"We envision LA as a city that embraces physical activity, and that will celebrate all cultures as it embarks on this transformation."

Cedars-Sinai Research Center for Health Equity

Project Brief

THE PARTNERS

In advance of the **2028 Olympics** to be hosted here in Los Angeles, Cedars-Sinai is leading an initiative in partnership with LA City Department of Recreation and Parks, Garmin, and the Discovery Cube to create a culture of healthy, active and engaged communities for all Angelenos.

They propose a multilevel multi-component community-based intervention to target increased physical activity among children and adults living in Los Angeles. A primary goal of this program is to increase park usage and LA Rec and Parks program participation. The intervention will target three levels that will impact physical activity and involvement, namely the individual, family and the community, with an overarching goal of developing strategies that target the knowledge, attitudes and behavior of community members in a sustainable manner.

ARTCENTER INVOLVEMENT

Through **Designmatters**, ArtCenter's award-winning social innovation department, this project challenges students to explore the role of technology in a city-wide health initiative: How can technology engage citizens in healthy activities, and help health researchers effectively gather and analyze data? Students will develop apps and other technology-based solutions for a multilevel intervention, which might include: gamification of healthy activities, citizen science engagement to help identify community barriers to participation in physical activity, creatively disseminating intervention messages and helping Cedars-Sinai gather research data.

Consistent with the imagery and storytelling components of the initiative's branding to be developed by ArtCenter students in a concurrent studio, products must be culturally sensitive and accessible to people of all ages and abilities, and racial and ethnic backgrounds.

THE CLASS

Led by professors Brian Boyl and Krystina Castella, IxD for Consumer Products or Adv. Graphics Studio is a class in systems innovation and experience. It is an advanced design class cross-listed in the product design, graphic design and interaction design departments. Students from all disciplines work together to develop products that require a physical design and user interface. The class exposes students to the complete design process of concurrently developing solutions, and employs methodologies in scenario-based design creation. Students create a set of physical products focused to a specific need and target audience and incorporate a screen, sound and/or haptic user interface. Students are taught professional studio methods of developing, testing and presenting design solutions with a focus on ergonomics, user interfaces and aesthetics.

The class utilizes textbooks written by the professors:

Interaction for Designers: How to Make Things People Love (Routledge 2019) by Brian Boyl

Designing for Kids: Creating for Playing, Learning and Growing (Routledge 2019) by Krystina Castella

Table of Contents

WEEK 01	Project Kickoff
WEEK 02	Top Three Concepts / Field Trip to RAP Headquarters
WEEK 03	Research and Direction
WEEK 04	Class at Discovery Cube Los Angeles
WEEK 05	Checkpoint Meeting with Sponsors
WEEK 06	Concept Refinement / Sock-Puppet Persona Excercise
WEEK 07	Focus on System and Business Strategy

WEEK 08	Midterms
WEEK 09	User Testing and Prototyping / Field Trip to LA City Parks
WEEK 10	Co-Design Session / Re-Briefing
WEEKTO	de Beergin edecient, ne Briefing
WEEK 11	Touch Point with Garmin
WEEK 12	Project Refinement
WEEK 13	Presentation Preparations
WEEK 14	Final Presentation at Camp Hollywood

Meeting Cedars-Sinai & Presenting Big Ideas

At kickoff, the researchers from Cedars-Sinai gave an in-depth presentation, helping to set the scope of the project. The students came to class with 20 Big Ideas drawn from their research assignment that started over the break.



THE PERFECT PROJECT

Jennifer May, Interim Director of DesignMatters explains that opportunities such as the Game On project are rare. "I can't think of a more perfect project for ArtCenter. Our partners are just getting started. And we're going to help them set the stage for this 10-year health initiative."

"Eventually, we hope to reach around 100,000 LA residents. Including their family members it could easily add up to 500,000 people."

Dr. Robert Haile, Director of Cedars-Sinai Research Center for Health Equity



Q & A WITH THE RESEARCHERS

Our visiting sponsors noted that they want to serve as a model for other cities. The goal of Dr. Haile, Head of the Research Center for Health Equity at Cedars-Sinai Medical Center, is for it to be the largest multilevel physical activity intervention conducted in the world.



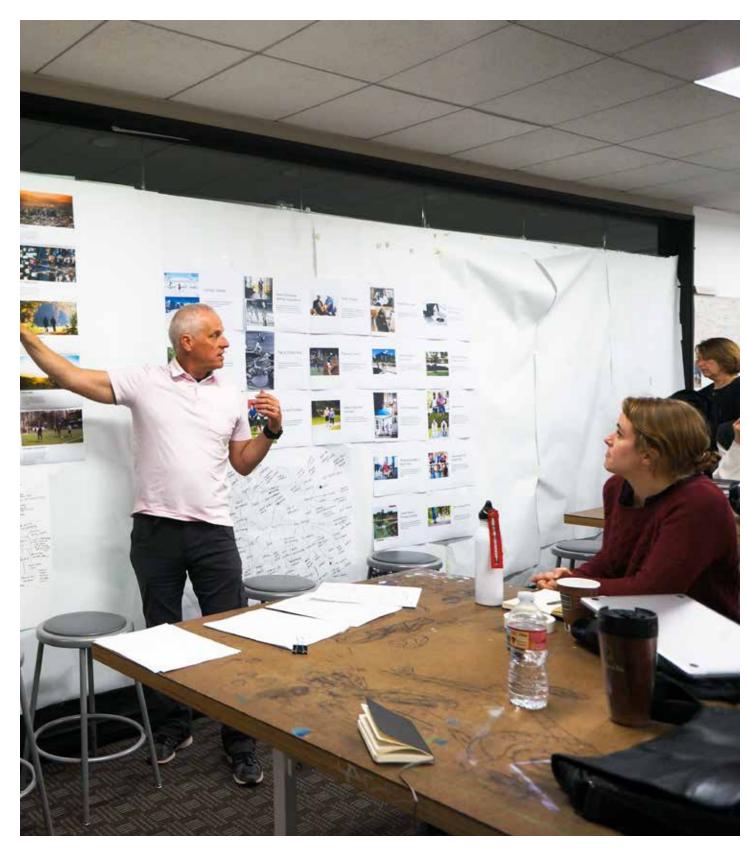
DISCUSSION TIM

Krystina Castella contributes to the discussion and talks about how the world perceives LA as fit and healthy. "The reality is not what you see in media."



EODMING TEAMS

The students formed teams of 3 to 4 members. The goal was that each team have one product, interaction, and graphic design student.



YOU HAVE 2 MINUTES

Students coated the walls with their homework. Each went through a rapid-fire presentation of 20 Big Ideas revolving around the topics of Play, Fitness and Health. Brian Boyl points out some of this to the sponsors, who were impressed and excited.



DROPPING PARK WISDOM

Ryan Carpio from LA Recs and Parks explains that a new park does not guarantee usage. There have to be structures and programs in place.

"We're using the Olympics as a motivator, really to crystallize the initiative."

Sarah Jeanne Salvy, Cedars-Sinai Research Center for Health Equity



MAKE IT ABOUT FAMILY

In response to the initial ideations that students brought in, Cedars-Sinai encouraged students to focus on targeting younger children, because they have the power to influence the habits of families and communities.



MAZI-SPORT ATHELETES
SPORT EQUIPMENT SUBSCRIPTION

The special form of the second of the second



TREASURE HUNT

A wate feature has shallings owng. 25 technings and indexts point up. 67. The period or interest fragge, related the seclate again, the salt top operate the secrence hand solvings to other top retingers. The shelp of sect to the play



BICYCLE RACE

Continuing with some and (40 million) against one of the solution against one of the solution of the solution



REWARDING WORKOUT



RECORD VISUALIZATIO



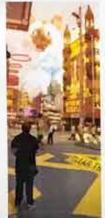
WATER FOUNTAIN MAP

An acquisite accounty with fourteen rest. Recognised UK, actually through a contri-



LOCAL SPORT MATCH MAKER

Excellented the Trade to biolog for bell anded opposition in sports. Voltage sports and on the section of the section.



ENTERAINING PHYSICAL ACTIVITY
IMMERSIVE CITY WALK

Appendix AP entrange through sensispecific study on common assessment when replacing A. The sensing perfortance through sensing resonance of pair



ACCESSIBLE GYM

Appellate and ap



VS ROBOT



KID FRIENDLY KIT

One of the entry to provide properties used a to introduce from to the new parpositions and to these to the quarter from at Stone of Flows against one soil had been to follow the search by the day area. And had to the properties to ofte bearing and get to these the search of the bearing and get to these the search.



FRIEND PROJECTION

has a harter from one Communing All hands noting and projection, uses and no longer fash compared has medicated. Uses clanguid from demand company through mobile



SMART RACKET

Amount of the second sec



PRIVATE SPACE IN PUBLIC PARK

by processed process come to the peak for people for such work out or foliog list, who can be processed all the chief people and the chief processed and the chief people and processed above comp. Lives one percentage



FOOD AND FITNESS

Dept. per service per certa di confici reces per del progres. Comercia de ces la del facto del progres della policiana di crisposi fine getti



IMMERSIVE ARCHERY FOR KIDS

year the operand author summer had



SMART CALENDAR

army provide some at himse which come had some administration they the had sport meet south years of the art had it is to the steams



MUSCLE BUILDING SUIT

A set that providing the Philip resign. Quality per provide the types of a colour and set one for such through making any. With the set, the unit can residue providing with the set of the period of the period of the contract.



MUSCLE BUILDING

and the latest part of the latest



HIKING TRAIL CHALLA

The second secon

SPONSOR PRESENTATION

Sponsor attendees from Cedars-Sinai prepared a presentation for the students. They outlined their goals for their partnership with ArtCenter, potential intervention approaches with users, and also helped to define physical activity.



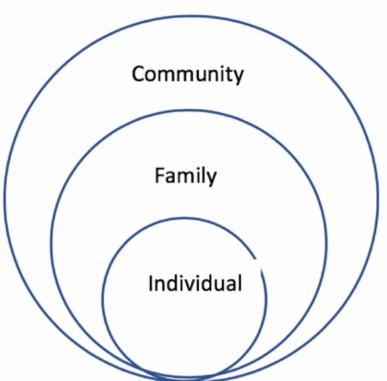
Defining Physical Activity

Three key types of PA:

- Exercise: PA that is planned, structured, and repetitive. One of the objectives is to improve physical fitness.
- Sport: Structured, competitive, and rules-based PA.
- Active Play: Unstructured (i.e. self-directed) PA that takes place in a child's free time. Optimal benefits occur when located outdoors.



Intervention Approach*



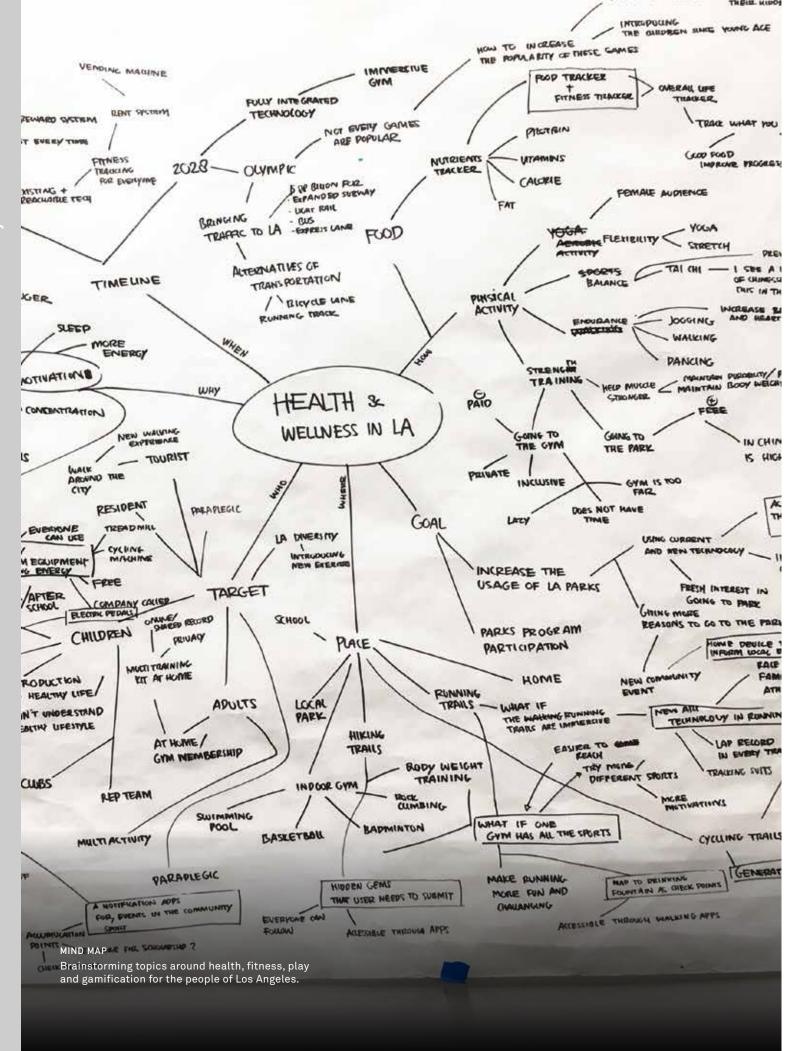
Individual: Personalized goal setting and tailored information delivery (present options based on individual information).

Family: Incorporating collective motivating factors that influence family dynamics and decision making.

Community: Tap into neighborhood champions, citizen science, community groups, LA Parks and Rec programming and events, to build a sense of LA community (culturally adapted to meet the needs of each distinctive community).**
Incorporate multi-media campaign to tell the 'GAME ON' story and narrative.

^{*}Guided by theories of behavior change

^{**}But seek universal principles that apply across cultures



"We are looking for solutions that are sustainable, expandable, and scalable."

Dr. Robert Haile, Director of Cedars-Sinai Research Center for Health Equity

MAJOR LEARNINGS

Students learned about the priorities of each of the client stakeholders: Cedars-Sinai, Rec and Parks, Discovery Cube, and Garmin. In their presentation, Cedars-Sinai highlighted the importance of design and technology as a means to influence behavior change. Citizen Science and inclusion around Social Equity and people with special needs were also important topics that were discussed. There were no boundaries at this point, and the sponsors were impressed at the 400+ ideas, in just the first meeting of the class.

SPONSOR ATTENDEES

Dr. Robert Haile, Director of Research Center for Health Equity, CSHE Sarah Jeanne Salvy, CSHE Celina Shirazipour, CSHE Ryan Carpio, LA City Recreation & Parks Dennis Lee, Advertising Faculty, ACCD

WEEK 01 DELIVERABLES

- + Explore & Research Topic
- + MindMap Brainstorming
- + 20 Big Ideas

Team Proposals & Field Trip to Rec & Parks

Working together, the teams conducted a vast amount of research and created three potential design directions. Some students and Brian Boyl went on a field trip to learn from people at the LA Rec and Parks department. Great ideas were exchanged between the groups.



MEETING IN SESSION

Students and the LA City Rec and Parks representatives discussed some of their challenges, including: the lack of volunteer coaches, restricted relationships with schools, and tracking their efforts, such as what they learn from talking to parents and kids.

"Each park serves different groups of people, so we speak to our specific location and community."

Vicki Israel, Assistant General Manager, LA City Recreation and Parks



FIELD STUDY

On a visit to the Sun Valley Recreation Center, student Yanqi Li was reminded by LA City Rec and Parks employee Jason Shepard that the solutions need to be low tech: "Human, low-price solutions."



NO BOUNDARIES

Student Yanqi Li shows a viral video of Chinese students exercising with their principal—a reminder to be open to unconventional ideas.



GETTING THEIR TRUST IS IMPORTANT

R&P noted that people are scared of walking into "government" spaces and filling out paper work. Promoting a sense of culture is important.



STUDENTS PRESENT THEIR TOP 3 CONCEPTS

Team Covfefe developed a Calisthenics Reward Program, exercising anytime, anywhere for 5 minutes. Team Tree presented a grassroots gardening program for youth and the elderly.



For homework, each team led a brainstorm session based on Krystina Castella's book Designing for Kids: Creating for Playing, Learning and Growning. From there they chose their top two directions.

"We're interested in solutions that can help measure impact and can be intergenerational.

Oscar Cardenas, Lanark Recreation Center, LA City Recreation and Parks



PHOTO CAPTION

Team Meta presented their observations and insights. Their favorite findings were how engaging games like Beat Saber and apps like Strava were. For example people use Strava (a running/biking app) to create digital artwork from their physical interactions.

"Going 'sports shopping' to find their true passion instead of having them make a 'sports commitment' could become an inviting entry point for kids new to outdoor activities."

