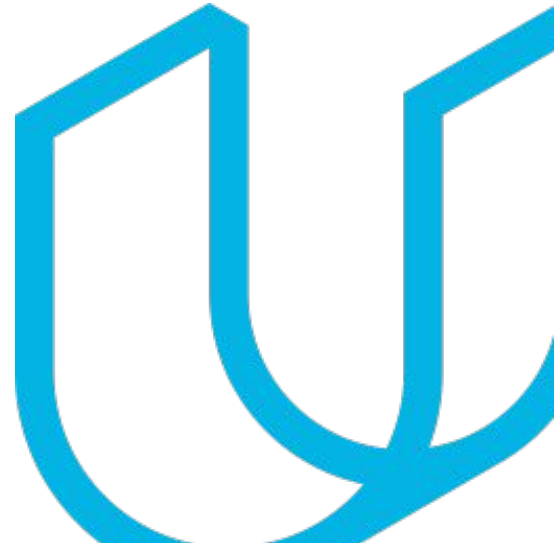


Design Sprint

**Product Manager: Harshal Gautam**



# Set the stage

Set the stage for the Design Sprint by framing the problem

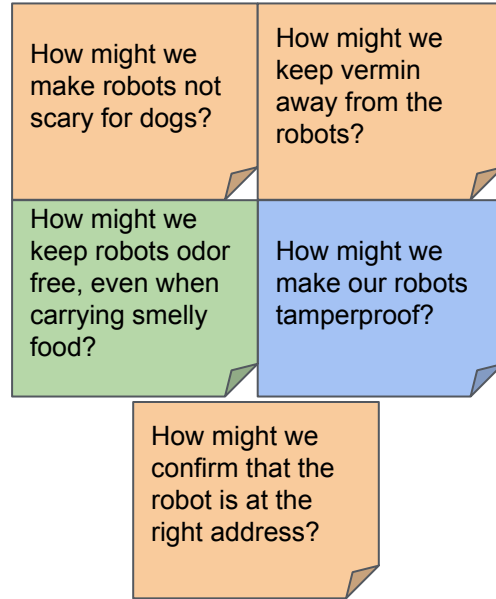
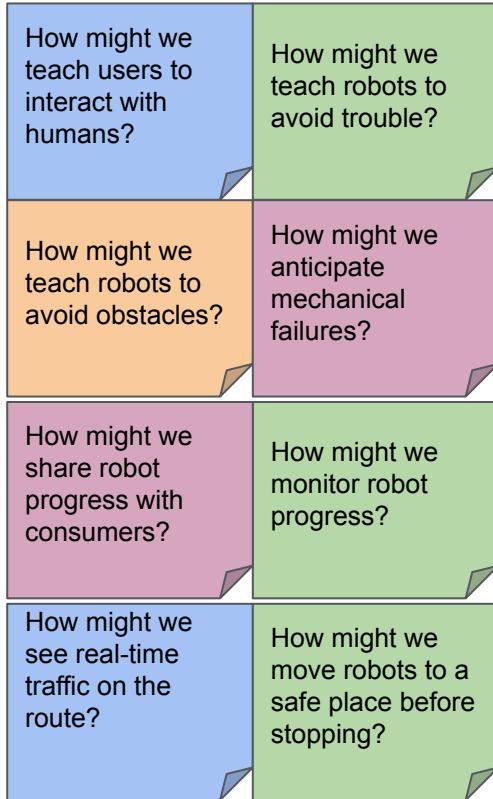
# Initial PRD



