

## Progress slides

## Final Presentation Slides

### **Research**

- Spilled drinks
- Slower than other delivery services
- Lack of customer service options
- Crosswalks/ taking up room on sidewalk
  - Hazardous on sidewalk
  - Obstructing pathways for wheelchair users
- Routing issues
  - “Starships are stupid”
  - See picture (right)
- Expensive
- Issues with obtaining food from the robot
- Limited location
- Food thieves
- Pranks/malicious behavior towards robots
  - Alternatively: being kind to the robots
- What do Oregon State students think about Starships?
- <https://www.scientificamerican.com/article/out-of-the-way-human-delivery-robots-want-a-share-of-your-sidewalk/>
- [https://www.breezejmu.org/news/students-turn-to-starships-to-avoid-going-across-campus-in-cold-weather/article\\_d19a474e-c0ac-11ee-8e24-f3aad97b279a.html](https://www.breezejmu.org/news/students-turn-to-starships-to-avoid-going-across-campus-in-cold-weather/article_d19a474e-c0ac-11ee-8e24-f3aad97b279a.html)
- <https://pittnews.com/article/151742/news/starship-robot-wheelchair-incident/>



### **Possible Ideas/Solutions**

- Cup holder?

- Better cup holders?
- Improving AI for routing
  - If the robot starts crossing the street, it should KEEP GOING
- Other options
  - ~~- Packages~~
  - ~~- Flying~~
  - ~~- School supplies~~
  - ~~- Medication delivery~~
  - ~~- Mail delivery~~
  - Jogging companion
  - Game event
    - Hide & Seek, Scavenger Hunt
  - ~~- Help with homework (if it wasn't dumb)~~
  - Gives you quests/rewards - NPC/Chest
  - Photographer
  - GPS
  - Notes exchange (take a note, leave a note)
- We immediately ruled out solutions that were too close to the original purpose of delivering (something), as well as the options that we thought were too far fetched.

## Interview Questions

- Participant specifics
- Do you live on-campus?
- If so, where?
  - What year are you in?
- Do you often use delivery apps?
- If so, what kinds?
- Have you ever used a Starship?
- If so, what was your experience like?
    - How much did it cost? (food + delivery)
    - How often do you use this?
    - What did you think about the app?
    - How was the delivery? (speed, efficiency, food quality)
    - What could be improved upon?
  - Would you use it again?

- Would you be more inclined to use Starship services if they could deliver non-food products/experiences? (See **Possible Ideas**)
  - Would you participate in a Starship-based event, such as a scavenger hunt?
- Do you have any thoughts or comments on Starships' visual appearance?
  - Do you think they're cute?
- Do you think Starships are obtrusive on sidewalks/roads?
- Is there anything that you wish Starships could do?
- In your opinion, are Starships beneficial on campus as a whole?

## **Interview (Transcript Samples)**

Q: Have you used a Starship? If so, what was the experience like?

A: Yeah, a couple of times last year. It was chill, lowkey expensive

Q: How was the delivery?

A: It sometimes takes a while depending on where you get it from; when I ordered from Jersey Mike's it took forever. But most of the time, standard delivery.

Q: What could be improved upon with the Starships?

A: Maybe a little faster I guess, and I feel like they're pretty bad at navigation. They could be a little sillier too.

Q: What's your overall opinion on Starships as a whole? Are they beneficial on campus?