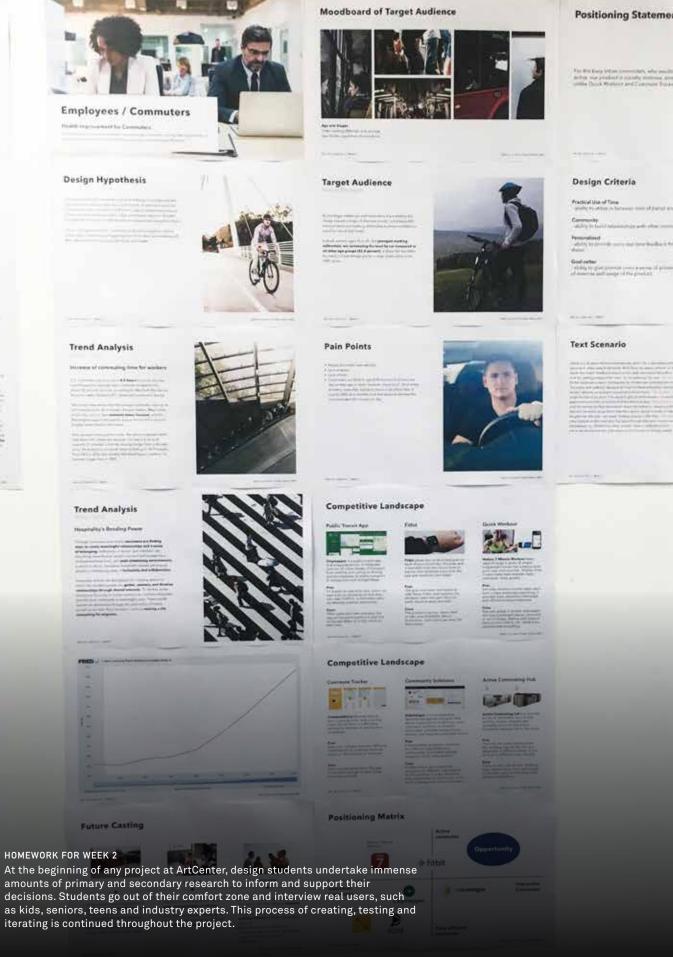
Brian Boyl, Professor, commenting on concepts

MAJOR LEARNINGS

From the Rec and Parks meeting, students learned the vital role that park representatives play at their specific city parks. They put in a lot of human effort talking to parents, kids, and reaching out to the community. It helped the students to understand that to design this fitness system, Rec and Parks will be a key resource and very likely the first contact with potential users.

WEEK 02 DELIVERABLES

- + Brainstorm Concepts
- + Top 3 Concepts
- + Design Hypothesis x3
- + Expert Interview x3
- + Trend Analyses x3
- + Future Casting x3
- + Target Market + Pain Points
- + Text Scenario



Research, Insights & Observations

After observing potential users of their systems in their natural environments, students presented their research and insights. They were inspired by the habits, pain points and joys they witnessed. The research added validity to their concepts and students began to create a strategic vision. A continued emphasis is for the teams to consider the outcomes for each stakeholder.



TEAM LALA'S PRESENTATION

Team Lala observed people at Echo Park Recreation Center and Fremont Park and noticed that there were few exercise environments meant for parents and kids to collaboratively and conveniently be active together, so they proposed exactly that.

"Kids are really good at carving out their own world if given the opportunity. What would this system look like if kids designed it?"

Krystina Castella, Professor



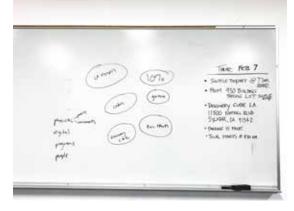
YOUNG GAMER USER RESEARCH

Team Meta did a research deep-dive into gamers ages 10-16 who were physically inactive. Observations included a visit to the gamer cafe to see how friends interact with one another.



COMPETITIVE LANDSCAPE

Obtaining healthy food is a challenge in low income communities. Team Trees analyzed the competitive landscape of food providers.



PROFESSOR NOTES DURING LECTURE

Krystina Castella stressed that the concepts need to integrate all the stakeholders. Many teams will explore this emphasis in coming weeks.

Personal Intervention / Ta

Competitive Landscape | Gamified Fitness



Pokemon Go

The closest thing to "world peace", This app is applying the Pokemon concept in real life. It is an indirect fitness program.

7 Minute Superhero Workout

Fitness app that turns you into

motion tracking technology to

superhero. This app is using



From the same company that made Pokemon Go, Ingress offers a similar gameplay with different plot



Habitica

An app that making your daily task as an RPG quest. You can create your own quest. Completing the quest increase your in game character power



Fitness tracker that provides progress bar, leaderboard and group challenges system.



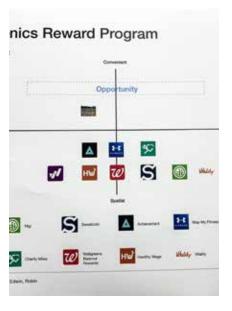
Strava

Tracking app for runner and cyclist.

Team Covfefe: Jordan, Pooja, Edwin, Robin

COMPETITIVE LANDSCAPE

Team Meta started to invest in the idea of tying physical and digital interactions together. They looked to successful competitors such as Pokemon Go and Zombies, Run! to understand how to get kids excited to exercise.



CALISTHENICS POSITIONING MATRIX

Team Covfefe is interested in fall-off groups such as teens and young adults. They looked at competitors in the health and wellness industry to find an opportunity space for their calisthenics concept.

"By focusing on a narrow concept (like plogging, picking up trash to exercise), it may be hard to get more people involved. Think about how your project will scale for all of Los Angelenos."

Krystina Castella, Professor

Secondary Research: Ages 14-18 & 20-30

Contextual

Contextual theories are the concept that development is determined by both immediate and more distant environments, which all influence each other. Our project will have to consider the interplay between the systems in our users life.

Environment-Based

On average, 8- to 18-year-olds use media actively for 6 hours and 21 minutes of every day, often using multiple media at the same time (Roberts et al., 2005). Because nearly a quarter of teenagers use two or more media at the same time, they may be cumulatively exposed to more than 8.5 hours of content per day.

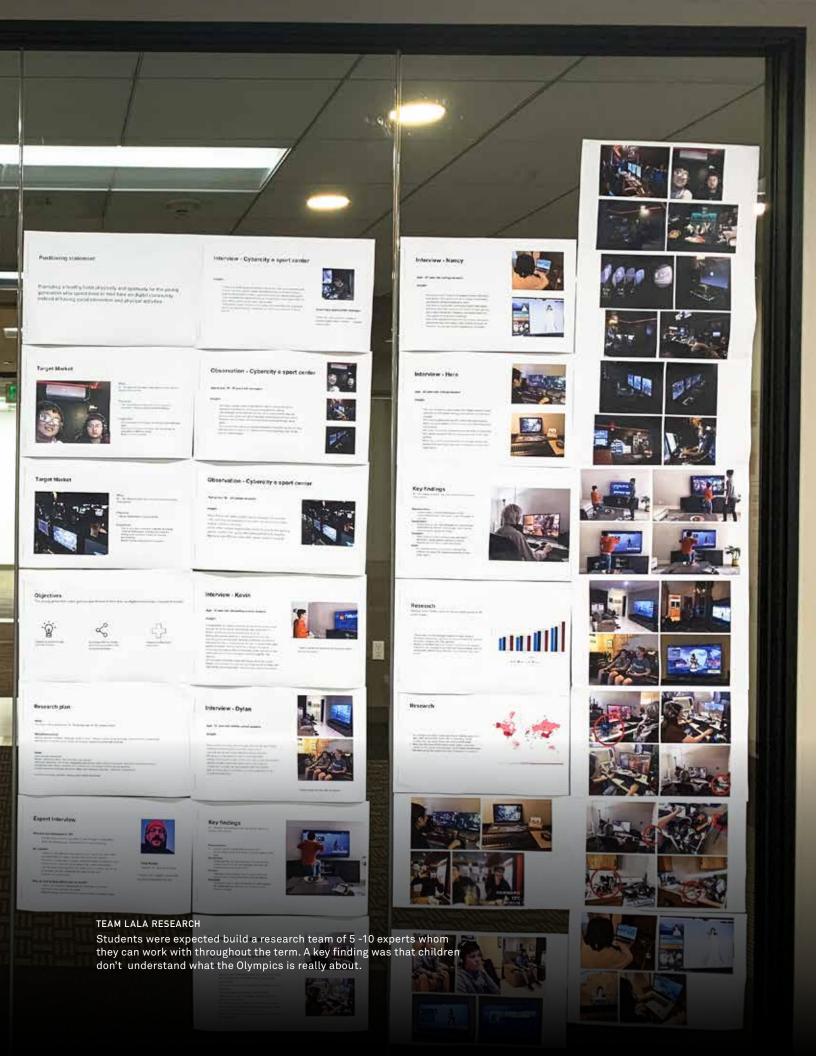
Cognition-Based

According to Jean Piaget (1896-1980), a wellknown child development specialist, teens become more scientific and logical in the way they approach problems. They also become more attuned to others, which can lead to social and emotional difficulties when teens begin to compare



SECONDARY RESEARCH

Through conducting secondary research students created a more in-depth understanding of a target age group. This included understanding the role of context, environment and cognition.



"It's time to step back and remember the goals of the contributors to this project: Cedars-Sinai, LA Rec and Park, Discovery Cube, and Garmin. What do they each want from this project and how will that shape your system?"

Krystina Castella, Professor

MAJOR LEARNINGS

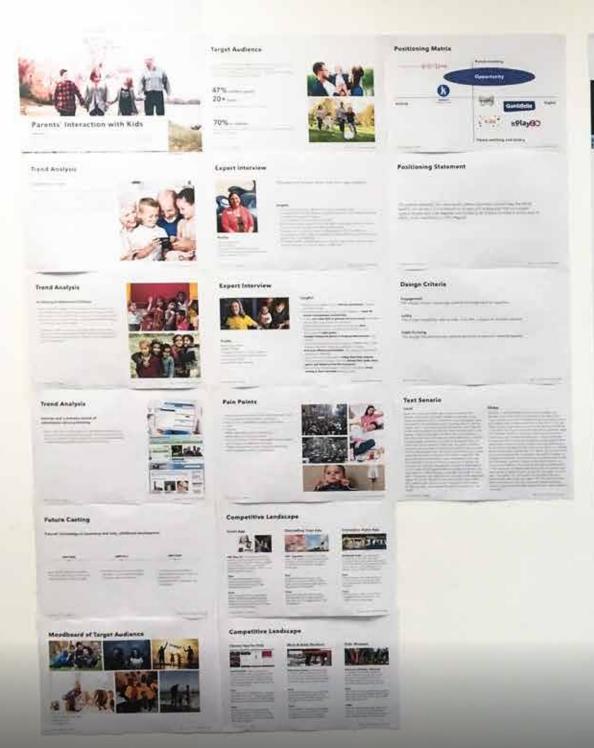
Product-to-market approaches were common today, and it may be how students are used to thinking. Encouraging students to think with a systematic approach was discussed over and over. Krystina Castella encouraged students to remember that this is a social impact class, and their goal is to use the Olympics to inspire movement. Concepts like gardening with seniors and kids, and plogging, felt a bit off topic. However, this week's deliverables were also brimming with observational research findings, and that did not go to waste. Today was about helping teams to make informed decisions as they narrowed down their concept directions to their top two.

WEEK 03 DELIVERABLES

- + Research Plan
- + Directed Observations
- + Analyze Results
- + Concept Brainstorming
- + Secondary Research
- + Cultural Research
- + Form Research Team

+ Strategic Vision

Team La La







Class at Discovery Cube with guest Mari Nakano

An exciting time for the class, this week consisted of a field trip to The LA Discovery Cube where students presented their focused concept to Discovery Cube director Sacha Van Voorhis and guest crit Mari Nakano of the NYC mayor's Office of Economic Opportunity. As students toured the space they were able to join in on the fun and see the world from their user's perspective. They had the opportunity to speak with potential users including kids, parents and teachers.



DEMONSTRATING THE MOST POPULAR INSTALLATION

Students were able to take a closer look at interactive exhibits at Discovery Cube. Sasha walked the students through an exhibit that teaches children how to make healthy decisions when grocery shopping with a digitally interactive shopping cart.

"Hone in on the age range you're targeting and really understand how to communicate with them."

Mari Nakano, Guest, NYC mayor's Office of Economic Oppourtunity



IMPERATIVE FEEDBACK

Mari Nakano, guest critic, urged the class to narrow in on the target audience to understand how to best promote healthy behavior by understanding the best ways to communicate with them. She shares some of her own experiences working with kids.



PRESENTING AT DISCOVERY CUBE

Team Meta begins to unpack the idea of gamifying healthy behavior in order to elicit activity among Los Angelenos.



PRESENTING AT DISCOVERY CUBE

Team Lala seeks to redefine Recreation and Parks locations with projections to activate empty spaces.



DEBRIEFING ON WHAT WAS LEARNED AT DISCOVERY CUBE

After having visited Discovery Cube, children's motivations and how to design for a younger target audience became clearer. Krystina Castella asks the students to prioritize designing for a younger target audience in the research as that is where this initiative can make the most impact.



CAUGHT IN THE FOG

Game On student Kristy Cheng
participates in an interactive science
installation at Discovery Cube.

"Our mission is to inspire and teach children through hands-on learning."

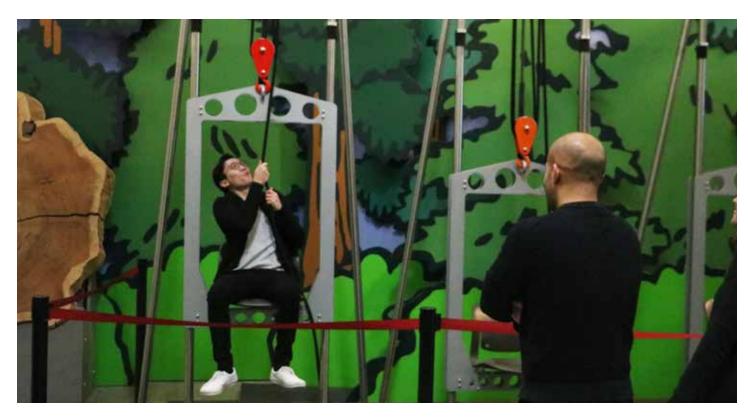
Sacha Van Voorhis, Director of Discovery Cube LA



SPECIFIC THINGS TO OBSERVE

Krystina Castella reiterates to Team Lala that their solutions shouldn't be a one-tech solution. When considering implementation and scalability it is best to also have a no-tech solution and something that can be implemented tomorrow with existing infrastructure in place.





ENGAGING PHYSICAL SET-UPS

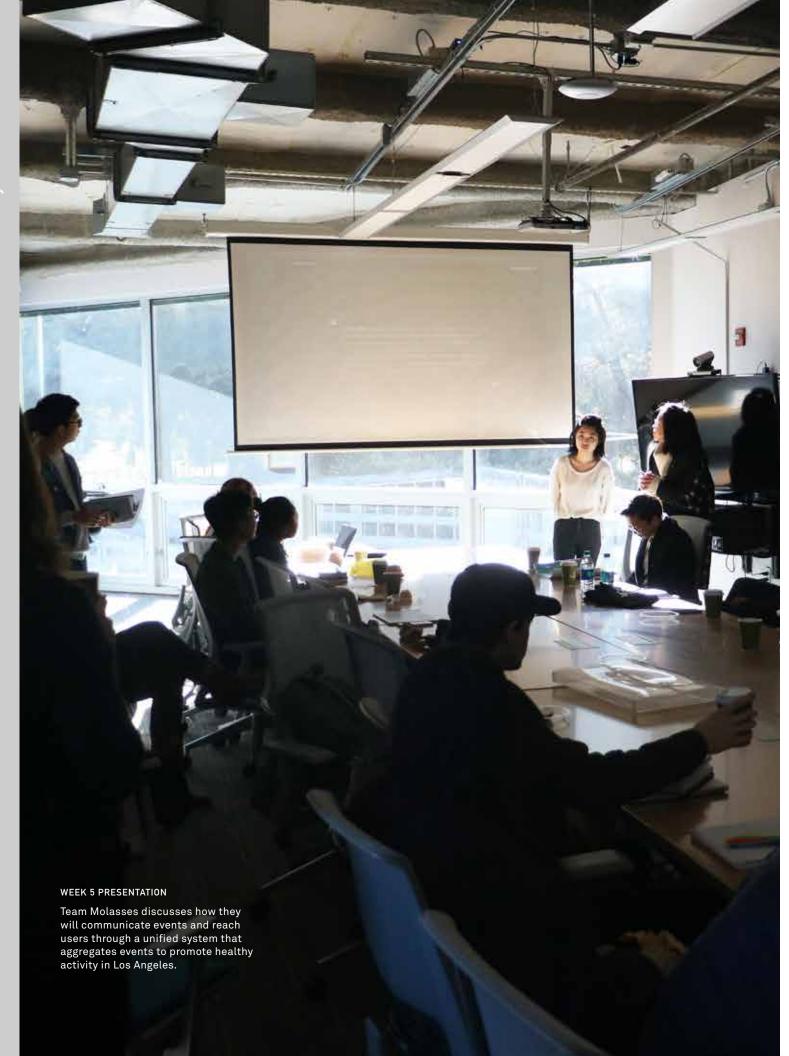
It was insightful to see how installations for children are designed to promote hands-on learning. From learning how to make healthy decisions at the grocery store to understanding the basics of physics, these installations are successful in engaging children.