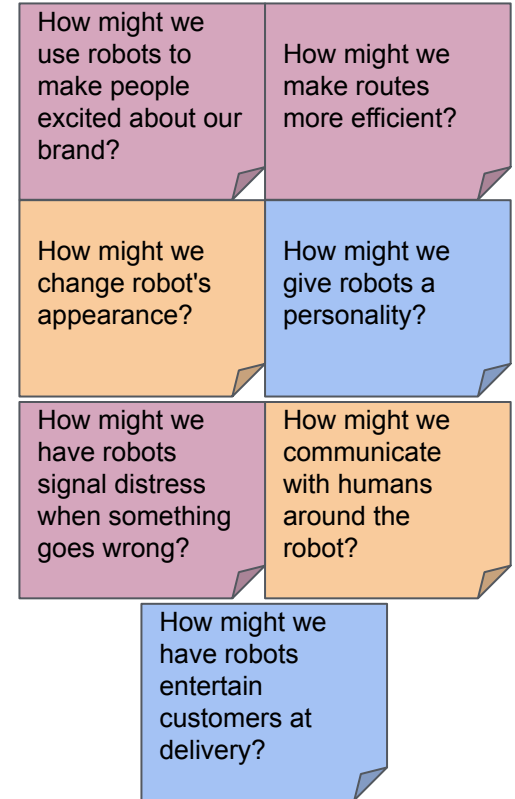
# Understand

Create a shared understanding of the space, problem, and goals

# Operations Dashboard



Exterior/Interior  
Changes



Programming

DashBoard Functionality

# Operations Dashboard

How might we get food to people quickly when the robot fails?	How might we ensure food gets delivered without incident?
How might we handle edge case issues that may arise?	How might we deal with accidents that might occur?
How might we determine when to recharge robot batteries?	How might we train our operations team on monitoring and controlling a robot?
How might we mitigate accidents between robots and pedestrians?	How might we alert consumers if their delivery is delayed?

Operations

How might we teach robots manners?	How might we leverage existing tools to better track our robots?
How might we establish preferred routes?	How might we control robots?
How might we use existing technologies?	How might we build redundancy into our system?
How might we use greener energy to power our robots?	How might we create ML/AI models to help robots learn to get better overtime?

Technology

How might we determine the best area for launching this program?	How might we collect data about where the robot got stuck?
How might we allow users to help us with tracking and feedback?	How might we track each robot?

Research

How might we detect when a robot needs help?	How might we program robots to address order cancellations?
How might we streamline communications between operators and robots?	How might we overcome technical glitches during a delivery?
How might we alert operators of need for robot intervention conveniently?	How might we program robots to address customer returns?
How might we allow robots to detect real-time traffic patterns?	How might we enable robots enter a crowded restaurant to pickup food?

How might we address a sudden power outage?	How might we accept tips that some customers may want to give a robot?
How might we prepare robot to handle deliveries to persons with disabilities?	How might we enable robots to detect missing items in the order during pickup?
How might we program robots to address delays in deliveries?	How might we increase robot speed?

Unprecedented times

How might we enable "emotion" modes in robots?	How might we enable robots to interpret and speak different languages?
How might we make interacting with robots more fun?	How might we help robots talk to people?
How might we make our robots act like people?	How might we teach empathy to robots?

Personality

Automatic Observations

# Sprint Focus

<b>Focus</b>	Dashboard Functionality
<b>Slide #</b>	#5
<b>I selected this theme because</b>	<p>The most important aspect of our product will be it's functionality. The goal is to help our Operations team improve last-mile delivery and to make sure that if the robot is facing an unprecedented situation, someone from the Operations team is able to take manual control to make sure that the delivery still occurs in time. Our robots need to have advanced functionality systems in-built as well systems to need to be in place for our Operations team to handle and be able to deal with tough situations such as system overriding.</p>



# Define

With an understanding of the problem space, create focus and align on specific outcomes for the Design Sprint

# Times Now - Mai Yu

## 1. Who is DoorBot for?

DoorBot has been designed for University students who live on the get-go. We have designed a user-friendly product for students so that they don't have to be waiting on their food for more than 30+ minutes just because their driver has been stuck in the work-hour traffic.

## 2. What does DoorBot hope to bring?

DoorBot solves the frustrations faced by customers over their delivery times. DoorBot will open doors to the new technology era and will revolutionize the way we think about our meal delivery. Our product also has an in-built voice translation system and so all the new international students out there having nothing to be worried about either

## 3. Why will customers love DoorBot?

Customers will love DoorBot because our robots will significantly cut down their waiting times for their deliveries and will also make sure their meals are warm and fresh in our inbuilt heat system inside the robot. Without DoorBot, you'll never get late for a class!

