DoorDash

Design Sprint

Product Manager: Heba Mohamed

Set the stage

Set the stage for the Design Sprint by framing the problem

Initial PRD

Project Title: DoorDash Self-Driving Robot Delivery Automation

Background

DoorDash is at the forefront of food delivery innovation, exploring the potential of self-driving robots to revolutionize its services. The company envisions a future where autonomous robots handle deliveries within a 2-mile radius, reducing operational costs and ensuring more reliable delivery times. While initial implementations may require human oversight for specific scenarios, the long-term goal is for these robots to navigate sidewalks independently.

Reference:

https://doordash.com/
https://www.instagram.com/doordash/
https://twitter.com/doordash

Cont. Initial PRD

Problems:

1. **High Operating Costs:** Current delivery methods rely heavily on human labor, which is costly and subject to variability.
2. **Inconsistent Delivery Times:** Traffic and human error can lead to delays, affecting customer satisfaction.
3. **Manual Intervention Needs:** While the goal is full autonomy, there will be instances where robots require manual control, especially during the initial deployment phase.

Goals:

1. **Cost Reduction:** Decrease delivery costs by minimizing reliance on human labor.
2. **Enhanced Reliability:** Provide more consistent and reliable delivery times through automation.
3. **Autonomous Navigation:** Develop robots capable of navigating sidewalks autonomously in the long term.
4. **Operational Control:** Create a tool for the operations team to monitor delivery status and remotely control robots when necessary.

Understand

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

How Might We

Use these digital stickies to capture your ideas. Feel free to rearrange. Colorize. Etc

HMW optimize the robot's battery life to reduce maintenance costs?

HMW develop protocols for quick and effective manual intervention?

HMW provide customers with real-time updates on their delivery status?

HMW gather customer feedback to continuously improve the service?

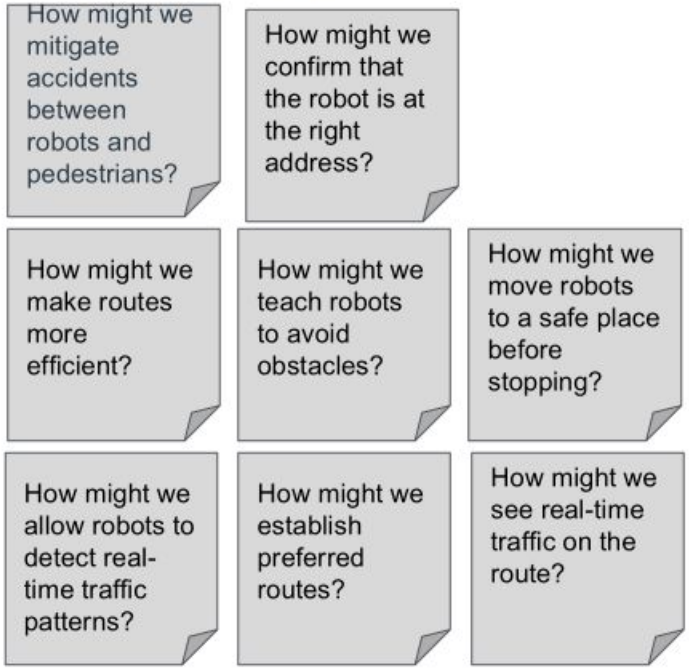
HMW ensure robots can operate effectively in various weather conditions?

HMW provide customers with a seamless and transparent delivery tracking experience?

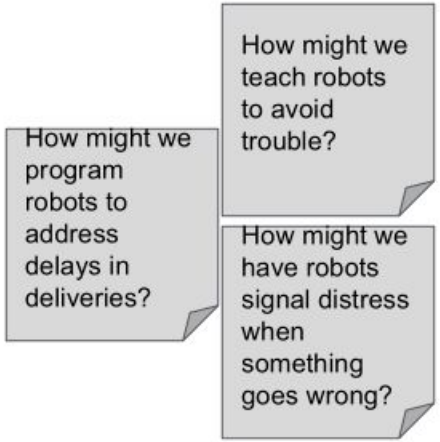
HMW leverage AI to enhance the decision-making capabilities of the robots?

HMW scale the robot delivery system to cover larger areas in the future?