DISCOVERY CUBE TOUR

Students had the opportunity to understand the mission of Discovery Cube on a micro and macro level. The space offers children unconventional ways to learn outside of a typical classroom setting. The result is active, engaged and excited children.



"Look for ways to produce products that benefit the community. How can we shift kids' consumptive technology behavior to productive behavior?"

Krystina Castella, Professor

MAJOR LEARNINGS

Students did a great job focusing on their target users, however there was a bit of a gap in their concept development. In the following weeks they would need to focus not only on the concept but the execution of the project.

Exploring exhibits at the Discovery Cube gave the students a taste of what designing experiences for kids and families, and outreach programs for schools could contribute to their overall project system.

WEEK 5 DELIVERABLES

- + Write-up of learnings
- + Presentation to clients
- + Research

- + Strategic vision
- + Aesthetic approach
- + Create scenarios

Research Presentation with Sponsors

With the stakeholders in attendance, this was an important week for the students to present a clear and refined vision of the potential impact their system could create. The sponsors were thrilled with the students' work and felt the topics they were addressing were right on target. They liked where the project was headed.



FIRST GROUP PRESENTATION TO STAKEHOLDERS

Sponsors gathered to converse and catch up. They expressed their excitement and goals for the project with one another before the presentations started.

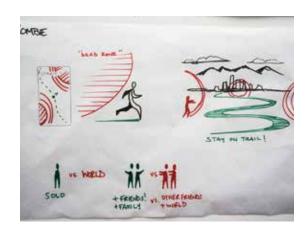
"How can we sustain the engagement?"

Sarah-Jeanne Salvy, Cedars-Sinai Research Center for Health Equity



USER JOURNEY

As part of the homework, students generated a day in the life of their user journey. They plotted out times and activities that they would expect their user to perform throughout the day.



VISUAL COMMUNICATION

Team Trees generated drawings to show their story. Instructors were happy with the overall idea but requested more in-depth moments.



VISUALIZING EMOTION

Team Molasses' journey map used a combination of images, and used one line to demonstrate emotion and another to show activity of the system.





TEAM COPA'S PROTOTYPES

This week's presentation gave the Advertising department the opportunity to give input and be inspired by the project ideas.

"Everybody has a unique voice now. So the 7 minutes must become personalized."

Dennis Lee, ArtCenter Advertising Faculty



TEAM COVFEFE PRESENTATION

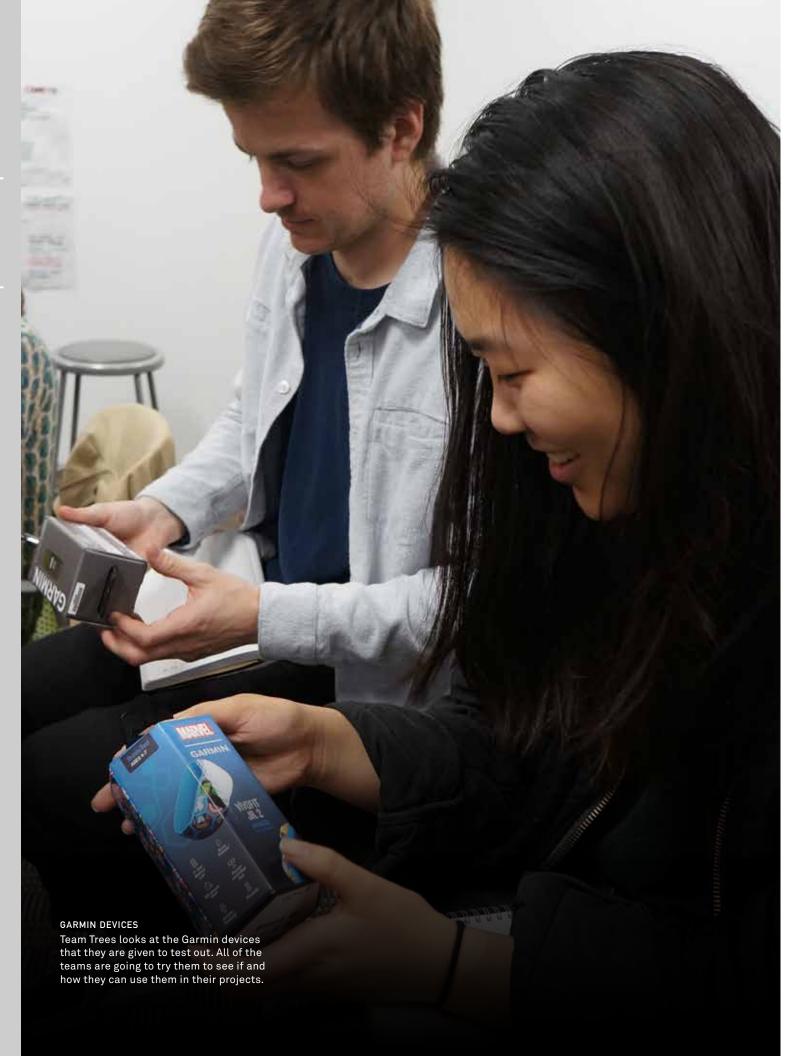
Team Covfefe presented their concept for 7-minute workouts. They referred to their system as a "gateway to fitness." The idea is that little changes can lead to a big one.



IDENTITY INSPIRATION BOARDS

Teams showed the visual directions and projected moods through inspiration boards. This exercise gives the team a visual goal to work toward.





"You can't spell play with out LA."

Sarah-Jeanne Salvy, Cedars-Sinai Research Center for Health Equity

MAJOR LEARNINGS

Students' research paid off and concepts were relevant to their users and addressed major needs. At this point in the project, each concept was directed toward one sponsor specifically, but during the critique it became apparent that every team needed to address every sponsor in the final concept.

WEEK 7 DELIVERABLES

+ Goals to Features

+ Day in the Life Journey Map

+ Product Name

+ Blob Scenario

+ Touchpoint Analysis

+ M.U.S.C.O.W. Chart

Creating Sock-Puppet Personas

After last week's stakeholder critiques, students made major refinements and focused on testing prototypes and interactions. Class time was used for groups to interact with one another's systems using sock-puppet personas to get in the mindset of critiquing as a potential user rather than the designers of the project. Materials Explorations suggested new points of innovation as well.



STEPPING OUTSIDE OF OURSELVES

Students developed specific user personas in the form of sock puppets to reflect on work from an outsiders perspective. Personas were used to critique the systems of each team.

"Physical contact will build up a social interaction."

Diana Chan, Student, Team Meta



METHODS AND MATERIALS

Students studied materials samples for the design of wearables and environments. Materials were also used playfully in the development of each student's unique sock-puppet persona.



IT'S NOT ME IT'S THE PUPPET

Students used dialogue and acting to demonstrate their target user's typical day.



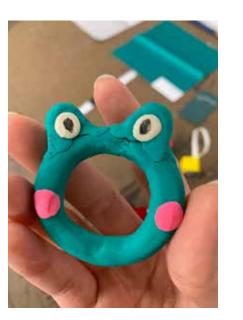
THROUGH THE EYES OF A SOCK

A very busy Momma Betty from Team Meta was used to interact with other sock characters.



MINI MOCKUP

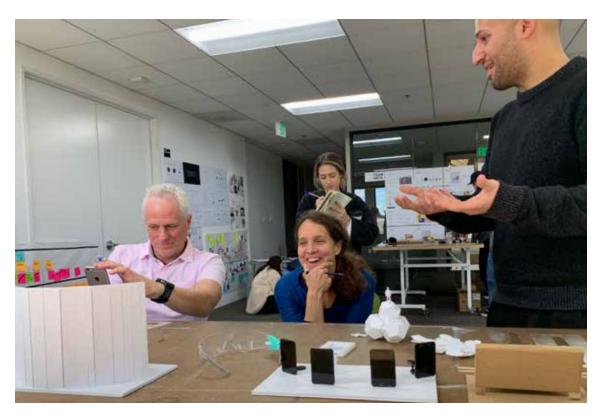
A prototype from one of Team Covfefe's initial play installation concepts. Prototypes from each team were continually iterated as they continued to hone in on user experience, intention, practicality and aesthetics.



CUSTOMIZE YOUR META
This is a "skin" prototype that allows
the user to customize their device
wearables.

"Good environmental ideas, but how do they connect to the goals of your project?"

Brian Boyl, Professor



MODELING PLAY

Brian Boyl and Krystina Castella provide feedback for Team Covfefe. Having experience designing for kids, they were able to open minds, making way for deeper thinking and stronger solutions. They were excited about the overall look and feel, but pushed for clear long-term and short-term goals.





"We turned a huge corner this week. Everyone has a really unique thumbprint and we are all inspired and in a really wonderful place right now."

Krystina Castella, Professor

MAJOR LEARNINGS

Students looked at the user journey for design inspiration. Moving into the designing of interactions they looked at nudges and habit building. They needed to think more about the drivers of motivation, and the professors begged the question: "How do people interact with devices to achieve their goals?"

WEEK 6 DELIVERABLES

- + Refinement
- + Materials Explorations
- + Mock Ups

- + Data Centric Organization
- + Primary Use Case
- + Ecosystem Diagram

Designing the Business Strategy

After Krystina Castella's lecture on business topics associated with the project, class time was spent refining project systems and critiquing. Topics included strategies, roll-out plan, positioning matrix, etc. Exchanging ideas across teams helped students focus in on concepts in preparation for next week's big stakeholder midterm presentation.



CRITIQUE BUDDIES

While the professors met one-on-one with each team, the remaining students critique each other's work. Team Covfefe talks with Team Trees about how they would get the word out to local residents and offer low-income communities fitness trackers.

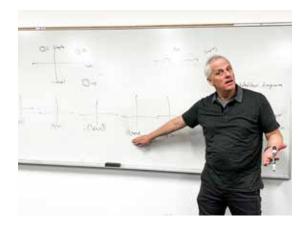
"It's quite possible that you have to revise a great deal of your work after the crit. Take the bull by the horns and make those hard changes."

Brian Boyl, Professor



HOW CINEMATIC IS YOUR SCENARIO?

Students used their prototypes to act out their primary use case. Brian Boyl tries to interpret the scenarios in order to test for clarity.



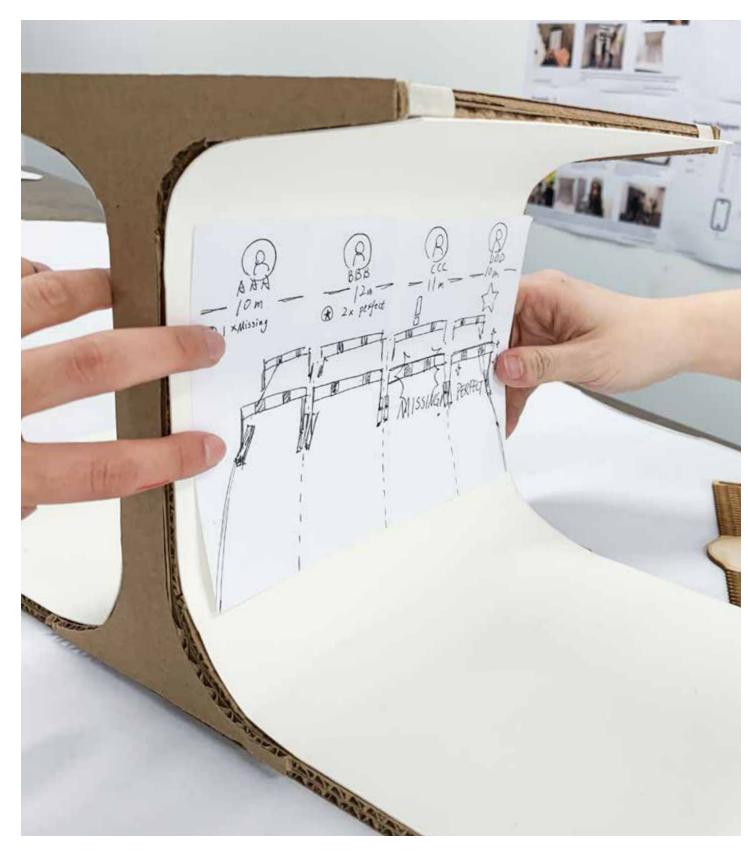
PRODUCT POSITIONING

Brian Boyl highlights Apple's system of products and how each product is positioned differently in its designated market space.



CONNECT TO THE ACTIVITY HUB

Team Meta explored outdoor scenarios. They role played kids playing a game at the park that is registered through their app.



TEM LALA SCALE MOCK UP

Students mock up a prototype exploring user-experience and physical form for a track running game that teens can participate in together. They were pushed to think beyond the park as the sole destination for their pop-up installations, and to explore all of the Summer Olympic sports.



REVISING STRUCTURE MAP

Team Molasses brainstormed their fitness events system including: community event-resources, local exploration and match donations as a business model.

"I think we should keep in mind that usually the smallest budget wins."

John Erickson, Student, on decision making



LECTURE ON BUSINESS STRATEGY

Krystina lectures on business strategy discussing the design approach, stakeholder diagram, roll-out plan, positioning matrix, and core market extensions.

"What really is a metric? With 'green time,' we're exploring different ways to complement quantitative data."

Travis Cantrell, Student, Team Tree

MAJOR LEARNINGS

Up to this week, students were selecting the stakeholders they wanted to address with their concepts. They were encouraged to change their perspective and address every stakeholder's goals. Students also realized that they haven't solidified their ideas into a business plan, and were pushed to incorporate these realities.

WEEK 7 DELIVERABLES

- + Task Breakdown
- + Sketch Scenario
- + Postures and Tasks
- + Identity Inspiration
- + Exercise/ Play / Sports
- + Product Name



Emerging Themes at Midterms

Midterms were a successful checkpoint, with the sponsors excited by the prospect of real solutions. Each team presented a wealth of interesting ideas, including their final direction, and it was clear that various themes had begun to emerge. Brian Boyl called it "a veritable Petri dish of possibilities," and concluded the class with this simple mandate: "The best [ideas] should be considered and integrated by all, the weak ones should be sloughed off."



LIGHT UP FITNESS BANDS

Inspired by their well received idea of calling outdoor time "green time," Team Trees proposed light-up fitness trackers with colored bands.

"There were themes popping up, and I saw myself cherry picking ideas and integrating them into a framework. It's been a really stimulating session."

Dr. Robert Haile, Director of Cedars-Sinai Research Center for Health Equity



IMMERSIVE SCREENS

One of Team Covfefe's physical experience prototypes included an immersive, digital space that could draw people in to exercise.



AFFORDABLE FITNESS BANDS

Team Covfefe introduced a minimal feature fitness band that could be more affordable for low-income families.



TEAM LALA'S IMAGINATION POP-UP

Krystina Castella notes that, "The role-playing Alice & Wonderland tennis is the gem of your project. You can go wackier: throw mushroom balls."



TELL THE STORY: SCENARIO

Team Tree's scenario explains their tracking color bands at work, to complement their more quantitative metrics. They also talk through future concepts like incorporating sticker sensors on a baseball in order to better measure metrics.



FITNESS FOR KIDS

Team Lala continues their materials explorations with clay. A bit tamagachi inspired, these fitness trackers are

customizable and designed for kids.

"Having the app ping you when you are near the gym is a really great idea. I would encourage you to explore how to make it inspirational and not annoying."

Dr. Robert Haile, Director of Cedars-Sinai Research Center for Health Equity



BRIAN BOYL AND KRYSTINA CASTELLA WELCOME THE SPONSORS

"Today, we (the professors) will be stepping back to let you (sponsors) talk. You're going to see patterns emerging. Some of the strategy of the teams will be overlapping. It is important to be straightforward about what is realistic," say the professors.





