

DoorDash Robonav

Developing the product

**Product Owner: Siddhant
Tembhurnikar**



Getting Started

Create Project Blueprint

A product launch is not just about deploying a beautifully designed, built and thoroughly tested feature. Your company needs to be equally prepared if not more to support every possible customer interaction associated with the product (e.g landing on your company website to learn more about the new feature)

Create a coordination activities map

Share your project-specific coordination activities map here ([Insert Link here](#)). You can also share a screenshot below.

Siddhant_Tembhurnikar_C3_Coordination Activities Map

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fx Set a target week

	A	B	C	D	E	F
1	Purpose Conveys the scope of various tasks that need to be coordinated to build and launch the product/feature	What is the task? Based on the purpose, select the appropriate from the drop-down	Who is the task owner? Does the following to finish task: 1. Schedule and run meetings 2. Gather feedback and share updates 3. Follow-up with stakeholders	Whose involvement is needed to accomplish the task ? Please select one from the drop-down list of your identified stakeholders	What is their role? Select the stakeholder's role from the drop-down. Note: 'Scrum Team' role is applicable to stakeholder 'Scrum Team' only	By when, does the task need to be completed? Select milestone keeping in mind nature of the task, downstream effects of delaying task
2	Evangelize internally	Setup PRD review meeting to receive feedback	Product Manager	Head of Product	Approver (Has the final say on a specific aspect of the project)	Set a target week
3				Cross-functional Stakeholders	Contributors (Consulted for their opinions or expertise to help with project decisions)	
4		Setup meeting to share MVP scope and walk-through design to gather feedback		Impacted Product Managers	Contributors (Consulted for their opinions or expertise to help with project decisions)	
5		Setup meeting to kickoff project with the scrum team		Scrum Team	Scrum Team (Involved directly in product development efforts)	
6	Involve legal and compliance	Get feedback on previously identified legal areas to update. e.g Terms of Use and Privacy Policy	Product Manager	Legal and Compliance	Contributors (Consulted for their opinions or expertise to help with project decisions)	Set a target week
7		Setup meeting to review MVP scope and identify possible legal updates.e.g Terms of Use and Privacy Policy				Before project's sprint 0 starts
8	Incorporate stakeholders feedback	Discuss the prioritized feedback received from stakeholders to update scope and design	Product Manager	Product Designer	Scrum Team (Involved directly in product development efforts)	Before each sprint starts
9	Initiate and maintain feedback loop	Create a project-specific communication channel (in Slack etc) to share insights from customer meetings/usability tests/data analysis	Product Manager	All except Legal and Compliance	Informed (No authority over the decisions and need to stay updated on the progress since it impacts their own work)	Ongoing activity
10	Plan development work	Setup solution feasibility discussions to understand the work involved/identify inter-dependencies and potential risks Identify critical spike and engineering	Product Manager	Scrum Team	Scrum Team (Involved directly in product development efforts)	Before project's sprint 0 starts

Pre-filled Starter Sheet

Help Information

Plan for Sprint Meeting

As a PM, it is important to stay ahead of your scrum team and be prepared for every upcoming sprint by having a target goal defined with prioritized backlog for team to start costing and breaking down the tasks

Sprint Planning Meeting Preparation

Sprint Goal: Enable the operator to track the robot's location, camera and sensor status so that they can they can detect if the robot has stopped moving due to an error or obstruction

Sprint Backlog (list the prioritized **user-stories** from the product backlog)

- | | |
|---|---|
| 1 | As an operator I want to know an active robot's current idle time so that I can determine if there could be a problem |
| 2 | As an operator I want to watch the camera feed so that I can see if there are any obstacles |
| 3 | As an operator I want to track the Robot on a map so that I can send help at the right location |
| 4 | As an operator I want to view the status of all motors and sensors so that I can determine if there is an error |
| 5 | As an operator I want to reboot the robot so that I can remotely try to fix software related issues |

Sprint Prioritization Logic: The prioritisation makes it possible to test each of the feature to determine a real world problem with the robot as they occur without depending on the next feature to be ready

