

User Guide

Background:

During this pandemic of COVID-19, the team at DoorDash has come to a solution which might just be the future of food delivery services. Today, there are 2 major problems that arise on a daily basis, one of them being that customers hate waiting for their food and the second being the fact that our Dashers definitely don't like delivering orders within 2km radius as they don't gain any income from that and they feel like it's a waste of gas money for them. To fix this, the company has been researching into the concept of having self-driving robots delivering the meals to our customers within the 2km range. This idea will solve the two biggest problems in this industry, and we look forward to solving these challenges. Keep in mind though that this concept will also have a few problems associated with it as no idea comes without any problems. Some of these problems might be as follows:

- Connectivity problems in rural areas between the robot and our Operations Team
- Delivery might sometimes be arriving later in unusual circumstances
- Accuracy in the tracking of the order

Description of the product (DoorBot):

We have built an application for our Operations team from which they will be able to track, navigate, manually control and assist the support team through the help button to ensure deliveries are made successfully within the timeframe to ensure upmost customer satisfaction.

The product DoorBot will ensure that we can always assist our customers at any point of time. The delivery through our robots might cause our customers to be hesitant at first to use our services, but through DoorBot we will ensure our customers that they will get constant updates upon their order whenever needed.

Some of our high-level features include:

- Manually controlling the robots
- In-built voice control system to help our customers in case of any concerns
- Surveillance within the food cart to ensure the safety of the customer's order

Problems Associated with Robotic Delivery:

- Tracking system can have a glitch if the delivery is being made in a rural area
- During high volumes, the delivery may take longer than the estimated time given
- The robot's sensors might not respond which may cause delays
- Someone might harm the robot which may cause us to use the emergency response

Product Goal:

Our goal is to make the food delivery service safe for both our customers and our fellow Dashers. This is why we are introducing robotic autonomous delivery systems which will help the public maintain physical and social distancing laws but still be able to enjoy their favourite meal from any restaurant. By bringing in this new technology, we also hope to launch in a new demographic market after the initial phase.

Our Three Key Features:

- **Ability to navigate the robots:** The most vital feature of our product will be to give our Operations team the ability to navigate our robots from the restaurant to the delivery destination **(F1)**
- **Manual Control:** The operations team will require this feature in any situation where the robot does not respond to the commands. Through the feature of manual control, our operations team will be able to take manual control and guide our robot to its destination **(F2)**
- **Emergency Response:** The Emergency response feature will help the Operations team take a decision if there is any conflict that arises with our robot. This may be the fact that the Operations team member might need to call a Dasher, the cops or may just call the restaurant to ensure the order was correct **(F3)**

Details:

Live Tracking of food delivery:

1. Describe the main functionality of that feature:

The feature lets our customers track the robots to get constant updates on their order. This includes knowing the live location of the robot as well as the waiting time of their order.

2. Describe how users can get to your feature:

This feature will be on the home page of the user once an order has been placed. Once the users have placed an order, they can go on the app after and view the live location of the robot at any time. If the users have signed up for updates, then they will get notification depending on the kind of update they choose.

3. Describe any known issues with the product (or upcoming features):

The customers will not be able to track the order if they reside in a rural area. This is because there is low connectivity with satellites in these areas and our Google maps API will not be able to catch constant updates from the robot. We are researching into more

APIs with different sources of maps so that we can fix this issue for our users who are also living in newly built areas as the satellite has not captured certain addresses.

4. Show at least one visual element (Screenshot or Mock)