BENCH WORKOUT

Team Covfefe proposed easy workout products that attach to existing structures around the park.

"It's about celebrating the activities that people do. It is not about making unrealistic goals."

Jordan Guerro, Student, Team Covfefe



COMMUNAL WELLNESS

"The essence of Copa is communal. Our strength is the ability to tap into local neighborhood activities," says Kristy Cheng. Team Molasses's insight that parents are having a hard time finding activities for kids all in one place resonated with the sponsors.



TEAM TREE'S PRESENTATION

Team Tree's explained concepts ranging from mini summer camps as a regularly scheduled activity hosted by Rec and Parks, to pop-up installations that personify the community, and all of it culminating into bigger events that incorporate the Olympic spirit with live shows.

VISITING PARTNERS

MICHAEL SHULL **GENERAL MANAGER, LA CITY REC & PARKS**



"Your painpoints are exactly right! Awareness of our programs is what we are trying to solve."

OSCAR CARDENAS LA CITY REC & PARKS



"I think that percieved autonomy is going to get people more hooked on it and try it. So [Team Covfefe's] idea of pushing information to where it's readily available is really important. **ERIC CALHOUN** LA CITY REC & PARKS



"I love this interactive pop-up. I can see it reaching kids around our city. Maybe even the world. The downside is that there is no predictability to it, so organize something for that."

RYAN CARPIO LA CITY REC & PARKS



"The World Cup brings out large screens in public for people to watch for free. Your pop-up reminded me of this because it's about showing people that this is a just small part of a bigger thing. This really draws people in."

NICOLE AHAND GUEST FACULTY



"Think about the other layers of influencers, like parents. Your entire solution could be targeted toward that parent, and it will ultimately trickle down to the child."

ZUL SURANI, CEDARS-SINAI RESEARCH CENTER FOR HEALTH EQUITY



"I love the idea of having culturally specific sports. Leveraging culture is a way to get communities that wouldn't ordinarly go to the park. For example, you would get more Indians involved if you held a cricket match."

SACHA VAN VOORHIS DIRECTOR OF DISCOVERY CUBE LOS ANGELES



"We are always trying to encourage projects that have a mission. We look for longevity so that it can be used in parks and schools or anywhere else."

DR. ROBERT HAILE, DIRECTOR OF CEDARS-SINAI RESEARCH CENTER FOR HEALTH EQUITY

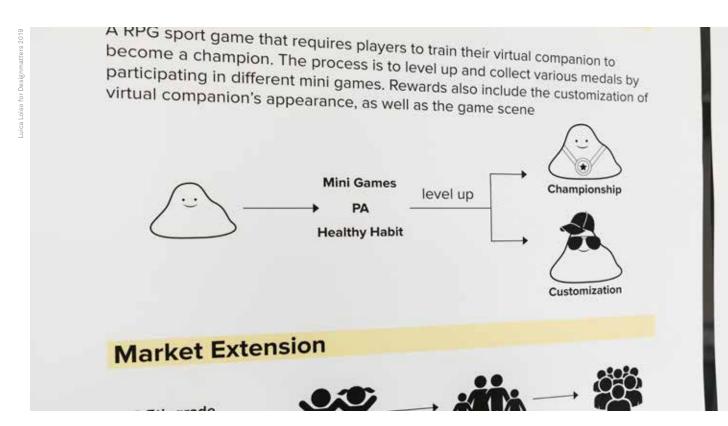


"A low-participation park facility probably indicates an unhealthy community."

Other Guests:

Hayden Hutchinson, Celina Shirazipour & Gillian Greshham from Cedars-Sinai





DON'T FORGET THE WALL

The work that students pin to the wall is just as important as the physical prototypes and verbal presentations. Their great ideas were the culmination of a methodical design process, and pictured above are some of their research insights and diagrams.

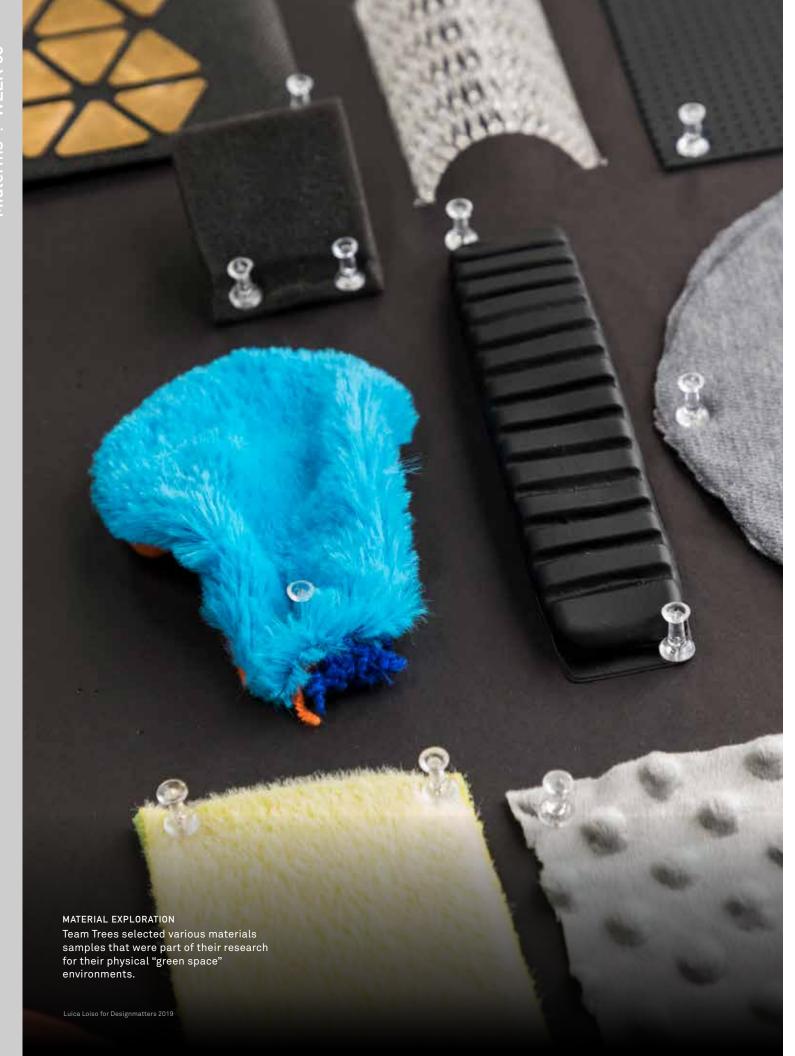


positioning









"What I love about this concept of the nudge is that if it's on my calendar, I'll just go. That's how attatched we are to our phones. If the nudge is part of our schedule, we might be more inclined to do it."

Ryan Carpio, LA City Recreation and Parks

MIDTERM DELIVERABLES

- + Refinement
- + Lo-fi & Paper Wireframes
- + Materials Explorations
- + Product Prototypes
- + Structure Maps
- + User Testing

79

NOTE FROM BRIAN & KRYSTINA TO STUDENTS: A PETRI DISH OF GREAT IDEAS

Thank you for an excellent midterm!

At this point we have loosely directed you to explore certain population segments and that focus has led each team to develop a wealth of interesting ideas. Some ideas are shared among the class-various themes have emerged-and some are unique to each group. In the end, Cedars will want a concept that integrates all the best ideas of the class. Robert said this in his final comment. As such, to give the clients what they want, as a class we should approach all the ideas presented as a veritable Petri dish of possibilities: The best should be considered and integrated by all, the weak ones should be sloughed off.

Based on Robert's comments—his direction that at the end Cedars will cherry pick the best ideas—let's beat them to the punch and cherry pick ourselves. Every team has developed amazing ideas. We are allowing you to share these ideas. Not only that, you are encouraged to do so. You are now at liberty to choose any aspect of any idea that you think works to achieve the goal of half a million new active people. You can take any comment delivered to any team at the midterm crit, and make it your own. Be sure to leverage those good ideas that are yours, and expand upon them. Since they came to you, naturally you most likely will be able to leverage them better than anyone else.

Also recall that Mike said that leveraging their access to kids is the best entry point for Rec and Park, since kids are their central clientele. With anything you do, consider how it will inspire and motivate kids and their parents, then how that can extend out to the rest of the community.

BRIAN & KRYSTINA'S LIST OF AWESOME IDEAS (FROM MIDTERMS):

NUDGE

Success of a system will probably not be as much about tracking the activity as it is about nudging people to do the activity in the first place. Focus on how to nudge your audience out of complacency. It's often the little things that matter most. That little pressure point that has them get into the car or walk down the street or put down their work for just a moment to perform and activity.

POP-UP PROMOTION

Making the effort visible through park gatherings, community gatherings (neighborhood cleanup), branding (trucks, t-shirts, banners), street fairs, events at fixed locations (Rec Centers, schools).

POP-UP TRUCK:

A "Koji Truck" type approach with a branded truck that carries pop-up structures and has a social following revealing where it will be "tomorrow." An element of dependable surprise to make it special.

ONLINE MULTI-USER ACTIVITIES AND EVENTS:

Participants in different locations can connect with one or two friends, larger classes, entire communities, or the entire city to engage in physical activities. These events could be synchronous (all participants engage at the same time) or asynchronous (they do them sometime that day). Think of MUDs, Swift (a cycling online community), or training clubs doing the same activities across the country (such as Endurance Nation, the triathlon team Brian Boyl trained with).

ADAPTING ACTIVITIES:

Taking a standard activity, such as tennis, and changing it up like doing it in Alice and Wonderland costumes.

SHAREABLE ACTIVITIES:

Possibly connected to adapting activities, above, think of ways activities can be shared on social media. What can make them Instagrammable? Tik Tok-able?

THE ACTIVITY FAIR:

This is a common trope throughout many of the projects. If a community had a street fair, what would you suggest that your system sends to that fair to promote your idea? Could this be leveraged with your pop-up ideas? What would be different? How could this fair be promoted?

CENTRAL RESOURCE FOR PROGRAMS AND ACTIVITIES:

Mike is clearly concerned about the digital resource they've created to inform and promote programs and activities at Rec and Parks. Clearly they have a massive database and effort employed at getting this information out there, but

LIST OF AWESOME IDEAS (FROM MIDTERMS) CONTINUED:

...the interface is problematic. If R & P can expose their data through an API, third parties (including your "system") could use that content to create a foundation of an event and activity promotion system. This could integrate not only Rec and Park events and activities, but those for community cleanups, Discovery Cube activities, faith group meetings, street fairs, pop-up locations, school events, etc.

PHYSICAL STEM:

Anything STEM is embraced by schools and educational organizations. If you can marry physical activity and STEM you may have a way of introducing your system to schools. Kidspace and Discovery Cube do these physical STEM activities well. This is great to engage younger kids. Can you get their parents involved too?

MODULARITY:

To promote 500k individuals to become more active, we have to have a system that fits with a wealth of different users. This points toward a modular system offering mass customizability. A component which carries the expensive part of the device—the chips, accelerometers, sensors, and basic display systems—being able to insert or "snap" into a housing that could make it a watch, a locket, a toy, etc. could be a possible solution.

A MARKETPLACE OF CONFIGURATIONS:

Think of the app store where a singular physical device (the phone) can become a myriad of different virtual devices (a GPS, a camera, a social network, a writing pad, a content reader, a cloud based storage system, etc.). Can you make your system virtually mass-customizable? Could that be coupled with the physical modularity proposed above? We imagine this wouldn't be all encompassing, such as an app store, but tightly focused on physical activities.

A DIVERSITY OF PHYSICAL STRUCTURES:

Complicated, expensive, and fragile digital structures will need a lot of support and security. Pop-up structures will need to be collapsible and be able to run on their own without access to the Internet and the power grid. Stand alone structures in parks need to be configured and hardened against physical abuse, vandalism, and theft. If you are proposing physical structures, be acutely aware of the challenges of the environment you are proposing them to be in. Consider our partner environments such as Discovery Cube (high support, expertise, and security), Rec Centers (moderate support, yet secure), pop-up (moderate support, moderate security, collapsible), a park (extremely low support and security). Where is your structure best placed? Can it be adapted to exist across all these?

AWARD MOTIVATION:

Physical badges and tokens of achievement are great ways of encouraging people, especially kids, and having them promote your system to others: If a kid

collects pins on their school backpack, that's an automatic promotion system for your project—they'll explain to their friends what the pin means and their friends will put pressure on their parents to get involved.

ENCOURAGEMENT GROUPS:

This is similar to the online multi-user group stated above, but this is more IRL (in real life). How can your system promote a nudge by a friend to prompt you to go to the park for a calisthenics session? How could it promote small group of stay at home moms to do so? How about assisting the organization of a small community cleanup group? How about promoting a citywide calisthenics session across all the parks, possibly assisted by a video projection system and led by a top local athlete?

OLYMPIC THEMED PLAY OR ACTIVITY EQUIPMENT:

How could activity equipment be configured to promote Olympic activities and training through play or accessible physical activities?

TIME CHISELING:

Your biggest competitor is not other athletic systems, it's inertia. To create a habit of activity, people need to consciously leave their TV, video games, social schedule, domestic responsibilities, work responsibilities, and just do it. Framing concepts such as the 7-minute workout or Green Time, not Screen Time, forces an audience to chisel time out of their day to be active. How can your system use time chiseling to nudge your audience to act?

BEAUTIFICATION:

A central theme that will help sell your concept to the city government (the mayor's office, the city council's office) is that these activities can promote and work hand in hand with neighborhood beautification efforts. How does your system promote this?

LEVERAGING COMMUNITY GROUPS:

Leveraging community groups is the best way to make this project go viral. Rec and Parks and Discovery Cube are already involved and baked into our systemic ideas, but how can you reach out to PE at schools, faith centers, community groups such as scouts, running clubs, sports clubs, or other fitness centers (YMCA)?

PRE-EMPTING FALL OFF:

There are many age groups that have significant fall off for physical activity: Teens, tweens, young professionals, sedentary elders, new families. Often we've been considering how to get them back in once they've fallen off, but an even better strategy would be to provide them things so they don't fall off in the first place. This means getting to them before they fall off, and transition them appropriately. For example, get to tweens before they're tweens (8-10yo), keep

them engaged, and allow the system to transform how it motivates them when their motivations change (i.e. kids doing what their parents want at 8-10, yet being inspired more about what increases their social status at 11-13).

ADAPT TO A DIVERSE POPULATION:

We've been focusing on niche groups. That was fine when we were considering different ways of reaching out to these groups. But that phase of our project is over. Take your considerations and ask how they can be manifested and be motivators for kids, kids and their parents, tweens, teens, students, young professionals, new families, school-age families, empty-nesters, the elderly, the economically challenged, the time challenged, the middle income families, people who love new tech, people who may have a mobile device, but otherwise hate new tech, the no-tech elder, etc. How can your core ideas inspire 500,000? Finally, underserved communities is where the money is for social impact, not affluent or middle income communities.

THE CORE DATA:

It's about active minutes. This is a universal metric that can apply to everyone, the fully abled as well as the partially abled. At its base, active minutes can be measured with accelerometers. Garmin is extremely good about using signal processing on wrist-based accelerometers to determine what activities are being performed just by the movement of the wrist. I imagine this signal processing can be further developed to aid in determining what is being done. Heart rate coupled with this information is an even better indicator of activity, and GPS adds an additional level of information as well. This implies a system hierarchy of kids/ accelerometers only, teens/accel and heartrate, adults/accel, heart rate, and GPS. The least expensive systems are accel only. Factor these tech configurations into your ecosystems. Finally, remember what Robert said, that sedentary activity is important too, as a negative indicator of physical health. Your systems should track that too.

CONCLUSION

You certainly don't have to integrate all these ideas. In fact, simplicity is often the secret to success. But you have carte blanche to choose any of these and all that resonate with you that you feel make your ideas stronger and more viable. DO NOT THROW OUT YOUR IDEA, EXPAND UPON IT. Please keep attacking and don't succumb to the post-midterm slump! Give yourselves the best chance to succeed.

Keep on Testing and Look to Your Use Case!

Post midterm, the teams focused on refining their concepts and working with their wireframes and prototypes. Class time was spent testing the systems through the eyes of a potential user, allowing students to judge the motivational factors and viability of their projects.



STREAMLINE YOUR WIREFRAME JOURNEY

Team Meta's app required several tasks such as on-boarding, reading content, QR scanning, and sharing. Brian Boyl commented, "Rethink your interface journey map. Think like a kid. When I hit play, I want to play. Not go through that whole process to get to play."

