

# DoorDash

Design Sprint

**Product Manager: Mariam Aslam**



# Set the stage

Set the stage for the Design Sprint by framing the problem

# Initial PRD

## **Background**

Looking to automate food delivery service by using the robotic technology for less than 2 miles away delivery

## **Problem**

Mapping the robots in different 50 states of United States is a complicated task, because first we need to understand & implement maps of sidewalks for all the cities and Simulation of theft scenarios

## **Goals**

Build hardware robots & software to operate the robots, provide real time delivery statuses to the operations team, restaurant manager & the customers

# Understand

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

# Operations Dashboard

How might  
we....handle  
theft scenarios

How might  
we.... Build  
relation with  
robots

How might  
we....handle  
system failure

How might  
we....handle  
internet  
connectivity  
loss

How might  
we....handle  
sidewalk  
implementatio  
n

How might  
we....handle  
failed/cancelle  
d deliveries

How might  
we....impleme  
nt Voice  
messaging  
Bots &  
Humans

How might  
we....handle  
Object  
Detection

# Operations Dashboard

How might we....teach robots to communicate with Humans

How might we.... monitor robot performance?

How might we...get food to people quickly when the robot fails?

How might we.... handle edge case issues that may arise?

How might we....handle internet connectivity loss

How might we....handle system failure

How might we.... teach robots to avoid trouble?

How might we....handle real-time traffic on the route?

How might we.... teach robots to avoid trouble?

How might we....alert customers if their delivery is delayed?

How might we....handle Object Detection

How might we....impleme nt Voice messaging Bots & Humans

**Robots**

**Operations**

**Technology**

# Operations Dashboard: Analysis

How might we.... Track the performance of robots

How might we.... Track failed delivered

How might we... identify best city for launching this program?

How might we.... track each robot?

How might we... identify if the order is delivered to right by the bot?

How might we.... Train bots to interact with people

How might we.... Perform analysis for theft scenarios

How might we.... we Increase robot speed?

How might we... allow users to help us with feedback?

How might we... collect data about where the robot got stuck?

How might we... add emotions in robots?

How might we... interacting with bots more fun?

**Analytics**

**Research**

**Communication**

# Operations Dashboard: Routing

How might we.... Land bot on a safe place when reaching delivery point?

How might we.... Track failed delivered?

How might we... ensure timely deliveries?

How might we.... Handle delayed deliveries?

How might we...allow robots to detect real-time traffic?

How might we.... we Increase robot speed on empty route?

How might we... handles orders cancelled after being dispatched?

How might we... avoid accidents between pedestrians & robots?

**Routing**

**Deliveries**



# Sprint Focus

<b>Focus</b>	Maps/Routing Implementation
<b>Slide #</b>	8
<b>I selected this theme because</b>	This is P0 feature, as the delivery would be impossible without implementation of routing

# Define

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

# DoorDash is building its own delivery robots - [TheRobotReport](#)

- **Who is it for?**

DoorDash is heading to new heights by introducing robot delivery is built for every person who is foodie and loves to eat at any time.

- **What does it solve? How does it change a customer's life?**

DoorDash robot delivery solves the frustrations faced by customers over their delivery times and delivery food in Innovative way. Bot Delivery 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

- **Why should customers love it?**

Customers will love Robotic delivery because our robots will decrease waiting times for food deliveries and will also make sure their meals are warm and fresh in our inbuilt heat system inside the robot. Without Bots deliver, you'll never get late for anything!

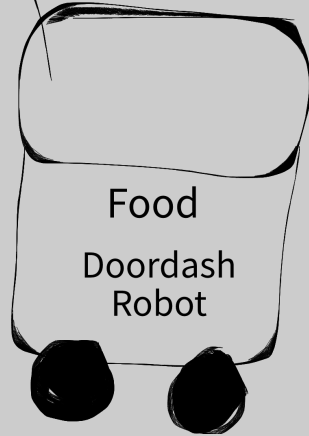
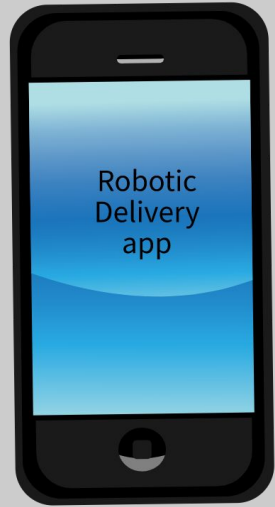
# Success Metrics