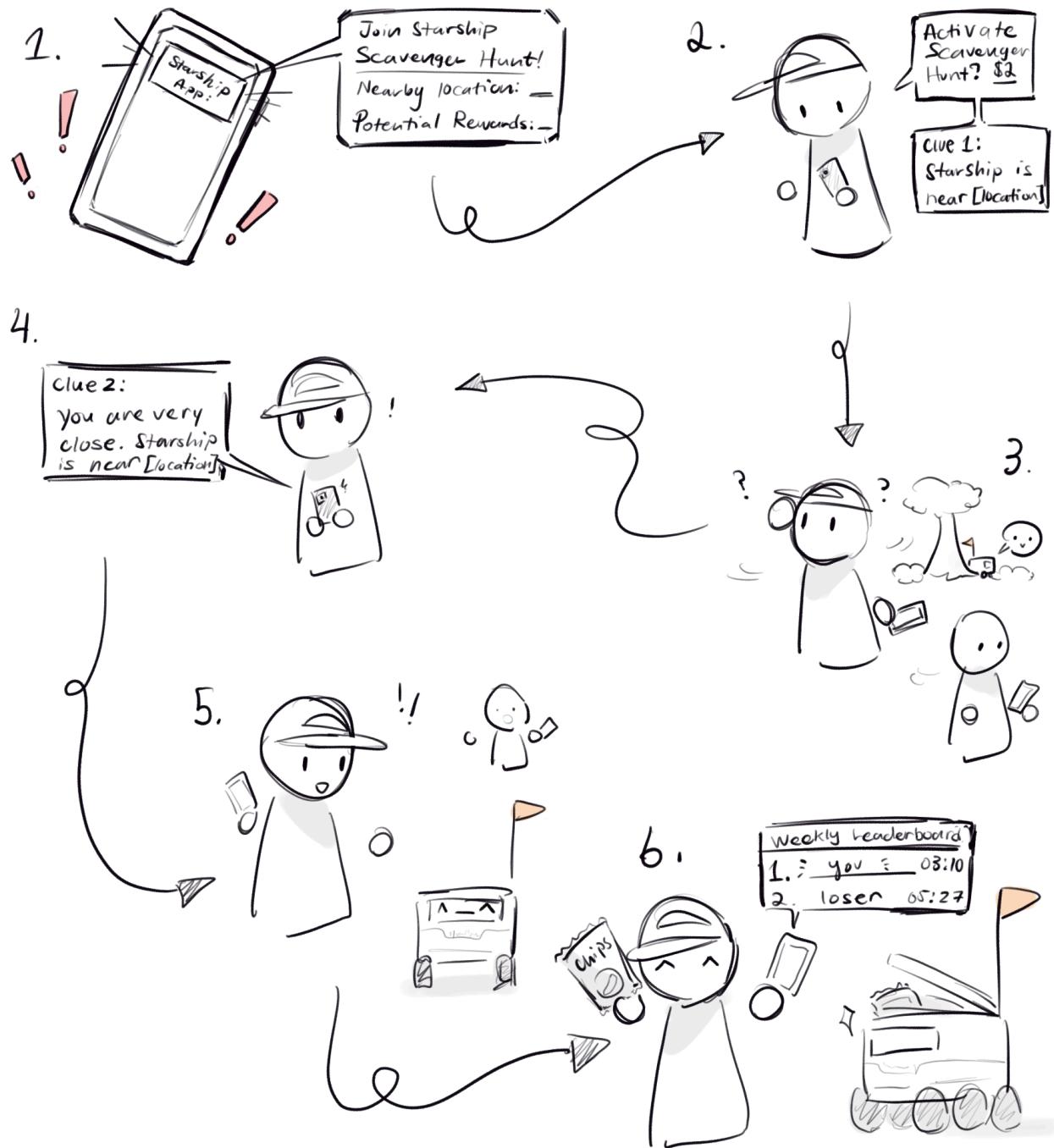
A: They're just there... they're not beneficial or detrimental, they just kind of do things. I probably won't use one for a while. They're just little fellows that go about, you know?

## **Observations**

- Skittish
- Relatively quiet when moving, besides some beeps here and there
- Usually stationed near food / retail locations (we saw them outside the third street market)
- Takes a bit to turn
- People either pay it no attention or look at it with admiration(?)
- Stops for prolonged periods of time to cross streets
- Will stop and swerve around people who stand in front of them
- Took forever to get to the destination; stopped for at least 15 minutes doing nothing.
- Struggles with curbs sometimes
  - Got stuck trying to go up on a curb; tried going back and up onto it again but failed. A girl came around and helped put it on the curb, and it said “thank you :D” before rolling away