"We need to look at the fringes and extremes because that's how were going to be inclusive and more impactful in influencing an underserved audience"

Brian Boyl, Professor, on underserved families



PRODUCT INTEGRATION DISCUSSIONS

The students from Team Covfefe presented a cheap swag tracker and a vending machine advertising distribution system. They were asked to consider "beyond the vending machine." How can the tracker and kiosk become a more meaningful part of the use case, and a system for collecting data?



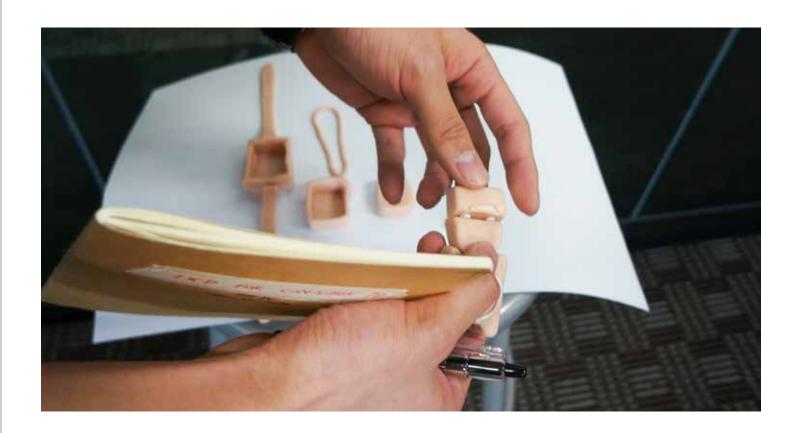
NICOLE ON LOGOS

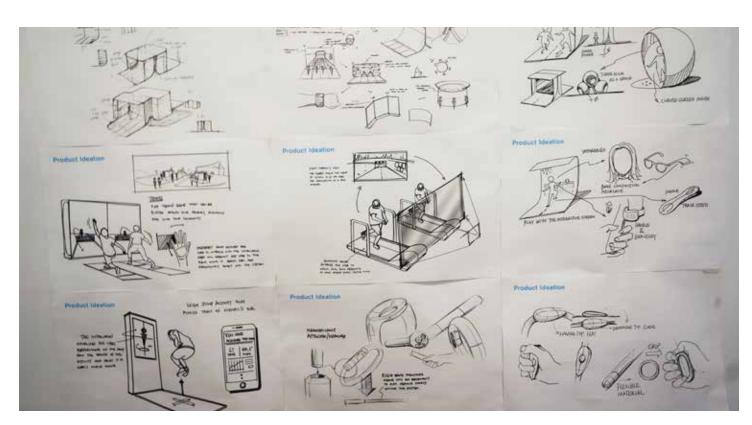
Nicole Wang from Team Trees talks about the logos developed for this week. They are deciding between the names "shift" and "que."



LIGHT UP BANDS FOR TRACKING

To all teams: "Talk to your users to see what they want on their watch faces. Brainstorm what sound, voice, motors, and lights can do!"





THINKING BY DRAWINGS OR PHYSICAL PROTOTYPES

Team Meta's modular band prototypes (top image). Suggestions were made to change the format and make all of the components available at once — like a Transformer. Focus on modes that transform the product, not separate pieces. Team Lala's sketches for their pop-up ideas.



POP-UP PROTOTYPES FOR TEENS

Team Lala explored several ways for their game projection system to collapse, lock and move. They also created different games to be played through projections.

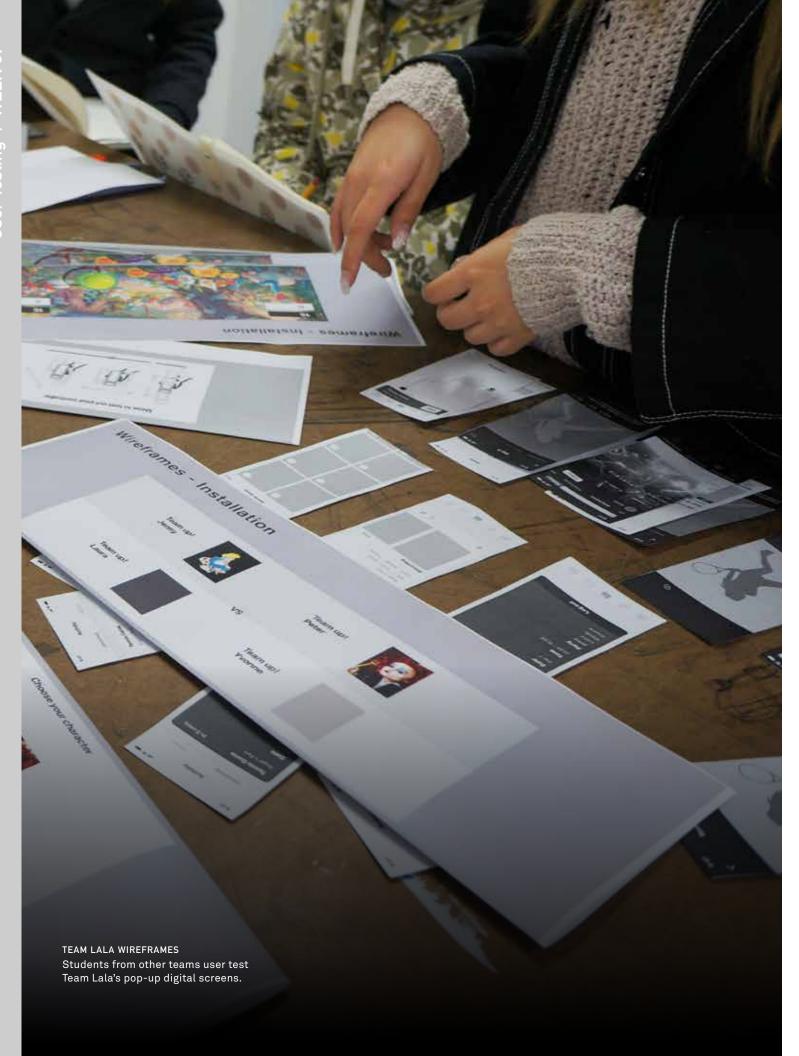
"If you want to change habits, your solutions should be long lasting, not disposable novelty swag."

Krystina Castella, Professor, on sustainability



PROVIDING REFERENCES FOR PLAY

Krystina Castella and Brian Boyl discuss with students a research study around behavior change that looks at the motivators for play. They also discuss different products and companies in the world of pop-up play. Brian Boyl acts out one of his favorite physically interactive playgrounds.



"Develop 25 really good reasons why people will use this. The [low cost] entry point is one good reason."

Krystina Castella, Professor

MAJOR LEARNINGS

Don't look to the product features or cost barriers to define your product. Look to your use case to understand why your system should be designed a specific way. Highlight your innovations, streamline the interface journey and think wider and deeper. Give yourselves the freedom to evolve your initial ideas, many of which have great potential.

WEEK 9 DELIVERABLES

+ Refinement

+ Lo-fi & Paper Wireframes

+ Materials Explorations

+ Product Prototypes

+ Structure Maps

+ User Testing





LA City Recreation & Parks Department Field Trip

The LA City Recreation and Parks department took the class on a field trip to three of their parks this week. This gave students a first hand look at all the regions and people their programs reach. Students gained great insight from touring Ross Snyder Recreation Center in South Los Angeles, Seoul International Park in Koreatown, and The Echo Park Recreation Center.



FUSION OF CULTURES

At Ross Snyder Recreation Center, RAP (LA Rec and Parks) addresses the mix of cultures in the area through signage printed in both English and Spanish. Families gather around to watch soccer, a popular sport here.

"We teach them to work together, be independent and prepare themselves to be an adult"

Anna Hu, LA City Recreation and Parks



LOCAL GRAFFITI ARTISTS

The class posed with artwork created by local graffiti artists in the community. RAP team members explained art created by locals gains more respect by citizens and is less likely to be tagged over.



STUDENT RESEARCH

Students walked around the Echo Park Recreation Center asking locals about their experiences with RAP.



HIGH SCHOOL PROGRAMING

Saturday programming is available for high schoolers to learn about money management and get help with homework.





QUICK, EASY, PRACTICAL

The department uses the classic method of hand painting to make quick and effective large signs, in both English and Spanish.





GAINING INSIGHT DIRECTLY FROM THE DEPARTMENT

Students spoke to employees and learned about the differences of programming at diverse locations as well as methods they use to get the word out. The employees loved the students ideas but were concerned about logistics and funding.

Co-design Session & Mission Refinement

This week a co-design session took place: sponsors worked with teams individually to develop the projects together. "Today when you are working with the clients it's about getting an understanding of their existing programs and how you can build them," said Krystina Castella. The stakeholders also refined the project guidelines, stating that they wanted to focus on solutions that can be launched within the next 3-6 months.

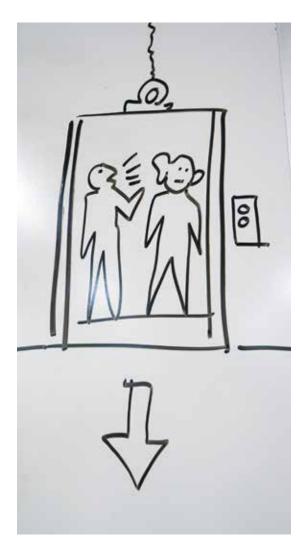


CO-DESIGN IS IN SESSION

Eric Calhoun and Oscar Cardenas from LA City Rec and Parks discuss concepts for community events with Team Molasses. "Think about districts rather than just individual parks. And seasonal nudges," suggests Calhoun.

"Localize the experiences within LA. What comes to mind visually? For example, when we visited each park they each had their own flavor."

Krystina Castella, Professor



ELEVATOR PITCH FOR ADVERTISING STUDENTS

The ad students working on the communications for the project visited the class for the first time. They were given elevator pitches on the projects.



INITIAL PARTICIPANTS FOR CSHE

Celina Shirazipour from Cedars-Sinai stated, "We hope to include 100,000 rolling participants, but we will start with a few hundred [this summer]."



A RANGE OF MINI GAMES

Team Meta explains their app as a vessel that enables a range of mini games. Brian Boyl and the team discuss the visual approach to the design.





THE DEAL DEWARD

"Our app introduces people to the areas around them to get them off the couch and excited to get out," said student Travis Cantrell. In agreement, Gillian Greshham from CSHE said, "It's about being able to get people to set goals and accomplish them. That is the *real* reward."

"Stress the education, learning and locations for the activities. I don't ask that you fill in all the educational content, but make sure there is a space designed for it."

Sacha Van Voorhis, Director of Discovery Cube Los Angeles

"Rewards don't work long term. An achievement system that survives when activity funds run out would be more sustainable."

Celina Shirazipour, Cedars-Sinai Research Center for Health Equity



EFFECTIVE TEEN PROGRAMS

Team Lala was advised to look at current teen programs from RAP. Krystina Castella suggested a program that could focus on exploring LA from an exercise perspective. It could be tied to all sorts of LA field trips for exercise, explaining that "exposure to these places could be life changing for teens."



PHYSICAL AND DIGITAL BADGES FROM TEAM MOLASSES

Student Kristy Cheng suggested that the physical badges could be similar to the badges one earns through Girl Scouts, but more affordable for low-income families. Representatives from CSHE loved the physical badges just as much as the digital ones, and thought it was a cool low-tech option.

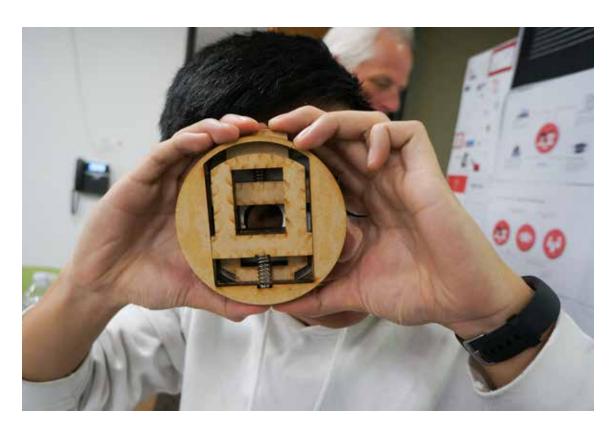


WIREFRAME TESTING

Krystina testing Team Molasses's interface: "People are more instantaneous about making plans these days. There is too much information on this screen."

"Gamify the event and use storytelling. There is a great narrative that could be built around your rewards system. Queen. Knight. MVP. Are you an explorer? Local? Baby athlete?"

Sarah Jeanne Salvy, Cedars-Sinai Research Center for Health Equity, on gamification



SCALING UP & CONNECTING THE DOTS

Student Daniel Kim from Team Molasses holds up an extra large-scale mechanism that will hold the badges on the wearable. Sarah Jeanne Salvy, CSHE, suggests, "Maybe Discovery Cube could be the ones distributing the badges! Discovery Cube wants to be a part of the reward incentive system."



FLEXIBLY INCLUSIVE

Jordan Guerrero from Team Covfefe explained how they started to look at pulse, instead of just steps in order to be more inclusive (for those unable to walk). Gillian Greshham, Cedars-Sinai, also suggests the BYOD [Bring Your Own Device] model. It is probably the most flexible and practical.



GARMIN IMPROVEMENTS Gillian Greshham discusses improvements for wearables: "When taking it off to charge, how often do people remember to put it back on?"

"While expending energy, one could collect energy."

Sarah Jeanne Saly, Cedars-Sinai Research Center for Health Equity, on gamification



TRUCK TO DISSEMINATE INFORMATION & MORE

"Your [outreach] truck seems to give the same appeal as ice-cream trucks. Try playing that up and see what happens. The messenger is important. Having well-trained staff to consistently take care of a population is important," comments Gillian Greshham (CSHE).



"We have done a good job future casting. Now that they have given us their official guidelines, we are prepared. It's time to focus on getting these projects up and running."

Brian Boyl, Professor, on project mission

MAJOR LEARNINGS

Cooperative design gave students a chance to work side-by-side with the sponsors and to practically incorporate all partners into their system. Some learnings that stood out were:

Instead of pursuing new ventures, maximize the existing resources and technologies in front of you.

Localize all your ideas by zooming into Los Angeles, making sure not to ignore the cultural aspects.

Focus on the "now" solution - things our partners can implement in the next three to six months.

Understand that community is an enabler for long-term system engagement.

Remember that it's about the experience, not just data collection, so be sure to narrate the story.

WEEK 10 DELIVERABLES

- + First Phase Roll-Out Plan + Wireframe Flow Board
- + Critical Alternates
- + User Flow with Interface
- + Mid-Fidelity Mock-Ups
- + Final Scenario

Think Local & Stay True to Garmin's Capabilities

Week 11 focused on pushing toward the final and refining deliverables. The instructors and Ann Quick from Garmin had a meeting and were able to set a product roll-out plan suited to Garmin's capabilities. Students will focus their efforts on No Tech, Now Tech, and Future Tech Solutions. Going into next week students will leverage the full branding potential of the city of Los Angeles, and continue refining designs.



KEEP IT WACKY

Team LaLa lost the wackiness of their pop-up experiences and replaced it with the ExploreLA concept. They were asked to bring the fun back. Brian Boyl suggested to look at the extremes: "I bet every community has some sort of extreme sport that is local to their community."

"You are where you are from. To teens, LA is part of their identity. Talk to them to find out what is important to them about LA. What does being from here say about them?"

Krystina Castella, Professor, on designing for kids



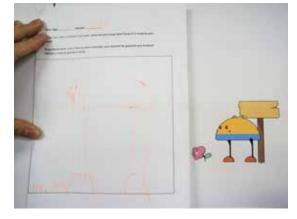
FORM DEVELOPMENT

"This form is very different than what Garmin is making now," said Aaron Park, student from Team Lala. Krystina suggested, "If this product is released in 3-5 years, design the transitions. Starting now with their current products and gradually build in your product with new product releases."