	Goals	Signals	Metrics
Happiness	Timely delivery	Customer Support & Reviews	Ratings
Engagement	Monitoring Robot performance	Feedback Survey	Active monitoring per robot
Adoption	Customers choosing robotic delivery	Higher robotic delivery demand	Robot delivery/communication ratio
Retention	Attract more customers with robotic delivery	Higher robotic delivery demand	Robots in use
Task Success	Success robotic delivery and usage of app	Less stress	Time per order Accuracy of usage

# Sketch

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

# 8 Sketches



Control Center



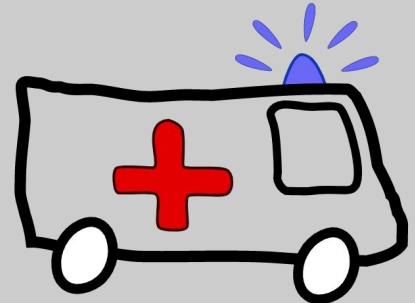
Maps



Analytics



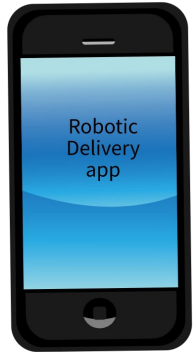
Manual Control



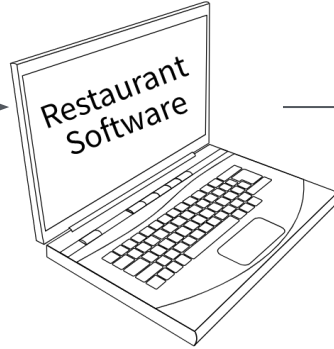
Security

# Solution Sketch 1

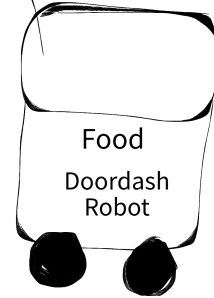
Order Placed



Order Accepted & Bot Assigned



Food handed over to Bot

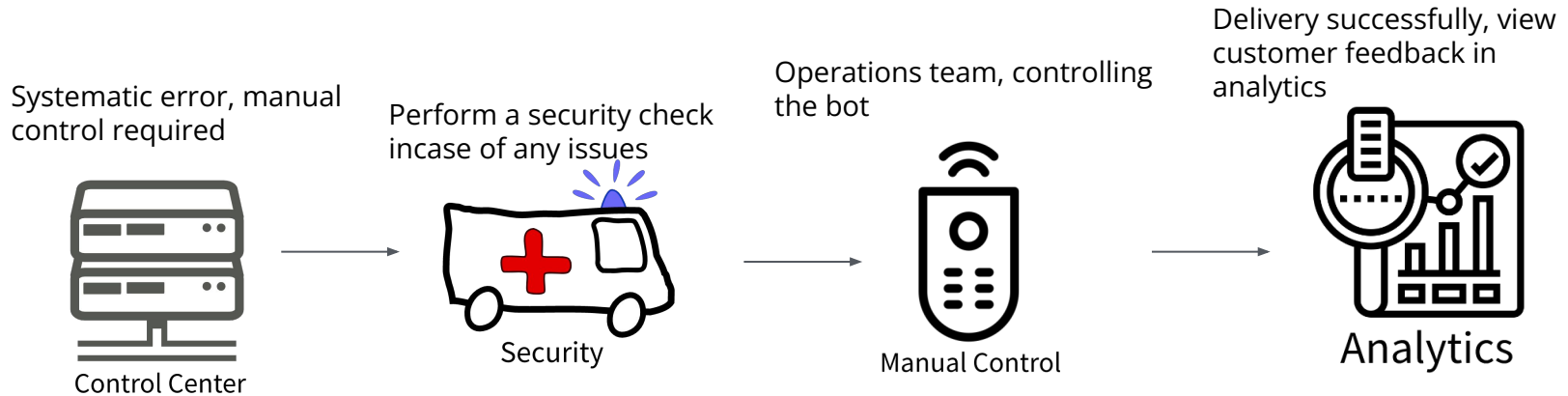


Order on route by bot



Maps

# Solution Sketch 2





# Decide

Pick the final concept that you develop into a prototype

# Decision

<b>Decision</b>	Solution Sketch # 1
<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

