

KING TRITON

BY HACKOSAUR



Description

King Triton is a smart digital kiosk that assists new visitors in getting to their destinations from the mobility hub by providing accessible, real-time information, identifying optimized paths, available amenities, and ongoing events, with the option to go mobile.

Start by the Problem

End users: visitors who are unfamiliar with places around the mobility hub

Situation: visitors who get off the trolley want to navigate from the hub to their destinations.

Need: a system to navigate as well as getting information of places nearby

How do they feel: lost, uninformative

System consideration: micro-mobilities, real-time traffic, special events, rideshares

Preliminary data: we talked to students, staffs, and visitors found all across campus and asked questions regarding issues or successes using transportation;

Insight: transportation available are disjointed, if not known to some, and the main reasons are their slowness and lack of availability. First impressions matter a lot.

Identifying assumptions:

- People have trouble finding things on campus.
- People don't know where to start.
- People want to waste as little time as possible.
- The experience of people first time using something determines if they will use it again.

Followed by the Process



Problem Discovery

Created an affinity diagram, grouping notes into categories → Large ones are about efficiency, availability of information, and issues with tech solutions

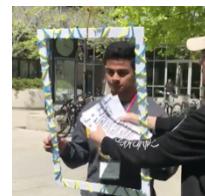


Brainstorming Solutions

Members brainstorming solutions to solve the three problems → 1.go from the hub to B in the most optimized way; 2.real-time updated info; 3.accessibility to transportation options → came up with the most shared ideas: a smart digital kiosk

Prototyping and Testing

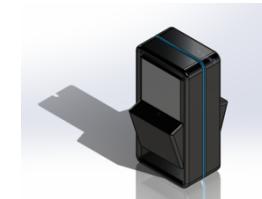
Developed the prototype with paperboard and paper and tested to a Lime scooter and SANDAG staffs → got suggestions to improve our current model



Planning

- We are going to include more features/customization for the kiosk
- We can also adapt the model into other mobility hubs