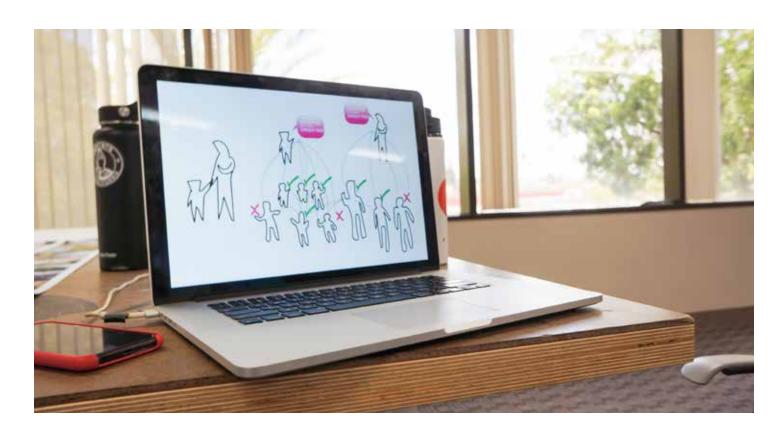
ICONIC PATHS

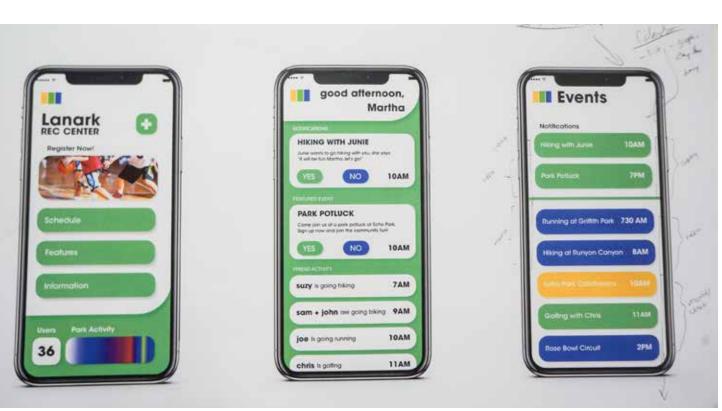
Team Meta introduced fun paths for kids to follow. Krystina and Brian recommended making them less abstract and more specific to each city park.



CO-DESIGN RESULTS

Team Meta created their app buddy character based on 7-year-old Sequoia Boyl's drawing from last week's co-design session.





TEAM TREE'S CRIT

In discussing the visual approach "LA is not really one city. It is many different cities with unique visual elements," said Brian Boyl. "Think about the point of view you want to showcase. Don't be stereotypical (referencing surfboarders and palm trees). That's an outsider's view of LA," said Krystina Castella.

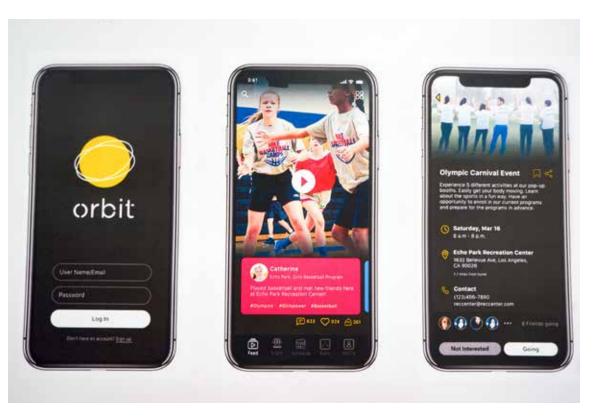


GARMIN TECHNOLOGY UPDATE

Brain Boyl and Krystina Castella lectured about the current and future technology, software and manufacturing capabilities of Garmin.

"Anne Quick from Garmin sees software & medical applications as a potential solution to expand the wearable market."

Krystina Castella, Professor



TEAM LALA'S EXPLORE LA "ORBIT"

Above are visual designs for Team Lala's Explore LA system for teens. It is called Orbit because teens experience different parts of LA through exercising. They were asked to further push the visual approach with more LA imagery and icons in their designs.



CONNECT THE DOTS

Team Covfefe shows how people are nudged to exercise. The instructors commented: "The strength of this project is that you can simply overlay what you are doing in the Rec and Parks current app. In your presentation, show how they relate."

"Nudging can be too easy. What happens after that so there is a level of commitment? Otherwise it's just going to be yes, yes, yes, and no one shows up."

Brian Boyl, Professor, on nudge concepts

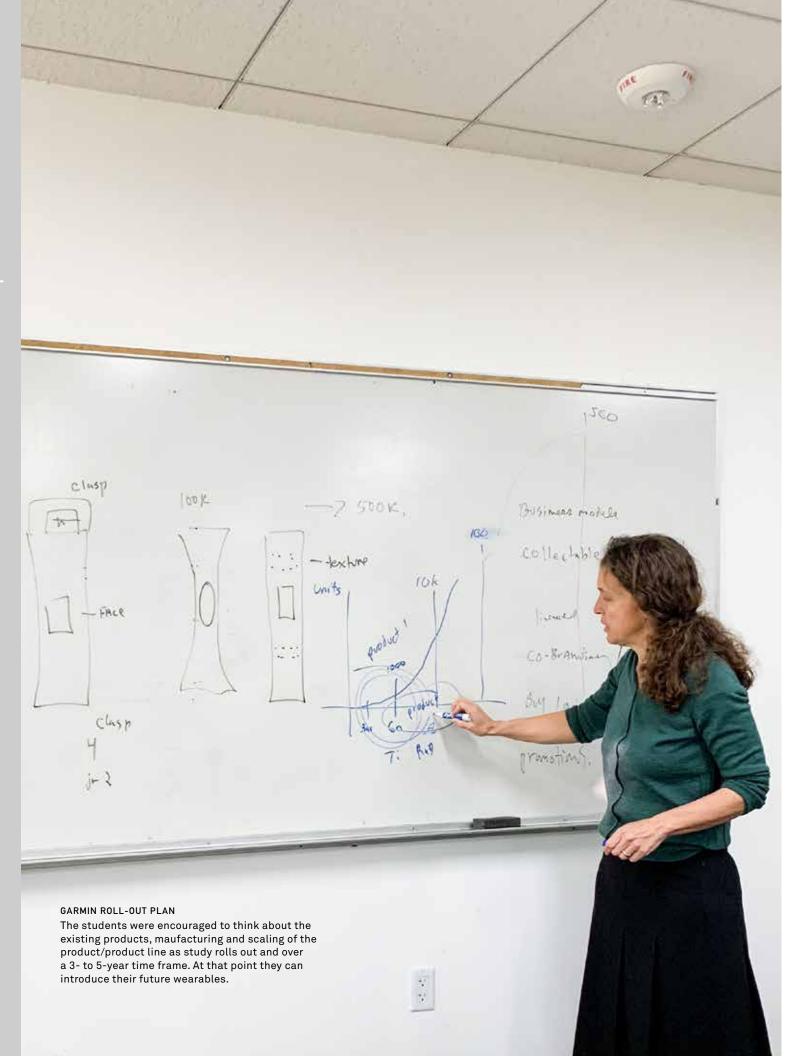


NARRATIVE MOODS

Students are readdressing the alien adventure storyline in their game. Krystina Castella mentions, "It is too dark and sad. Start in a happier place."

"First prime people to get their mind to think about exercising, and then you have to cue them. These are separate from the actual action itself."

Brian Boyl, Professor, on changing behaviors



"I think setting family health goals in the beginning is really important. Learn how these families set and achieve goals. How will that affect their interaction with the system?"

Krystina Castella, Professor

MAJOR LEARNINGS

Overall, students were instructed to think more about being a Los Angeleno. How does each project highlight aspects of the communities within LA through the attitude and visuals of their system? Teams are challenged to design a plan that expresses the core of their best ideas, considering how to make it happen today and transform into the future. Including:

FUTURE TECH:

Framing of future concepts in a scenario of what it "ideally could be."

NOW TECH:

Affordable technology over the next year or two. They were encouraged to implement current Garmin products.

NO TECH:

Through service solutions, programs and simple graphic applications. By being creative with CMF, product design and partnerships these projects can be ready to roll out this summer.

WEEK 11 DELIVERABLES

+ Design Framework: Scenario, User Flow, Wireframes + Visual Design & Garmin
Focused Physical Design
+ Experience/Oz Prototype



Making Challenging Refinements

Week 12 was focused on finalizing assets, solidifying story lines, and working in class on preparation for the final. Many teams lacked the integration of current Garmin products, the representation of Los Angeles in the DNA of the visual approach, and the 2028 Olympics as a motivator. They were challenged to commit to these aspects.



MAKE IT WORTH \$500,000

"From the perspective of investing into this truck, including staffing and training, how can we make this worth more than an initial contact point? You want what happens at the truck to be the experience. Not just sell the experience," said Krystina Castella.

"Design the experience first, and then the marketing will follow."

Krystina Castella, Professor



TEAM META'S CHILD INTERFACE

Krystina Castella connects their walking trails patterns to their interface by suggesting to, "Evolve the functionality of the patterns. It could be about improving motor skills, instead of just attractive graphics. It could be spaced out based on how far kids can jump to improve gross motor skills."



LOS ANGELES DETAILS BY TEAM TREE

The graphic approach to the RAP centers was liked by all. It was a great example of incorporating the local landmarks of LA into the visual system.



FINALIZING THEIR ANIMATED VIDEO

Daniel Kim from Team Molasses sits down with Eunice Han, TA, during class to record a voice-over for their final project's animated video.





INFILTRATING STRUCTURES

"I like the idea of infiltrating the structures of LA and enabling people to make better choices, like your park benches, and 'LAvate fitness parking' encouraging people to park further and walk more. It could also include stairs and other infrastructure." remarks Camila Golestaneh, TA.

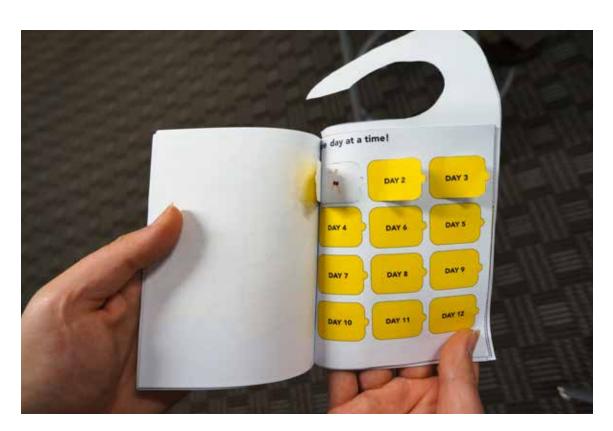


VISUAL DESIGN

The faculty and students discussed details in the app's visual design. "Speak to energy and excitement." It was suggested that the app felt dark with a heavy palette. LA is sunny, not overcast.

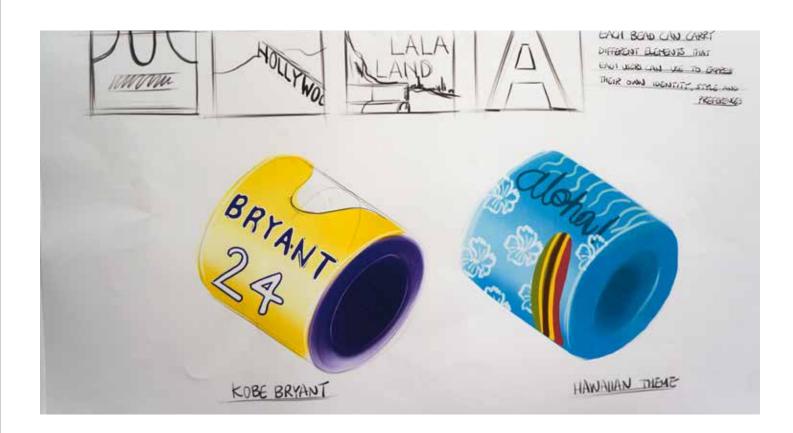
"What if this truck rolled out as a stage for exercise performances... bringing fun activities to parks that don't currently have those activities?"

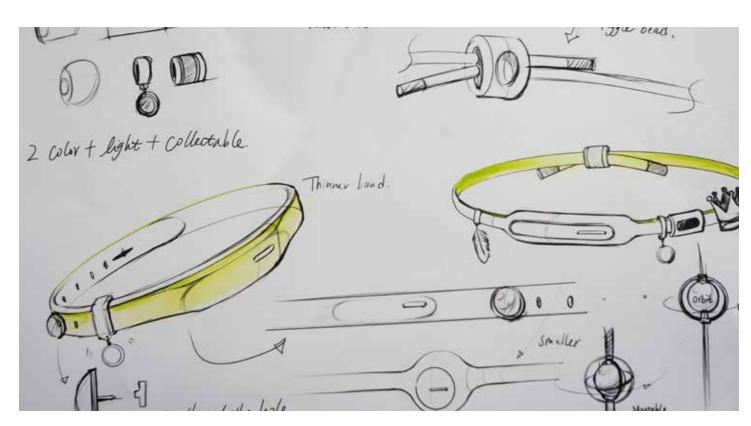
Brian Boyl, Professor



THE GOOD BOOK

"We thought about having churches and restaurants that believe in the program distribute these books. It would cut costs and give people the message from a community insider," explained Robin Vane from Team Covfefe. Krystina suggested also tying distribution to existing stakeholders and school programming.





FORM EXPLORATION FOR TEENS: IS IT UNISEX?

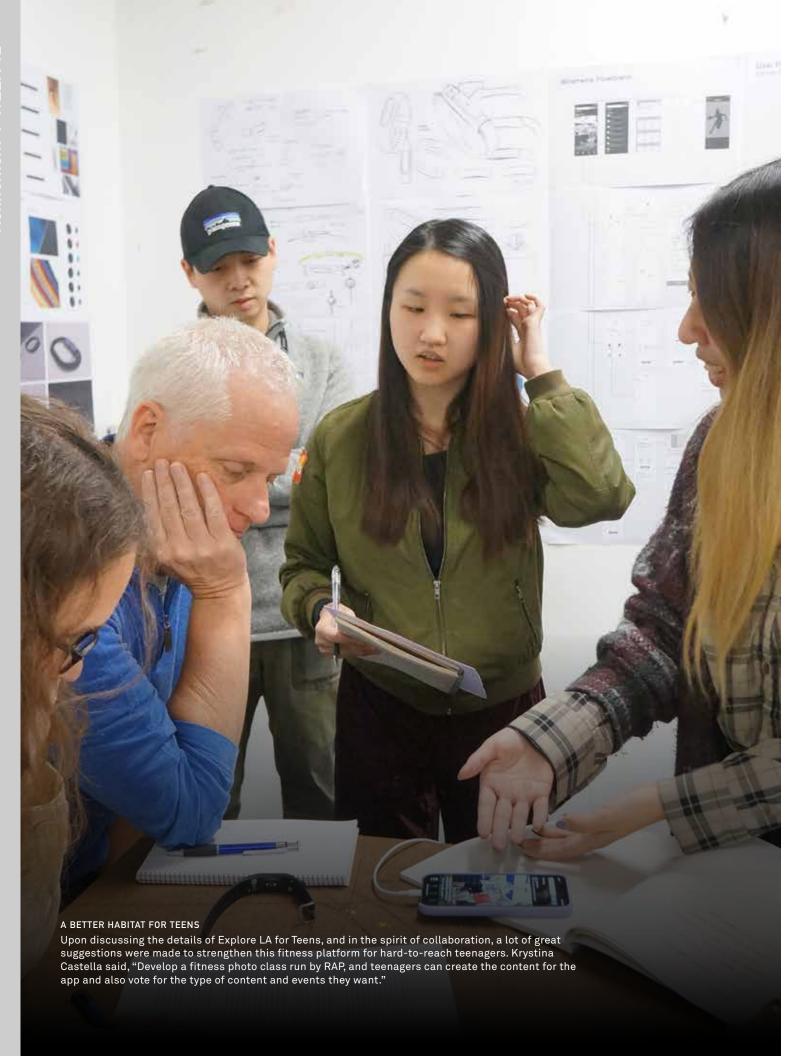
Krystina Castella said, "Talk to teens to see if they will wear the bracelet. For the beads, think about the aesthetic as it relates to the scale of manufacturing. There are many different printing processes to explore for executing this. Detail how the product will look for the 10,000 units, 50,000 units, and 100,000 units phases."





EVENT RATIOS

"What makes this project unique is the events, so think about your event ratios in the hierarchy of the app. How does RAP channel their current and additional programs you're introducing? Create a 'now' solution and include how that ratio changes in the future," said Krystina Castella



"Think about the photos on Instagram that are interesting to teens. By having them take the pictures for your system, it drives future content."