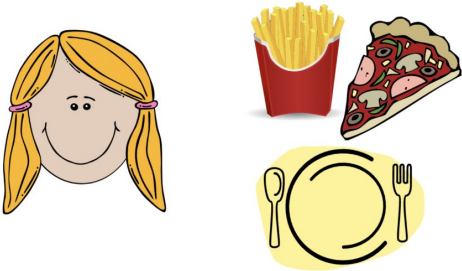

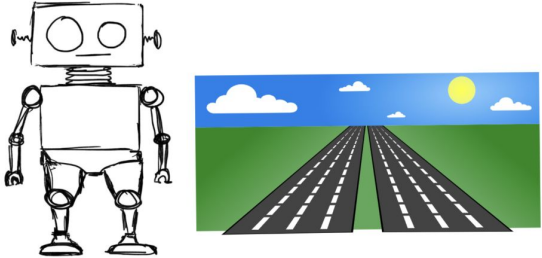
# Prototype

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

# Storyboard

[Theplot.io Link](https://theplot.io)



		
<p><b>Script</b></p> <p>Mariam is doing a full-time job is 9 to 5 and has evening masters classes at university starting from 6 PM. She wants to have a meal to feel more energetic in class, her university is 2 miles away from the restaurants. She knows her order will reach her in a timely manner so she places an order</p>	<p><b>Script</b></p> <p>Operation team to open the restaurant management system on the web and enter their login created to log into the system. The operations Specialist will be notified with an alter for a new order to be delivered and the specialist will quickly assign a bot.</p>	<p><b>Script</b></p> <p>Order is accepted by the restaurant operations time and is ready to dispatch. The robot picks the order with delivery details and food and suddenly, Mariam receives a systematic error</p>

# Storyboard



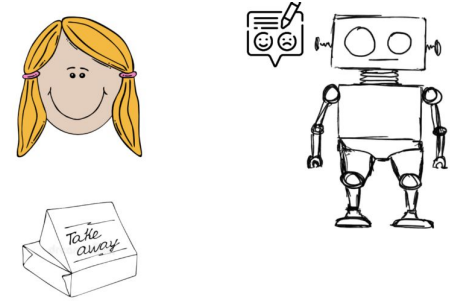
## Script

Restaurant operation team gets instantly notified and operation team members take control of the robot and ensure to send timely delivery updates to the customer



## Script

The operations team manually operates the robot to Mariam's university and the robot drops off the food delivery. Mariam is excited and overwhelmed to see that order arrived in time considering the fact of systematic error and now she can have her meal before her class starts



## Script

The robot shows feedback form to Mariam on the screen to provide her feedback and Robot asks for a selfie that Mariam can share on her social media handles to get discounted promotional offers

# Storyboard



## Script

The analytics team will the feedback Mariam provided and this helps the company to analyze their customer feedback

## Script

Bot manual control mode is exited and bot is redirected back to the restaurant to deliver more orders

# Prototype

## Description

- High level overview of the prototype
- What does it do?

The prototype shows overview of the following features:

- Login
- Dashboard/Maps view
- Orders statuses

## Assumptions

- Any assumptions within the prototype

This prototype will help in following:

- Allow the management to login
- View maps
- View Order statuses
- View Drone Status

## Tasks

- What are the tasks that a user can complete in the prototype?

This prototype is fulfill the following actions:

- Map view of all the cities
- Order statuses (In Process, Routing, completed etc)
- View drones location
- View Drones active/inactive



Link your  
prototype

# Validate

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



# DoorDash Analysis Research Plan

PM: Mariam Aslam  
STATUS: DRAFT

## Objectives

Help the operations team to operate bots with the help of app  
UX experience of the app  
Any suggestions? Or features that should be added

## Methodology

Conduct online interviews via storytelling methodology

## Participants

Stormy Hills (Operations Manager)  
Kylie Jack (Customer Support Representative)

***Note: Further details are mentioned in the attached document***



# DoorDash Analysis: Interview Sessions

## Introduction

Let's get started with some background, what improvements might make life easier for the Operations team at Doordash.