User Story 1

User Story	As an operator I want to watch the camera feed so that I can see if there are any obstacles
Design	Figma Prototype
Acceptance Criteria	<ul style="list-style-type: none">• User selects the robot which is currently active but idle for a long time to open the camera• User opens the fullscreen to look at all camera angles at one glance• User checks the front camera footage and clicks the arrow buttons to cycle through the other camera angles• User uses zoom to look at the footage more closely and spot obstacles• If an obstacle is present user places a call to the closest remote operations team to check on the robot through the call button <p>Non-functional requirements:</p> <ul style="list-style-type: none">• The camera footage should not zoom in or out beyond a threshold• If the user double clicks on the footage it should not open the entire camera panel in full screen but only that camera footage• The software should work as a native software on both PC and Mac• The software should be able to scale to concurrently support and service monitoring 60 robots in a neighbourhood
Assumptions	<ul style="list-style-type: none">• Software is designed for power use, hence its restricted to desktop/laptop devices• Software is designed for a predefined user, hence flexibility in terms of internationalization may not be needed

User Story 2

User Story	As an operator I want to track the Robot on a map so that I can send help at the right location
Design	Figma Prototype
Acceptance Criteria	<ul style="list-style-type: none">• User monitors all robots and their delivery progress status at one glance on the map• User can zoom in into the map and locate the robot to the exact street and sidewalk it is on• User can also track where the robot is headed that is the robots route to the delivery• The default view provides the overview of the neighbourhood Non-Functional Requirements <ul style="list-style-type: none">• The map view should only zoom in and out to a certain threshold• The map view should also show a circle marking the level of accuracy of the location• The software should work as a native software on both PC and Mac• The software should be able to scale to concurrently support and service monitoring 60 robots in a neighbourhood
Assumptions	<ul style="list-style-type: none">• Software is a designed for power use, hence its restricted to desktop/laptop devices• Software is designed for a predefined user, hence flexibility in terms of internationalization may not be needed

Decoding API Documentation

As a PM, you will collaborate with the engineering team and provide guidance that heavily influences their development approach. When a product requires an API integration, sometimes PM need to be “technical enough” to understand the following to refine the solution with designer and development team

- what information is available via the API
- how is it available
- possible pricing impact

DoorDash Robonav Project

Based on the API documentation how would you update your solution and design?

- We can use the Maps API to detect routes on which our robot can travel
- We can estimate the time required to deliver the order based on these routes (Walking and bicycling)

Based on your high-level understanding of the API documentation, are there any details that you want to discuss with engineering to refine solution and/or determine feasibility

- Is it possible to combines these bicycle and walking routes along with terrain information to trace routes where the robot can travel?
- Can we develop a predictive machine learning model over time to estimate the traffic on bicycle and walking routes so that we can estimate our time of delivery more accurately since Maps API doesn't provide pedestrian traffic information?

Re-prioritize Sprint Backlog

As a PM, unexpected issues and new feature requests will require you to triage them efficiently and re-prioritize the sprint backlog without impacting the roadmap deliverables significantly

Issue 1: Landing Page loading too slow

Determine impact and criticality to prioritize issue	<ul style="list-style-type: none">• The issue affects the landing page which is common across all devices.• Since the landing page is the first page that any user would access a large number of users would be affected and could potentially turn some customers away.• However the issue does not break a functionality and the users can still access the page• The issue is an important metric however the functionality isn't broken, hence this issue is assigned a priority 2. High
Next Steps You would carry out typically using JIRA (ticketing tool), communication channel (Slack)	<ul style="list-style-type: none">• Update the issue priority to High• Add the issue to Customer and Stakeholder requests buffer in the sprint to issue a hotfix
Would you take additional steps?	<ul style="list-style-type: none">• Notify the stakeholders (all except legal and compliance) about the issue raised as high priority mid sprint• Discuss with the engineering and QA team to identify what lead to the the issue being created and make sure to create tickets in the next sprint to address the root causes.

Issue 2: Misaligned fields in Profile Settings

Determine impact and criticality to prioritize issue

- The issue currently impacts 2% of all users daily. This is not a huge number considering its not something all users will encounter.
- The feature is still functional and users can proceed to use it as intended since only the alignment is affected.
- The issue is a level **4. Low** priority issue since it doesn't break functionality or affect a large number of users.

Next Steps use ticketing tool (JIRA), and communication channel (Slack)

- Create a ticket for the next sprint to fix the issue.
- Communicate the issue to the stakeholders to keep them informed on the communication channel so that they are aware that it has been noticed and will be taken care of, thereby allowing them to communicate the same to the customers.