Brian Boyl, Professor

MAJOR LEARNINGS

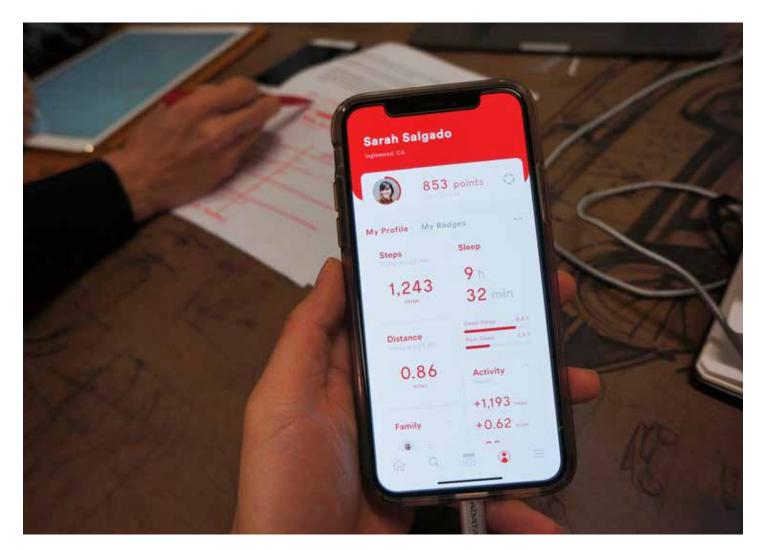
Students are learning to disconnect from communication design (advertising solutions) and moving toward strategic design (systems solutions with a project rollout). Focusing on experience solutions and building the long-term habit continues to be a challenge. The "now" solution is continuing to be emphasized by incorporating Garmin technology, Rec and Parks app and database and the infrastructure of Discovery Cube.

WEEK 12 DELIVERABLES

- + Refinement
- + Final Presentation Prep
- + Garmin Integration

Preparing for the Final Presentation

Students took responsive action this week, and proved to be able to resolve their designs, despite the pressure of short deadlines. We witnessed exciting glimpses of what is to come for the final. Presentation structures were developed and last-minute design decisions were made. Most importantly, each project began to develop a distinct voice and strength.



TEAM MOLASSES - COMPASS APP

The interface that Team Molasses designed for their events-based app was visually modified to be more fitness oriented. Student Kristy Cheng used her cellphone to test the user-interface design.

"The idea is to reach people in all corners of LA. Show the sponsors that they can start this immediately by using the vans that Rec and Parks already has."

Krystina Castella, Professor, on Team Covfefe's fitness programs



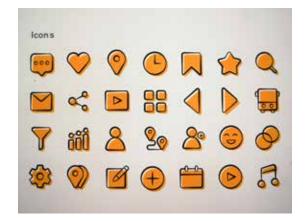
TEAM COVFEFE'S PARK VANS

This is a movable fitness program showcasing exercises people can do on park benches. "We want to inform people how to use the park benches for exercise," said Product Design Student Jordan Guerrero.



TEAM MOLASSES'S PROGRESS

Team Molasses made progress with their product evolution and had some strong near-term solutions.



TEAM LALA'S ICONS

Team Lala designed a consistent and playful set of icons for their interface. This is essential for any app with a strong brand.



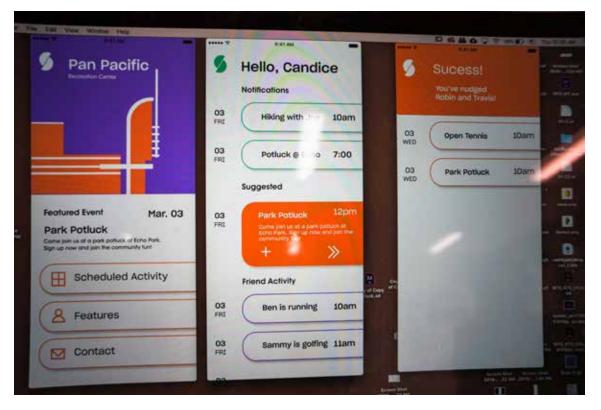
"The strength of your device is making the fitness data feel natural. The current market is filled with screens and steps, and yours is about just translating the checkpoints. Define the benefits to that. It is a new way of thinking about data collection through the device."

Krystina Castella, Professor, on Team Tree's color-changing fitness band



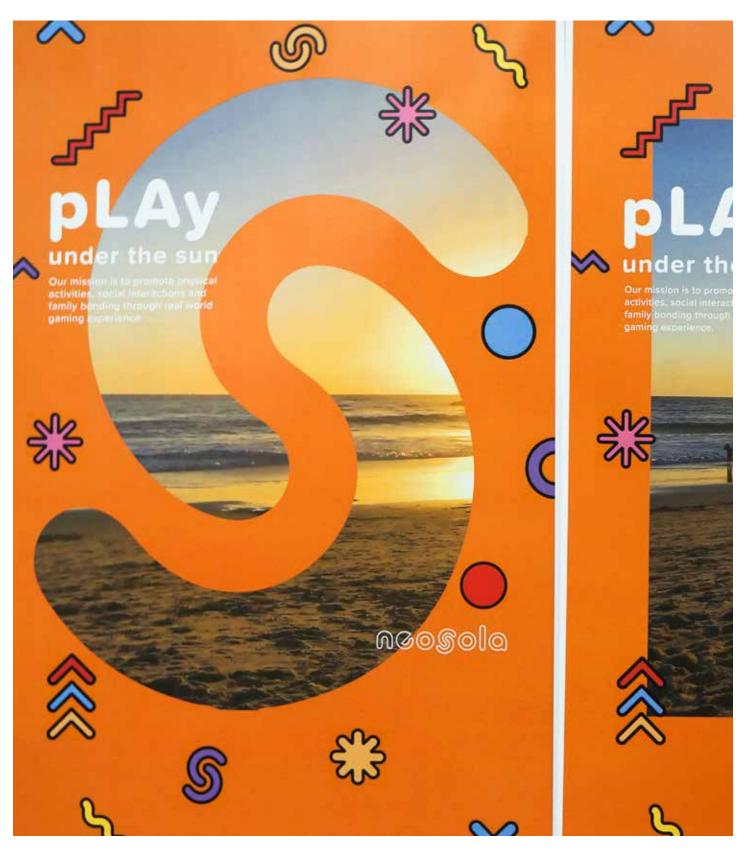
TEAM TREE'S SYSTEM AND COLOR-CHANGING BAND

Above, Nicole Wang explains the context of their system: "Rec and Parks is really the backbone of making this all happen." It was suggested to keep the business framework and design open ended so other organizations such as the YMCA and the schools interested in promoting fitness can easily get involved.



TEAM TREE'S INTERFACE

Brian Boyl notes, "The graphics that you're integrating now work really well. However, using color to identify locale and location but also activity usage is too much, and can become confusing. Avoid using the same colors and crossing over into different topics."



WHAT'S THE REAL CONTEXT?

Team Meta designed posters for their "Under the Sun" system. Krystina also reminds them to thoroughly explain context. "If you are suggesting that they hire a third-party game developer, then explain that. Highlight throughout the game what the health data is and where it is captured."



TEAM COVFEFE CLIP

Team Covfefe reintroduces their low-cost wearable. It evolved from a cheap and disposable slap-on band to a clip-on that can attach to any band / watch. This decision helped strengthen their project by making data tracking affordable.

"I envision kids helping out with the design of the patterns."

Penny Lin, Student, Team Meta, on floor patterns



HIGHLIGHT THE RIGHT THINGS

Team Lala is reviewing their slideshow scenario that is going to be shown in their final presentation. They are making sure that all of the stakeholders, people with special needs and the Olympics are all included.

Primary User Flow Onboarding See Chris's profile Check the event details & register Connect wristband Purchase wristband

User flows help showcase the app's interface from a bird's eye view, and the

purpose of the pages are explained as a user "flows" through it. This is Team Lala's ExploreLA for Teens platform, and they were asked to make sure to

highlight that their system would post teen-generated photos.

"Your virtual games are not intended for kids that are physically active and are not addicted to games. So don't encourage them to play the game. Don't solve the fitness problem by introducing a screen problem."

Brian Boyl, Professor, on user specificity

MAJOR LEARNINGS

Each team went through a mock presentation with the professors and reprioritized the immense amount of information that they developed over the past 13 weeks. They stepped back from their expertise on their project and used their main character to tell the story of their system. This process also reinforced how they explain the context of their system.

WEEK 13 DELIVERABLES

- + Final Presentation Prep
- + Posters
- + Animation / Scenario

The final presentation was hosted at the LA Rec and Park's Camp Hollywoodland location. Students presented their final concepts through a fantastic display of keynote presentations, posters and final models to the sponsering partners. Veteran attendees and new viewers alike were extremely impressed with the level of the students' dedication and work. This portion of the project drew to a bittersweet close as the sponsors prepared to move on to the advertising phase.



PRESENTATION MOD

There were two parts to each team's presentation. A team gave a digital presentation, explaining their project's system and user scenario, after which followed an open discussion with the audience at that team's designated wall space—where the physical prototypes and posters were displayed.





"Thank you for aligning every partner. you took all of the pieces and brought them together thoughtfully."

Sacha Van Voorhis, Director of Discovery Cube Los Angeles



"I love the fact that you are using cheap and effective paint on the asphalt. Using this as a game to disguise the exercise for your market is very smart."

Ryan Carpio, LA City Rec & Parks







"I really love the idea of a book that my kid can interact with. Can you get different books for different seasons? Theme them with different types of experiences."

Valerie Poliakoff Struski, Executive Creative Director, Kantar, to Team Covfefe



"I like the idea of collectable beads, but don't just stick them to bracelets. Think about the creative habits of these teens. It could go on shoe laces, on necklaces, on earrings."

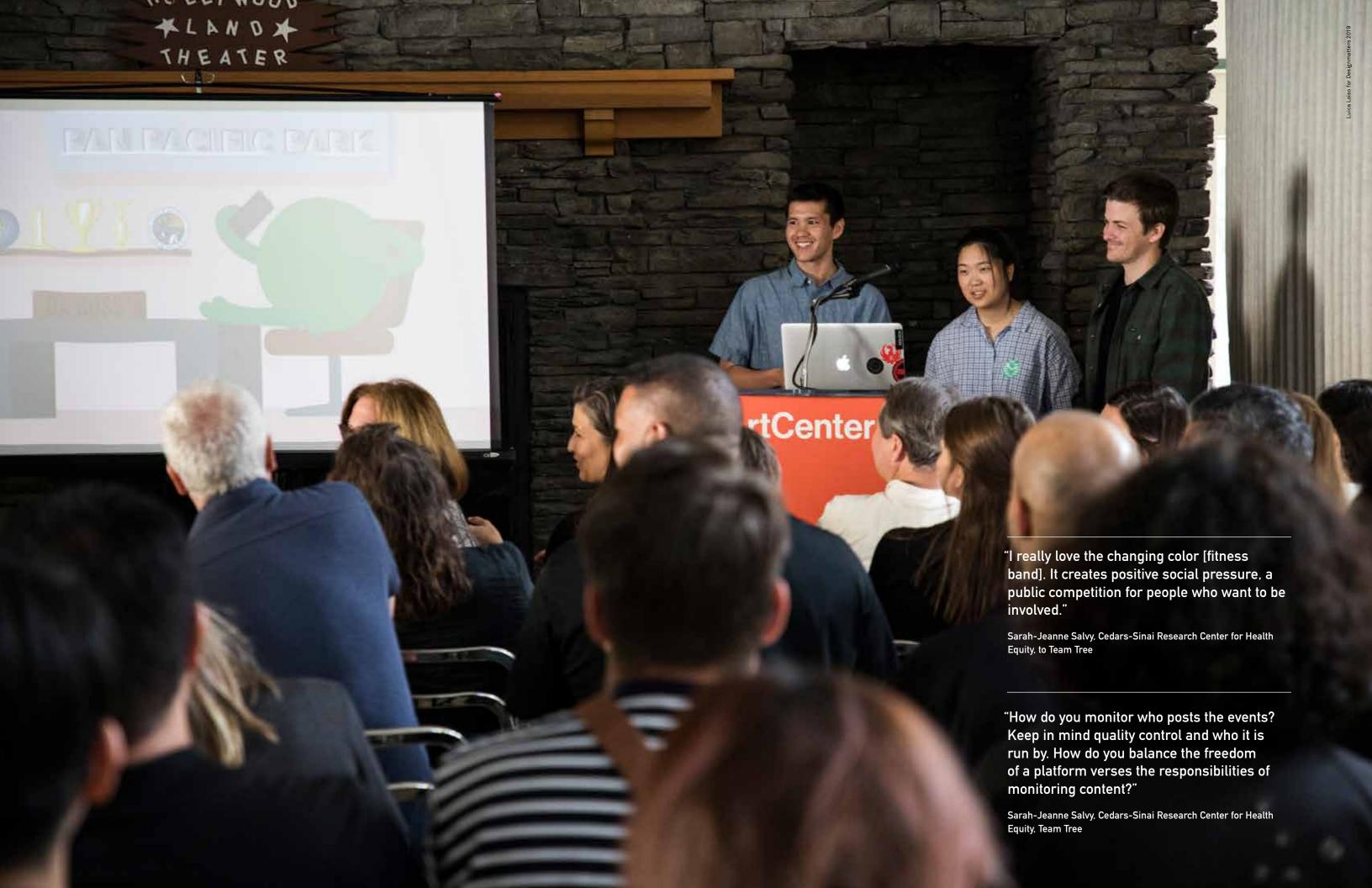
Valerie Poliakoff Struski, Kantar



for Designmatters 2019



Luica Loiso for Designmatters 2019



MEET THE TEAMS

TEAM MOLASSES



"We chose the name Compass because we want this to be a simple and easy guide to the events happening in your neighborhood."

Kristy Cheng, Student

TEAM COVFEFE



"It's not a product, it's an underlying principle and idea. The users are primed, nudged, and given the tools to build that habit."

Jorden Guerrero, Student

TEAM META



"There is less opportunity to play outside. Technology has become a very important role in children's lives so we need to show them how to play in the modern era."

Toby Yu, Student

TEAM LALA



"As Orbit develops, teenagers are able to design the new events themselves, vote for events, and help with content creation.

Aaron Park, Student

TEAM TREE



"The idea is to reinforce to the community that these events are happening consistently. You know Thursday is Green Time."

John Erickson, Student







PROJECT COMPASS

BY TEAM MOLASSES

MEMBERS

Kristy Cheng Graphic Design Daniel Kim Graphic Design Yanqi Li Product Design Shiya Zeng Interaction Design

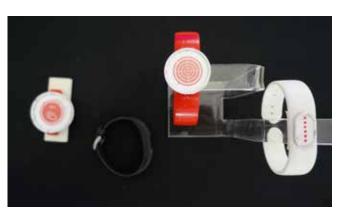
PROJECT OVERVIEW

Compass is a community-event platform promoting health and wellness in LA. Its mission is to create a healthier and better community through events that unify and motivate the city of Los Angeles. It's your LA Community Pass.









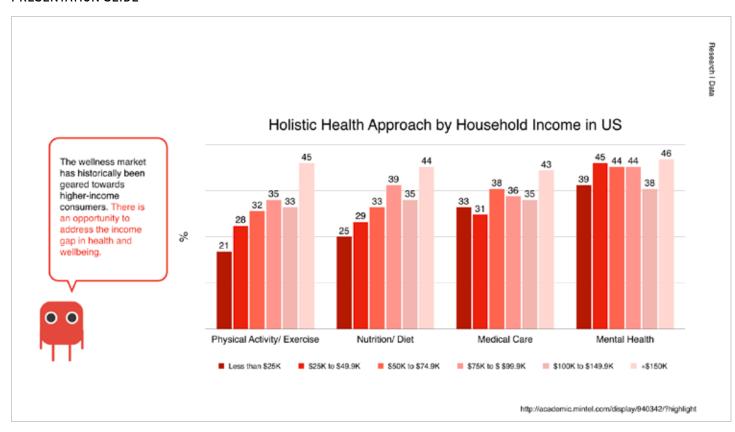




PROJECT COMPASS

BY TEAM MOLASSES

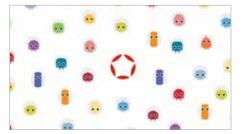
PRESENTATION SLIDE



SCENARIO



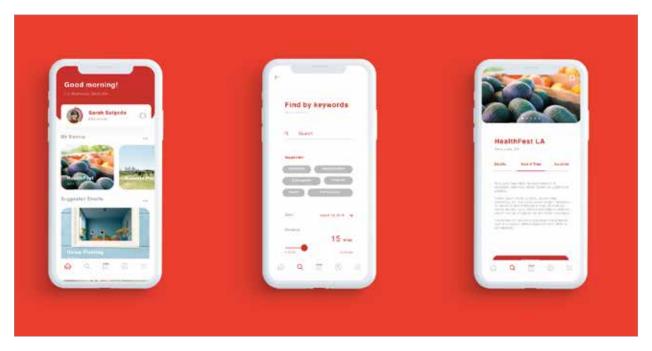




YOUR LA COMMUNITY PASS

A family goes to the park and experiences a variety of Olympic-themed games. They receive further information and access to events happening throughout their neighborhood through the Compass app, a comunity-event platform.