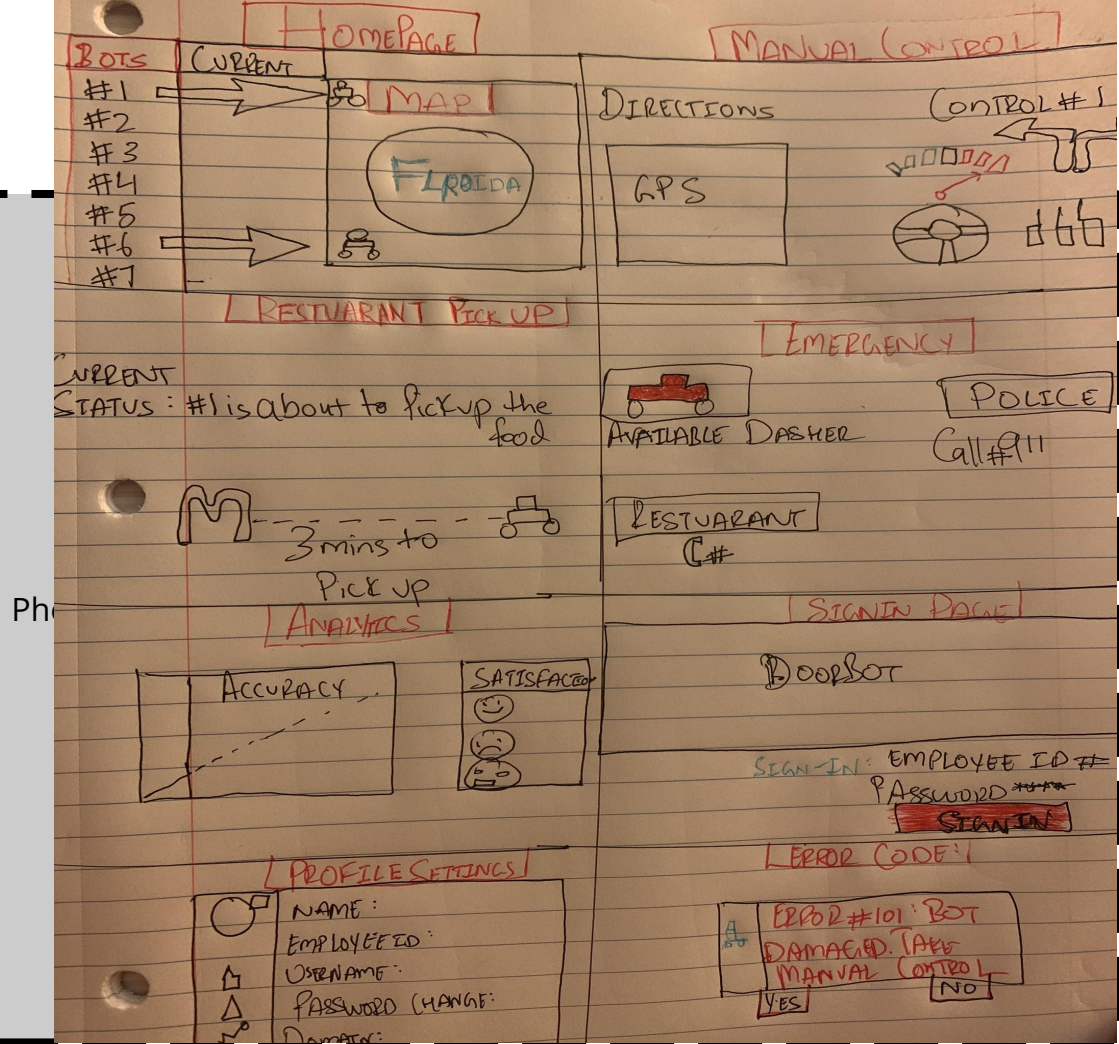
# Success Metrics

	Goals	Signals	Metrics
Happiness	Manually Controlling	Feedback Survey	Perceived Ease of Use
Engagement	Monitoring our Robot Dashers	Feedback Survey	Time spent actively monitoring per robot
Adoption	Willingness to monitoring more robots	Feedback Survey	Deliveries controlled per robot
Retention	Continuously using tools	Feedback Survey	Logins per day
Task Success	Operations Agent knows how to use every tool	Feedback Survey	Accuracy of usage