Finalized by the Proposal



The original model is two kiosks standing back to back

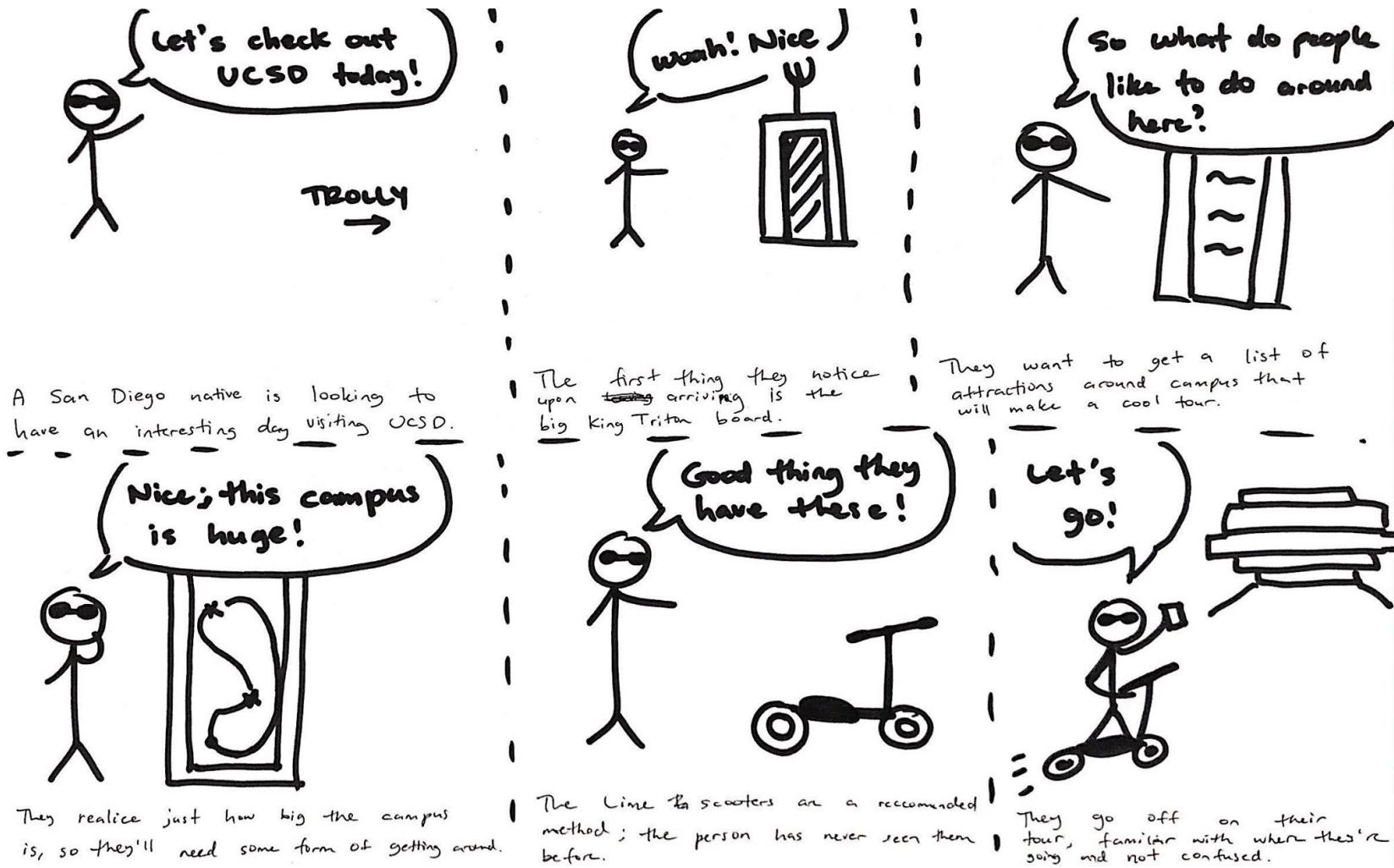


Later, we came up with a better idea with two kiosks standing next to each other, and the animated King Triton could move from one screen to the other.

Finally, the model King Triton is designed to be located at the west side of the trolley where it could attract passengers.



BIG IDEA IN CARTOON



Problem Definition

- Target Audience: UCSD guest attending a conference (first time visitor)
- secondary, tertiary (no need to mention in pitch but for impact maybe)
- What Situation?: Navigating from the trolley station to a desired* place on campus.
* (mobility hub) (any)
- What they need?: Identify the most appropriate route to get to that location. The campus is big and confusing, and there are lots of modes of transportation, unknown to most.
Accessibility?

System Consideration

- Systems Included: UCSD maps, Special Events calendars, shuttle maps/times, micromobility*, ride-share, UCPD (security, safety, SOS)

Preliminary Research / Data

- Who we talked to: Students, staff, and high school visitors found all across campus
- What questions we asked: Issues or successes experienced using transportation (both public and private)
- how we constructed our questions
 - elaborate on how they were used or possible to identify commute patterns
 - describe your daily commute
- Key insights: Transportation systems available are disjointed, if not unknown to some, and the main reason for neglecting them are their slowness and lack of availability. First impressions matter a lot.
? what does this mean will everyone know? from now on little about how we got these insights. Maybe quote people

Assumptions

- People have trouble finding things on campus
- People don't know where to start
 - People already have an ~~image~~ idea of what they want to do
- People want to waste as little time as possible
 - Peoples first use of something determines if or not they'll use it again

Problem Discovery, Brainstorming, Prototyping

- DISCOVERY**
1. Interviewed students, staff, & visitors
 2. Collected information from our interviews onto individual sticky notes
 3. Created an affinity diagram, grouping notes into common problem spaces
 - Large ones around efficiency, availability of information, and issues w/ tech solutions
consider other places, like airports
 4. Took info from affinity diagram and began ideating.
 - Each group member came up with 5-10 possible solutions to solve three key problems
 - Go from MH → B in the most optimized way
 - Real time & up-to-date info
 - Accessibility to transportation options
 - After solutions were presented, we selected the most shared ideas
- | | | |
|---------------------------|-------------------------------------|---------------------------------|
| • Better signage | • Kiosk(s) | • Routine, specialized shuttles |
| • Real time traffic flows | • APP | • Scooter charging zones |
| • Trained staff | • Designated mobility service areas | |
- find one word for each*



Affinity diagram

5. Voted on our favorite idea(s)

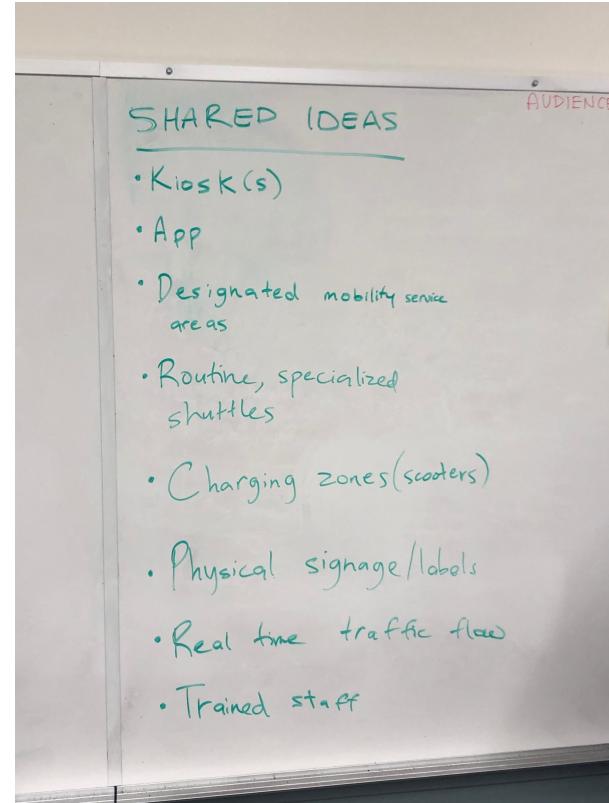
- We converged on a kiosk to serve the following purposes