INTERFACE



EVENT FINDING

Compass's app provides a space for families to sync and watch their health progress together, collect achievement badges based off of different events they've attended, and look for local events. In the future, events will become more user-generated.

WEARABLE





PRESENTATION MODE

Around the year 2024, a new wave of customization abilities are introduced, including custamizable bands and watch faces. These will help families track their activity better and even support citizen science activities. Event themes range from fitness, education, beautification, health and exploration.

PROJECT LA.VATE

BY TEAM COVFEFE

MEMBERS

Jordan Guerrero Product Design Pooja Nair Interaction Design Edwin Tanu Product Design Robin Vane Graphic Design

PROJECT OVERVIEW

LAVATE is a system of digital and real world nudges that help create a steady habit of activity for the users by encouraging them to move just a little bit every day. The system includes: an app with a library of short workouts, daily live sessions led by a variety of guests, and the ability to log in your own individual activity to create daily or weekly streaks of activity; a pop-up truck that goes to parks, malls, schools, and street festivals to spread the word about LAVATE, to distribute a no-tech handbooks with an advent calendar of short, and more.

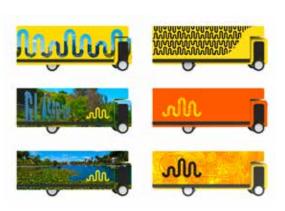










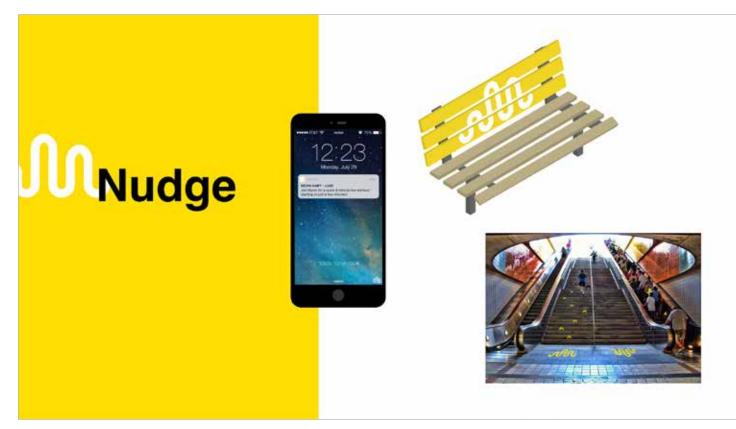




PROJECT LA.VATE

BY TEAM COVFEFE

PRESENTATION SLIDE



SCENARIO



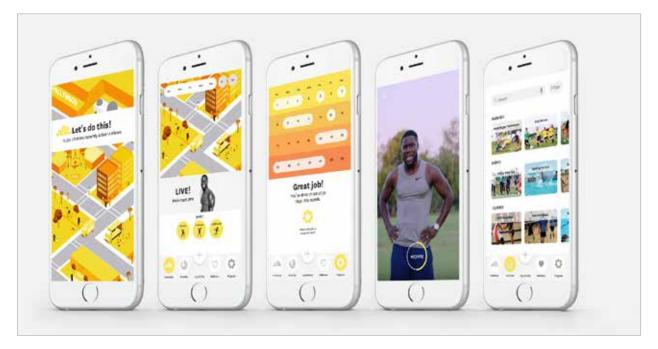




LITTLE BY LITTLE EVERYDAY

From physical trucks at parks, to phamplets and benches, Team Covfefe's scenario for LA.VATE shows how they use various methods to help people integrate easy, everyday excercises into their lives.

INTERFACE



MAKE A STREAK!

A highlight from LA.VATE's app system is its ability to help you work toward daily, tiny streaks. It is designed to promote continuous activity and a includes a feature called "live workouts," where users are notified of a quick live workout being performed from a star or friend and are encouraged to join.

WEARABLE





CLIP IT

LA.VATE stayed true to the more practical "bring your own device" model and created an attachable health tracking device that anyone could attach to their existing wrist watches.

PROJECT SHIFT

BY TEAM TREE

MEMBERS

Travis Cantrell Graphic Design John Ericksen Product Design Nicole Wang Graphic Design

PROJECT OVERVIEW

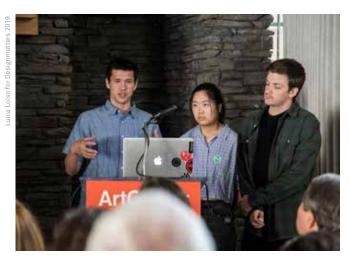
Shift transforms individual activity into a cross-communal experience enabling users to develop healthy habits among friends, family and peers. Its mission is to remove the user away from the screen to create tech supportive wellness, embracing the idea of shifting toward "Green time, not Screen time."









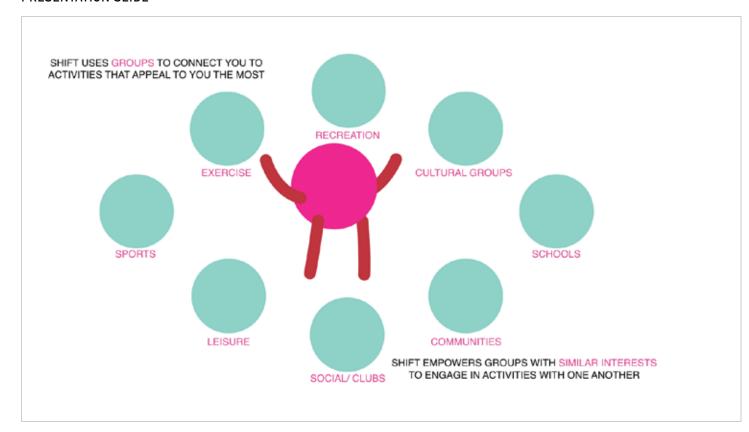




PROJECT SHIFT

BY TEAM TREE

PRESENTATION SLIDE



SCENARIO



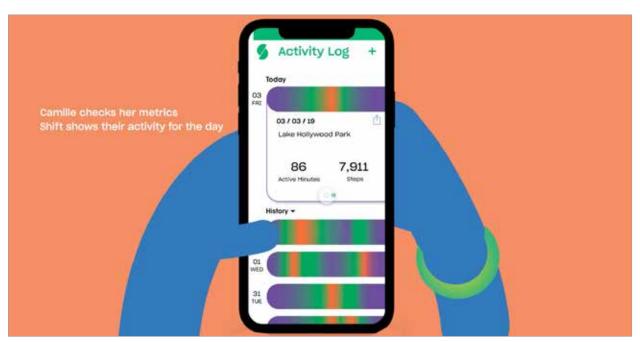




IS IT GREEN TIME YET?

Shift shares a scenario of a mother and daughter connecting to their diverse community through activities that encourage consistent and reliable outdoor "green time." Shift supports these activities in many ways, for example by organizing repeating events for every group that then become routine.

INTERFACE



SHOW YOUR TRUE COLORS

Shift gives a great example of connecting the wearable device experience to their app. Because Shift's wearable device translates their physical activity metrics through simple colors, the app also displays its data in that manner.

WEARABLE



CLIP IT

Shift tracks activity by connecting to Garmin devices. This is a future concept, color-changing fitness band that tells you your fitness level through color messaging. Because it is glancable, more visibly public, and the fitness data more emotional, it keeps users more accountable for their health.

PROJECT ORBIT

BY TEAM LALA

MEMBERS

Shixun Chen Grad Industrial Design Chufan Huang Graphic Design Aron Park Product Design Wenyuan Xu Interaction Design

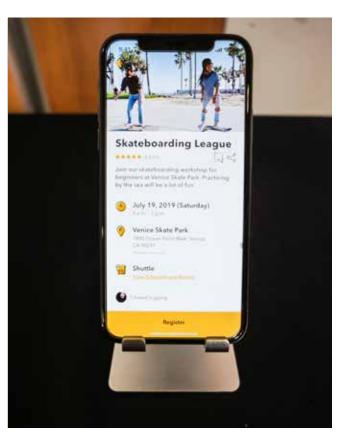
PROJECT OVERVIEW

Orbit is a physical activity system for teens that helps them to explore LA. It is an event platform that utilizes resources provided by RAP and Discovery Cube to create a range of LA-specific activities, and can ultimatly source activities and content from teenagers themselves. It integrates events, fitness wristbands and a mobile application to create an engaging social experience for teenagers to explore LA and ultimatley become more active.











PROJECT ORBIT

BY TEAM LALA

PRESENTATION SLIDE



SCENARIO



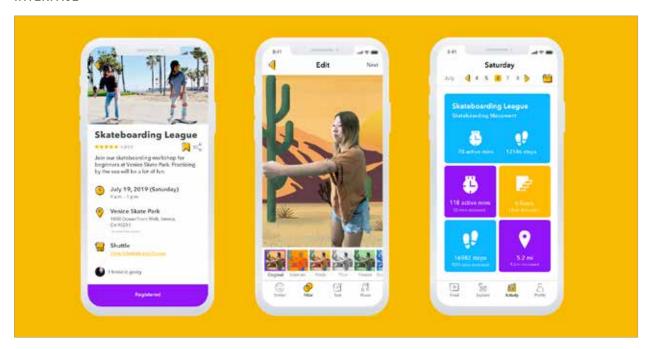




JENNY HAS A CRUSH

A teenager named Jenny is drawn to the app Orbit because she sees her crush is going to the many physical-activity focused events that Orbit provides all over LA. It's exciting for her, and through the help of Rec & Parks, and fun teen-generated content, she becomes more active over time.

INTERFACE



A PLATFORM FOR TEENS

Orbit provides a space for teens to hang out, outdoors. Activities range from going on hiking adventures to partying and kickboxing at venues with virtually projected cactuses from Joshua Tree.

WEARABLE



BRACELETS TO COLLECT

Orbit provides a beautifully designed bracelet for teens that acts as an activity tracker and also allows them to collect beads from different events they've attended, such as a kickboxing bead or a basketball bead. Its thin design alludes to the threaded bracletes that kids often make and exchange themselves.

PROJECT NEOSOLA

BY TEAM META

MEMBERS

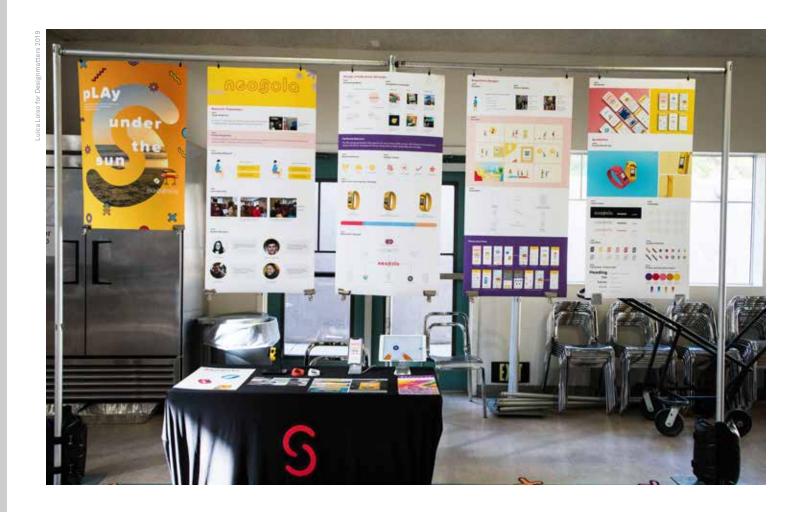
Diana Chan Graphic Design Penny Lin Product Design

Tian Liu Tang ign Media Design Practices Toby Yu

Product Design

PROJECT OVERVIEW

The main goal of NeoSola is to increase 7- to 12-year old kids' physical activity levels while they play. Through primary and secondary research, we found that kids love Role Playing Games (RPGs) with character customization and they get bored very easily. Therefore, NeoSola offers different types of mini, habit-building games. They encourage fun social interaction while keeping the kids physically active.















PROJECT NEOSOLA

BY TEAM META

PRESENTATION SLIDE



SCENARIO







A JOURNEY OF MINI GAMES

NeoSola takes kids through a variety of active games that balance the digital and physical experience. Games like virtually passing the mini torch, to jumping across patterns that tell you how far you've jumped mixes things up and kids never get bored.

INTERFACE



YOUR VIRTUAL COMPANION

NeoSola provides kids with a virtual companion that grows and plays actively with them. Team Meta found that customization needs to be a big part of the character because it has proven to be extremely popular with kids.

WEARABLE



WEAR YOUR COMPANION

NeoSola builds off of the Garmin platform to create further customization oppourtunities for kid users. The silicon case slips off easily, without having to change the hardware design. The software includes the companion, of course, and closely follows the child's activity journey.



"Think about the market you are excluding when you charge for products."

Valerie Poliakoff Struski, Insights Division Kantar, to Team Lala

MAJOR LEARNINGS

Key factors that determined the success of the students projects:

Every team proactively addressed issues that were brought up in past weeks by sponsors and by the professors. It took time to evolve, but that process was important.

Storytelling through scenarios was the magic that helped everyone to believe in the projects and put smiles on the audience's faces.

The accuracy of research showed in the final.

A mindset of inclusivity. It was clear that students made an immense effort to reach all of LA, not just families in the higher income range. They were realistic in thought, and children, teengagers, parents, seniors, and the individual needs of the Partners were all important chess pieces to their systems.

WEEK 14 DELIVERABLES

- + Keynote Presentation
- + Wall Presentation
- + Final Models & Prototypes

THANK YOU TO OUR GUESTS

Aaron Bruce

VP and Chief Diversity Officer ArtCenter College of Design

Adrian Morales

Recreation Coordinator
City of LA Recreation and Parks

Carlton Stubbs

Senior Recreation Director (Van Ness) City of LA Recreation and Parks

Eric Calhoun

Senior Recreation Director (Pan Pacific) City of LA Recreation and Parks

Dennis Lee

Advertising Faculty
ArtCenter College of Design

Ellen Gaines Varela

Senior Recreation Director City of LA of Recreation and Parks

Gillian Gresham, PhD

Cedars-Sinai Research Center for Health Equity

Jason Shepherd

Recreation Facility Director (Sun Valley) City of LA of Recreation and Parks

Jeremy Aldridge

Senior Recreation Director (Lanark) City of LA of Recreation and Parks

Liz Lanphear

Director of Events for the Center of Diversity, Equity and Inclusion ArtCenter College of Design

Michael Shull

General Manager City of LA Recreation and Parks

Nicole Anand

Independent Political Economist & Co-founder of The Residency Adjunct Faculty, Transdisciplinary Design, Parsons The New School

Oscar Cardenas

City of LA of Recreation and Parks

Randy Kelly

Superintendent (Pacific Region) City of LA of Recreation and Parks

Dr. Robert W. Haile

Associate Director of Population Sciences
Director, Cedars-Sinai Research Center for Health Equity

Rodolfo Sanchez

Recreation Facility Director City of LA of Recreation and Parks

Ryan Carpio

Director of Government Affairs City of LA of Recreation and Parks

Sarah-Jeanne Salvy, PhD

Cedars-Sinai Research Center for Health Equity Cedars-Sinai Medical Center

Tamara Williams

City of LA of Recreation and Parks

Valerie Poliakoff Struski

Executive Creative Director (North America) Insights Division Kantar

Vicki Israel

Assistant General Manager City of LA Recreation and Parks

Wesley King

Facility Director (St. Andrews)
City of LA of Recreation and Parks

Zul Surani

Cedars-Sinai Research Center for Health Equity

Credits

HOST DEPARTMENTS Product Design Interaction Design Graphic Design

FACULTY

Brian Boyl Krystina Castella

PARTNERS

Cedars-Sinai Research Center for Health Equity
City of Los Angeles Department of Recreation and Parks

Discovery Cube Garmin International

DESIGNMATTERS

Jennifer May, Interim Executive Director Susannah Ramshaw, Associate Director Garret Scullin, Senior Coordinator Steven Butler, Media Coordinator STUDENTS

Travis Cantrell Diana Chan Shixun Chen Kristy Cheng John Ericksen Jordan Guerrero Chufan Huang Daniel Kim Yanqi Li Penny Lin Pooja Nair Aron Park Tian Liu Tang Edwin Tanu Robin Vane Nicole Wang Wenyuan Xu Toby Yu Shiya Zeng

TAs

Eunice Han Sophia Rowland Camilla Golestaneh Brian Ostroff