# Sketch

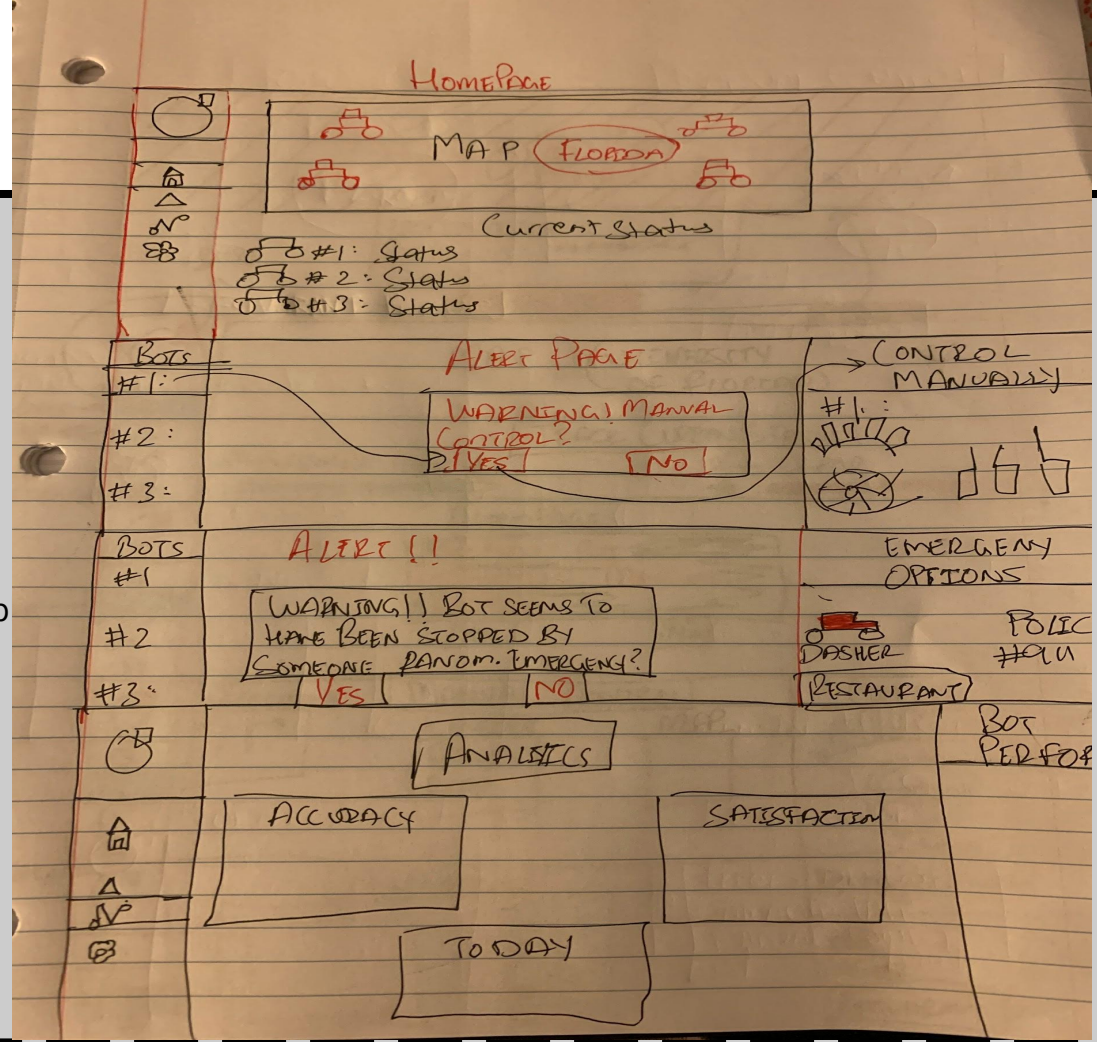
Generate tons of ideas, then narrow them down to two in depth solution sketches

# 8 Sketches



# Solution Sketch

Up





Upload a photo of you

# Decide

Pick the final concept that you develop into a prototype



# Decision

<b>Decision</b>	Solution Sketch #2
<b>Rationale</b>	Solution Sketch #2 makes it easier for our Operations team to navigate through the platform. It also makes it very easy for the Operations team to handle errors, take control and monitor throughout

# Prototype

Turn your concept into a realistic, interactive prototype that you will use to validate your assumptions and ideas

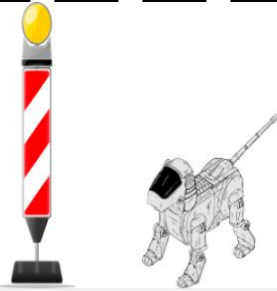
# Storyboard



SCRIPT

Steven has a 7-10pm class and at around 5:30pm. He gets extremely hungry and so decides to use DoorBot for their fast delivery service. He lives less than 2 miles away from the restaurant and so he knows his order will be there in no time. DoorBot's best robot, TBot picks up

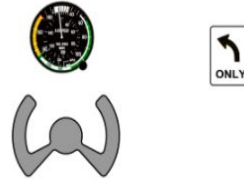
1



SCRIPT

DoorBot's Operations Team gets a ticket issued and they get a warning sign for TBot's sensors. One of DoorBot's best Operations Specialist, Blake takes over the manual control of TBot to make sure Steven's delivery is still on time.

