# DoorDash: Autonomous Delivery App

Managing Product Development

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# Test Plan

Create a test plan to validate everything is built to spec and working correctly

## Test Cases: Functional Requirements

Feature	Steps	Expected Behavior	Priority
Automated Order Pickup and Drop- off	1. Navigate to the app's home screen. 2. Select desired items for order. 3. Proceed to checkout. 4. Enter delivery address and payment details. 5. Confirm order. 6. Verify order confirmation message.	Expected Behavior: User should be able to place an order without errors.	PO
Track Order Status	1. Open the app. 2. Go to the order history section. 3. Select the desired order. 4. Verify the status displayed matches the current order status.	User should see accurate order status information.	PO
Cancel Order	1. Open the app. 2. Navigate to the order history section. 3. Select the desired order. 4. Choose the option to cancel the order. 5. Confirm cancellation. 6. Verify cancellation confirmation message.	User should be able to cancel the order successfully.	P1
User should be able to cancel the order successfully.	1. Open the app.     2. Navigate to the active order.     3. Click on the tracking option.     4. Verify real-time location updates are displayed accurately.	User should see live tracking updates of their order.	P0
1. Open the app. 2. Navigate to the active order. 3. Check the estimated time of arrival (ETA). 4. Compare the ETA with the actual delivery time.		ETA should be accurate and match the actual delivery time.	P1

## Test Cases: Non-functional Requirements

Requirement	Steps to reproduce	Priority
App Load Time	<ol> <li>Open the app.</li> <li>Measure the time taken for the app to fully load.</li> <li>Compare with the acceptable threshold (e.g., less than 3 seconds).</li> </ol>	P0
Data Encryption	<ol> <li>Send data from the app to the server.</li> <li>Monitor the transmission process.</li> <li>Verify data encryption protocols (e.g., SSL) are implemented.</li> </ol>	PO
Scalability	<ol> <li>Simulate multiple users accessing the app simultaneously.</li> <li>Monitor app performance and responsiveness under load.</li> </ol>	P1

# Dogfood Survey

Create a dogfood survey to get insight from real world usage

## **Dogfood Survey**



# Prioritize

Issues come up. Keep the team focused on the things that matter the most

## Fire Drills

Scenario	Who	Communication Method	Key Messages
QA finished testing and reported that 3 test cases failed	QA Team Lead, Development Team	Ping (Instant Messaging)	Notify the development team about the test failures reported by QA.     Provide details of the failed test cases and any relevant information for debugging.     Discuss priorities for fixing the failures and potential impact on project timelines.
An engineer is ready to start working on the next feature, but doesn't have the mocks for it	Design Team Lead, Product Owner	Email	Request immediate assistance from the design team for providing mocks for the next feature.     Highlight the urgency of the request to avoid delays in development.     Provide context on the feature requirements and timeline for implementation.
Support flagged that many users are unable to sign in to their accounts	Support Team Lead, Development Team	Warroom	Call for an urgent meeting with the support team and development team to address the sign-in issue.     Discuss the scope and severity of the problem based on support reports.     Formulate a plan to investigate and resolve the sign-in issue as quickly as possible.
Dogfood survey results are in and dogfooders are not excited about recommending the product	Product Owner, Marketing Lead, Product team	Warroom	Document the feedback from the dogfood survey indicating low enthusiasm among users.     Discuss potential reasons for the dissatisfaction and areas for improvement.     Brainstorm strategies to address the feedback and improve user satisfaction.
Legal informed you about a new law going into effect that will require you to add new privacy controls before you can launch	Legal Team, Product Owner, Tech Lead, Leadership	Meeting	Notify the product owner, tech lead, and leadership team about the new privacy law and its implications.     Schedule a meeting with the legal team to understand the compliance requirements and discuss the necessary privacy controls.     Document the key points from the meeting and share them with the relevant stakeholders via a document.     Collaborate with the product owner and tech lead to prioritize the implementation of privacy controls in alignment with the product development and launch timelines.     Regularly communicate updates and progress on the implementation to ensure transparency and alignment across teams.
A new PM just joined your team and is interested in learning about your work	New PM, PM(Me)	Meeting	Welcome the new PM to the team and introduce them to the ongoing projects and initiatives.     Provide an overview of the product roadmap and key responsibilities of the PM role.     Offer support and resources for onboarding and getting up to speed with the team's processes and tools.