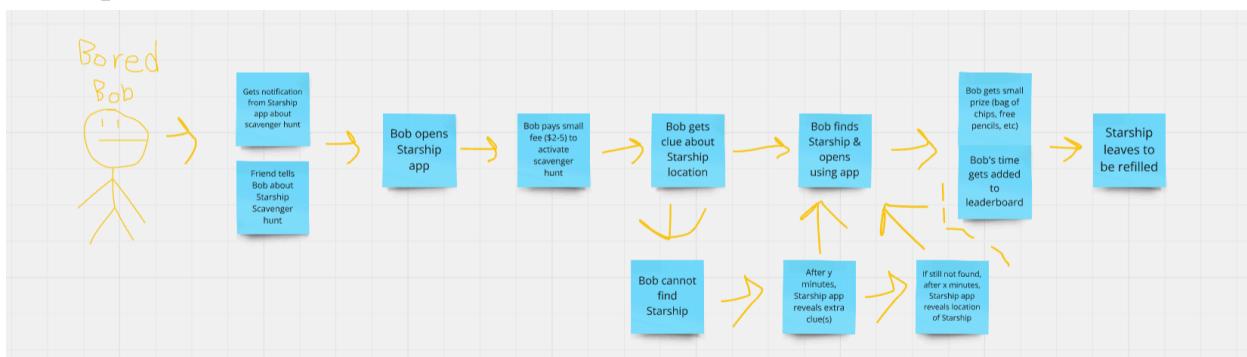
## [Interview Notes & Scenario](#)

## Example Scenario Storyboard





^ Compilation of data collected from our interviews



^ Example scenario

## Reflections

### Anthony

This project is a relatively long-term one with multiple steps involved. The topic we researched is closely related to real-life issues that we often encounter in our daily lives. The project we did also applied theoretical knowledge to practical situations. The interview skills and UX design concepts that we learned in class and through reading were very helpful in completing this project. Through this experience, I learned more about UX design, such as the use of hypothetical scenarios, which I found particularly useful. These scenarios allow us to discover potential problems in an ideal design. At the same time, it made me realize that some single-purpose technologies can still offer many opportunities for enhancing our daily lives in ways we may not have imagined.

### Emma

I think this project was very interesting to research - after all, who doesn't think the starships are intriguing? Designing a new, hypothetical purpose for the starships after researching them allowed for a lot of creative ideas and fun topics that wouldn't have been brought up otherwise. The most nerve wracking part was probably having to interview others. It's a very useful skill that will definitely be necessary going forward, but I had very little previous experience with interviewing others, so having the opportunity to do so with this project allowed for a very valuable experience. However, the most interesting part of the whole project was definitely seeing the other groups' presentations, since we were all given the task to design a solution, but most of the solutions that came up were different from each other. All in all, I think this project was both fun and allowed for a lot of useful experiences.

### Mason

Overall, this was an enlightening project. I definitely improved in my ability to gather information from real-world sources, especially when it comes to interviewing others. Not to mention, having project scenarios will be helpful for keeping design projects on track, both in this class and others. My main draw from this project, however, was how to collaborate. I've never been great with group projects in the past, and this experience has been perfect for getting better at working with others on a problem. The collection of divided work, such as with the research or interview data, helped with organization skills, and the presentations improved my skills with presenting and answering questions I hadn't considered.

### Carlton

Going into the project I was nervous due to the topic. I really had no idea on what to specifically do. At first I was thinking more on how to improve rather than give another use for the robot. I quickly learned the advantages of having a group. The ideas the group gave allowed for me to

have a bigger scope towards the project. Normally I prefer working by myself, but working with others made it easier thanks to dividing the workload. The project also taught me to think more creatively and to have fun with the project. Usually I try to take the easiest route to finish a project, but sometimes brainstorming different ideas also for more fun to be had. In all the project really made me remember how important the brainstorming stage is to a project. It made me realize just how much I enjoy that step of the process.

### Amelia

I think this was a particularly interesting project to explore because of how often we, as students, notice and interact with the starships on campus. This made gathering data especially convenient, or at the very least it made it more personal. I also enjoyed getting to hear different information and ideas from my own teammates as well as other groups in the class; it's fascinating how so many ideas can stem from one common invention we interact with. Overall I'd say the project went pretty well. The team worked well together and was great at dividing work and completing it in a timely manner, and I was able to learn a lot about user experience as a whole through the different processes of data collection.

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