## Background Questions

Tell us about yourself?

How long have you been into Operations?

Have you used food delivery before?

## Tasks

Feedback on Prototyping

## Task 1

Feedback on the look & feel of the app?

Do you think these functionality is to accomplish your tasks?

Do you think it is easy to see drove statuses i.e. Activate & Deactivate drones?

Do you think the flow to take control over drone incase of any failure is easy to use?



# DoorDash Analysis: Interview Sessions

## Task 2

Number of total delivered completed

Number of delivered failed? What were the reasons?

See how you are performing compared to other operators

Which shift is more suitable to score more?

## Wrap Up

What is your feedback on the overall app? How would you rate from experience point of view?

What do you think of the UI? Is it user friendly



# User Testing: Participant 1 Key Findings



Link your audio  
recording

## What worked well

- *User friendly software*
- *Checking bots statuses which are active, in-active, on route etc*
- *Perform different actions in drones tab*

## Where participants got stuck

- *Understanding the analytics section and how to capture feedback*

## Other observations

- *Sending an alert on failed/delayed deliveries through SMS, email and in app notifications*

# Participant 1: Interview Notes

- Stromy, being an operation team representative was really happy with the overall software.
- The design was quite user friendly and easy to use.
- She mentioned, she is really satisfied that can she have a clear picture of every bots statuses, that shows their status of being active, in-active and for how long they can standby without being charged
- However, she was not easily able to use the analytics to track down customer feedback and how can she generate a daily basis report.
- She was looking for something more customisable solution to extract customer feedback in analytics section

# User Testing: Participant 2 Key Findings



Link your audio  
recording

## What worked well

- *Signing In*
- *User friendly UI*
- *Checking delivery statuses*

## Where participants got stuck

- *How to manually control a bot in case of issues*
- *Unable to differentiate between maps and the maps that has bots on route on dashboard page*

## Other observations

- *A dashboard tab, that has statuses of deliveries, drones & routes would be helpful*

# Participant 2: Interview Notes

- Kylie was happy that they have software to manage their deliveries and bots
- She mentioned, that she really liked how she can view the statuses of each delivered
- She mentioned, that UI was really good and the color scheme was awesome
- However, she was not sure how can take control over the bos using the software what actions she should perform
- She was unable to differentiate between the different city maps and maps that had bots on route.
- She was clicking on all the maps one by one to view the bots location

# Improvements

<b>Improvement #1</b>	<i>Add dashboard report view, for all failed/completed delivered and bots statuses</i>
Rationale	<i>A pie chart view and stats of completed delivered and bots statuses by daily,weekly, monthly basis to perform analysis</i>
<b>Improvement #2</b>	<i>Add Chat center section, where the on duty operations team can chat and discuss issues or delivery failures</i>
Rationale	<i>A new feature that keeps the operations team connected to improve their deliveries &amp; actively monitoring all drones</i>



# Handoff

# Updated PRD

## Background

DoorDash wants to become world's number one company providing robotic food delivery for trips that are less than 2 miles away

## Problem

Mapping the robots in different 50 states of United States is a complicated task, because first we need to understand & implement maps of sidewalks for all the cities,

## Goals

Our goal is to build hardware robots & software to operate the robots, provide real time delivery statuses to the operations team, restaurant manager & the customers.

***Note: Further details are mentioned in the attached document***



# Updated PRD (page 2)

## Success Metrics

Customer Satisfaction

More than 80% of positive ratings/ customer feedback

More than 80% of successful deliveries

Delivery of order within the estimated time provided

## Key Features & Scope

GPS tracking will be available for our Operations team to monitor bots (P0)

Our Operations Team will be able to take full control of the bots in case of failure/fraud situations (P0)

Ability to view the earliest time a delivery can be made (P1)

Ability to view bots statuses (P1)

Ability to view customer's feedback (P2)



## Core UX Flow

<https://www.figma.com/proto/qJuZldwYQcuAB3NOLijDdD/DoorDash-Drone?node-id=11%3A229&scaling=scale-down&page-id=0%3A1>