## Prioritize

Scenario	Priority Ranked	Rationale	
QA finished testing and reported that 3 test cases failed	3	Test failures indicate potential defects in the product, necessitating timely resolution to maintain product quality and stability.	
An engineer is ready to start working on the next feature, but doesn't have the mocks for it	4	Providing mocks for upcoming features facilitates smooth development and prevents delays, but it can wait until more urgent issues are addressed.	
Support flagged that many users are unable to sign in to their accounts	1	User access issues directly impact user experience and satisfaction, requiring immediate attention to prevent further disruption and potential loss of users.	
Dogfood survey results are in and dogfooders are not excited about recommending the product	5	While user feedback is valuable for product improvement, addressing dissatisfaction from the dogfood survey can be scheduled after resolving higher-priority issues.	
Legal informed you about a new law going into effect that will require you to add new privacy controls before you can launch	2	Compliance with legal requirements is crucial to avoid legal risks and penalties, making this issue urgent for maintaining regulatory compliance.	
A new PM just joined your team and is interested in learning about your work	6	While user feedback is valuable for product improvement, addressing dissatisfaction from the dogfood survey can be scheduled after resolving higher-priority issues.	

# Go No Go

Run a go / no go meeting to decide if the product is ready to launch, and communicate out any risks and mitigations in place

## Autonomous Delivery App

The Autonomous Delivery App is a revolutionary platform that utilizes advanced robotics and AI technology to provide efficient and reliable delivery services. Users can enjoy hassle-free delivery experiences, with features designed to enhance convenience, safety, and speed.

#### Key Features:

- 1. Automated Order Pickup and Drop-off
- 2. SeamlessCart
- 3. Intelligent Routing and Navigation

## **Automated Order Pickup and Drop-off**

#### Testing:

All test cases passed

#### Dogfood:

Positive feedback from dogfooders

#### **Production Readiness:**

- Success rate of automated order pickup and drop-off
- Response time for processing orders
- System uptime and availability

#### Open Issues / Risk:

No critical issues identified during testing or dogfooding

#### Mitigations:

 Regular monitoring and proactive issue resolution to address any potential issues that may arise post-launch

#### SeamlessCart

#### Testing:

 One test case failed [User unable to add item to cart in certain browsers]

#### Dogfood:

 Dogfooders ran into issues related to the failed test case above

#### **Production Readiness:**

- Conversion rate of adding items to cart
- Browser compatibility across major browsers

#### Open Issues / Risk:

 Risk of user experience degradation due to failed test case

#### Mitigations:

- Immediate investigation and resolution of the issue
- Rollback to previous version if necessary to maintain user experience integrity

## **Intelligent Routing and Navigation**

#### Testing:

All test cases passed

#### Dogfood:

• Some of dogfooders experienced issues with route predictions:

#### **Production Readiness:**

 Accuracy of route predictions compared to actual delivery routes.

#### Open Issues / Risk:

- Risk of scalability issues under high traffic conditions.
- Risk of inaccurate route predictions due to incomplete or outdated map data.

#### Mitigations:

- mplement load testing to simulate high traffic conditions and identify potential scalability issues.
- Regularly update map data to ensure route predictions are accurate and up-to-date.

## Recommendation: [Launch]

- 1. All test cases have passed except for one, which is being actively addressed.
- 2. Positive feedback from dogfooders indicates overall satisfaction with the product.
- Production readiness metrics, such as conversion rate and browser compatibility, are within acceptable ranges.
- 4. The remaining issues and risks are manageable and have clear mitigations in place. Considering these factors, the product is ready for launch.

## Invitation: Go / No Go Launch Meeting

#### To:

#### Engineering Lead

- QA Lead
- Design Lead
- Marketing Lead
- Support Lead
- Legal Lead
- Leadership

Date: 5/1/2024

• Time: 2:00 pm

Duration: 1 hour

#### Message:

Dear [Team/Colleagues],

I hope this message finds you well.

As we near the culmination of our project journey with 96% completed for DoorDash: Autonomous Delivery App, I am thrilled to invite you to the Go/No Go Launch Meeting.

In this meeting, we'll be evaluating the readiness of our product for launch and making a critical decision on whether to proceed. Here's a brief overview of where we currently stand:

Overall, the product development has progressed smoothly, with most features implemented according to plan. However, there are a few outstanding issues that need to be addressed before we can confidently move forward. Key risks include potential user experience issues and compliance concerns raised by the legal team. Our key message for the meeting is to ensure that we have thoroughly reviewed the product's status, addressed any risks, and are prepared to make an informed decision about the launch.

## Responding to Feedback

Your director:

This all looks really promising! Can we launch two weeks earlier than originally planned?

#### Your response:

- Thank you for your enthusiasm and confidence in our product!
- While launching two weeks earlier than planned is an ambitious goal, we need to assess the feasibility and potential implications on the quality and readiness of the product.
- I suggest we conduct a thorough review of our current progress, identify any potential risks or challenges associated with an accelerated timeline, and then determine the best course of action in alignment with our quality standards and customer expectations.
- Rushing the launch could lead to unforeseen issues, negative user experiences, and potential damage to our brand reputation.