- Act as an attraction (King Triton) and art piece (glowing trident to light up area)
- Promote school spirit
- Provide a means for displaying transportation in a singular, integrated location that can be updated as necessary
- Help new ~~visitors~~ get access to information about transportation options

6. Began low fidelity prototyping

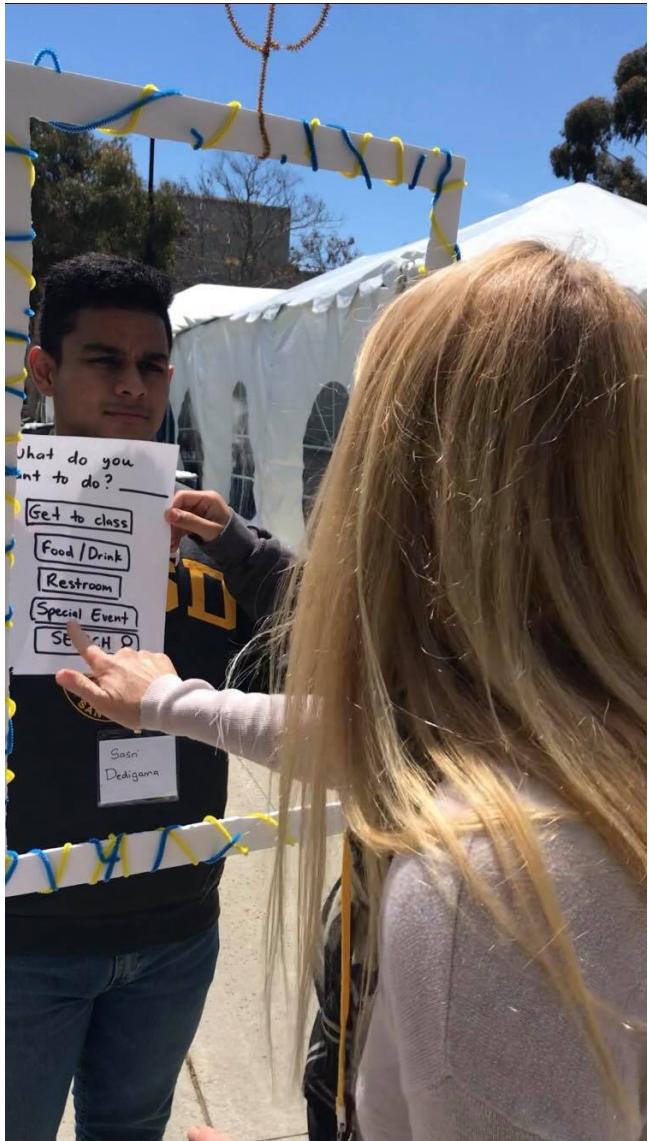
- Cut out a foam board to create a "bezel"
- Someone stands in the frame, acting like King Triton, holding up paper to represent various available screens

7. Conducted user testing



We chose Kiosk, incorporated with App, to be our idea

Prototyping and testing with a lady from SANDAG



User Testing and Feedback w/ user

- Matt Anton w/ Lime Scooters
 - Add option for a contact number if they're unable to find what they're looking for
 - Include options for both typing and speaking desires
 - If you're searching for a class, start w/ the class subjects (**COGS, CSE, etc.**), then move into class numbers (**14A, 101, etc.**)
 - * Are classes relevant for our target audience?
 - If searching for a building / location, list some hot spots

• Coleen w/ SANDAG + UCSD Alum!

- Framing! We want to welcome people to our beautiful campus
- Include tourist attractions
- Switch "Bikes/ Skateboards" + "scooters" to "personal micromobility" and "rental micromobility", then go to appropriate resources from there
- Add pricing + time to the transportation methods
 - * Have a recommended one?

User Testing and Feedback ^{w/ video}

• Matt Anton w/ Lime Scooters

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