Respond to Customer Service Manager's Email

Determine impact and criticality to prioritize the issue (1 - Critical; 2 - High; 3 - Normal; 4 - Low)	<ul style="list-style-type: none">• The issue currently prevents 20% of 7% that is around 1.4% of the total daily users unable to use the product because of this issue.• While this is not a huge number it adds up over a period of time and clogs our customer service line preventing from other critical issues being reported quickly• This issue can be deemed as a priority of 1.Critical since it prevents some users from accessing the product and affects other users from reaching out to the customer service
Next Steps You would carry out typically using JIRA (ticketing tool), communication channel (Slack)	<ul style="list-style-type: none">• Create a ticket and add it to the Critical-Issues buffer in the sprint backlog to deploy a hotfix• Communicate to all the stakeholders the issue and ask the customer facing stakeholders to ask the customers to use the feature in the product to request the password reset email temporarily till the issue in the internal tool is fixed.• Work with the design team to change the design in the product so that the in product reset password feature is more visible to users, create a user story and add it to the next sprint. This will make sure the number of calls for resetting password.
Sample Email Response	<p>Dear team,</p> <p>We've encountered a bug in our internal tool that delays customer service agents' reset password emails sent to the customers by 12 hours. This is preventing about 1.4% of our users from logging in daily, and clogging our customer service lines and preventing other customers from reaching out. For this reason this is a serious critical issue that needs to be addressed immediately within the current sprint itself. We also need to make sure this doesn't happen again by making the necessary design changes in the product to encourage customers to self service themselves in the future.</p>

Handle Potentially Difficult Situations

As a PM, you will be faced with many unexpected situations where you have to make a decision or push back while managing competing priorities from stakeholders and tackling issues that could potentially affect your product launch

Respond to CEO or GM's request via email

Assessment and result	<ul style="list-style-type: none">• Stakeholders involved could be investors in the startup. It is critical to the startups reputation that a product demo goes well and makes an impression on the stakeholders.• Currently the product is only 65% complete and is still in the testing stage. The development team is still deploying changes to the QA environment.• This makes very uncertain that the product will work as expected at this stage of the sprint.
Sample Email Response	<p>As you are aware, we are currently through week one of our 2 week sprint. The product is about 65% built and is yet to be thoroughly tested. At the same time the development team is still pushing out changes to the QA environment. This makes it very uncertain that the product will work as expected. In the light of the upcoming stakeholder meeting as the Product Manager I would strongly recommend not showcasing the product in the current state as it is very likely that it may be unstable and fail to create a good impression. I would instead recommend using the prototype we have built during the Design Sprint to demo the product to the stakeholders at it will give a much better overall view of the product's key features and functionality.</p>

Step-in and guide the scrum team at stand up

Video Response

https://drive.google.com/file/d/1CEU3hEkLo0zNPOMBakaPN_Wh5jDP0K8Z/view?usp=sharing

Handling Resource Constraints

List 2- 3 activities that you would carry out as a PM to unblock the scrum team immediately ?	<ul style="list-style-type: none">• Identify tickets that can be performed by the PM on his own without the QA team member's expertise.• Identify and prioritise the tickets that are blocking other team members from proceeding. Based on these two criteria complete the tickets.
Since the QA team member is shared across multiple projects, how would you coordinate with other PMs to de-risk your project and raise appropriate visibility ?	<ul style="list-style-type: none">• Request a meeting with all impacted members and the head of product• Understand their concerns, timeliness and assess the criticality of the QA team member to their projects• Put forward the concerns faced by our scrum team and problems that may cause• Emphasize on the business impact a potential delay in completing the tickets in the sprint may have and try to come to a mutual agreement to get more time of the QA team member
Since there is a potential risk, it is important to raise visibility amongst appropriate stakeholders	<p>Stakeholders such as Impacted product managers, head of product, customer service and the product marketing team, scrum team</p> <ul style="list-style-type: none">• QA team member available for more time: Communicate to the product marketing team that the launch plans may proceed as previously planned. Ask the scrum team to utilize the buffer story points to counter any delays. Inform the Head of product and other impacted product managers about the current status.• QA team member not available for more time: Convey to the scrum team about the user stories that have been downgraded in order to finish the feature within the sprint. Communicate to the product marketing, customer service, sales team and account managers to convey to the changes to the product feature to manage their expectations. Inform the impacted product managers and the head of product about the current expected build from the sprint and the expected launch date.

How would you handle stakeholder feedback?

Feedback Assessment	<ul style="list-style-type: none">• How, when and what push notifications be sent to the user?• What is the expected behaviour of the user?• What is the expectation based on? What are the underlying assumption we are making about the users behaviour?
Video Response	https://drive.google.com/file/d/1alm7z1Q2wvRQzoKOpRwcHzp9-a3n7DUy/view?usp=sharing