2



SCRIPT

Blake follows the directions from the GPS and ensures that TBot's speed is changing with the estimated delivery time. Blake also makes sure to give timely updates to Steven representing good customer service.

3



SCRIPT

Blake manually brings TBot to Steven's apartment and TBot drops off the food delivery. Steven is surprised at the fact that TBot was still able to delivery on time even the fact that it's sensors are not working.

4



SCRIPT

Steven presses on the "Feedback" button which is on the screen of the robot. The robot also takes a selfie and sends it to Steven. Steven uploads the selfie on his Instagram.

5



SCRIPT

Steven has left TBot with some feedback. Blake goes under the analytics section and looks at the most recent feedback by Steven in which he seems very happy with the service and is fully satisfied.

6



SCRIPT

Blake exits out of the manual control and assigns a new customer to TBot.

ACTION

7

# Prototype



<b>Description</b> <ul style="list-style-type: none"><li>• High level overview of the prototype</li><li>• What does it do?</li></ul>	This prototype gives an overview of the Dashboard that we have created for our Operations Team which includes Navigation, Analytics and HomePage
<b>Assumptions</b> <ul style="list-style-type: none"><li>• Any assumptions within the prototype</li></ul>	<ul style="list-style-type: none"><li>• We've got an Operations Specialist / Agent using the dashboard</li><li>• The user of the dashboard has attained solid training in order to manually control the robots</li><li>• Our user can read analytics very well in order to notice any changes</li></ul>
<b>Tasks</b> <ul style="list-style-type: none"><li>• What are the tasks that a user can complete in the prototype?</li></ul>	<ul style="list-style-type: none"><li>• User can login into the homepage via signing in with their employee ID, password and domain name</li><li>• User can respond to any error codes and warnings given, and is able to take manual control of the robot</li><li>• User can respond to any warnings by using the Emergency responses in unprecedented situations</li><li>• User is able to analyze the trends and forecast the robot's work by looking at the customer feedback</li></ul>

# Validate

Users will go through your prototype and provide feedback on your concept. This is also an opportunity to have an engineering feasibility discussion

# Plan and recruit for research



# User Testing



## Key Findings from Participant 1

<b>What worked well</b>	<ul style="list-style-type: none"><li>• Easy to use</li><li>• Works well in terms of Operations Perspective</li><li>• Has the basic functionalities needed</li></ul>
<b>Where participants got stuck</b>	<ul style="list-style-type: none"><li>• Manual control cannot be given to every Operations member</li><li>• Not much to do other than just focusing on the delivery status</li><li>• Home page can be changed with variety of options available for the Operations team to get system updates</li></ul>
<b>Other observations</b>	<ul style="list-style-type: none"><li>• Not sure how the inbuilt voice feature might work</li></ul>

# User Testing



## Key Findings from Participant 2

<b>What worked well</b>	<ul style="list-style-type: none"><li>• The ease of use</li><li>• User settings</li><li>• Size of graphs and transitions between screens</li></ul>
<b>Where participants got stuck</b>	<ul style="list-style-type: none"><li>• Colour scheme</li><li>• Font size used</li><li>• Display settings in the user settings area where Red should be the background colour</li></ul>
<b>Other observations</b>	<ul style="list-style-type: none"><li>• User is a UI designer and so she expected the work to be done from a fellow UI</li></ul>



# Improvements

<b>Improvement #1</b>	Improvements in the visual appearance of the the prototype in order to give the Engineering team a better guide on what they are going to be implementing
Rationale	Colour scheme should be easy on the eyes. For example: red is not a colour that should be your primary one, instead using white as a primary colour and red as a secondary will be easy on the eyes of the audience.
<b>Improvement #2</b>	Navigation page needs improvements
Rationale	Navigation page seems to have functionalities all over the place. Making it in an organized layout will help the users to perform better

# Handoff

# Updated PRD