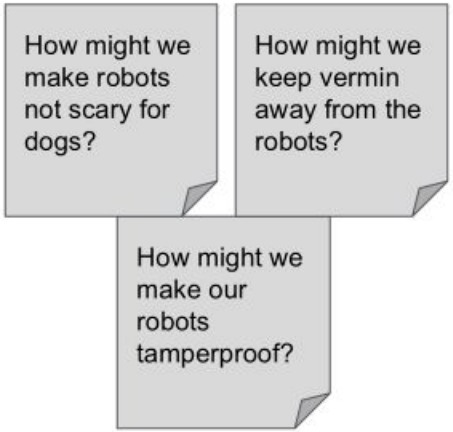
Routing and delivery



Routing

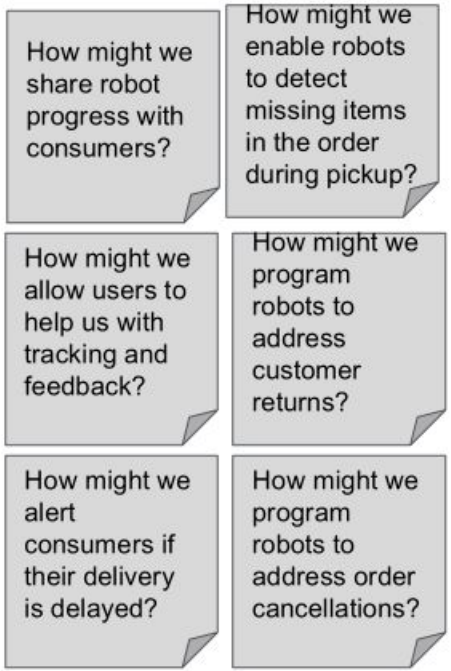


Issues on route

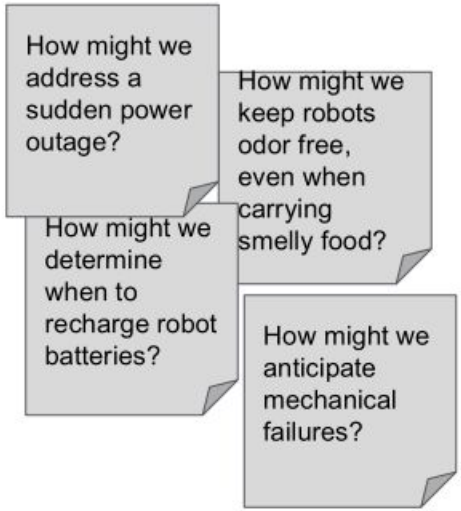


Environmental Factors

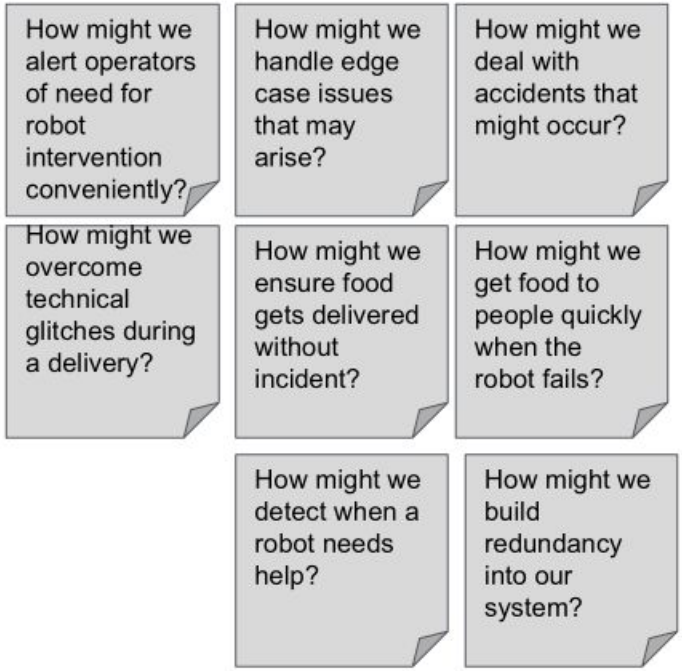
When things go wrong



Delays, Missing Items, and Cancellations

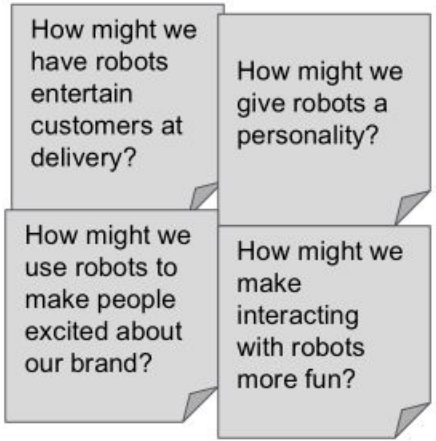


Maintenance and mechanical issues

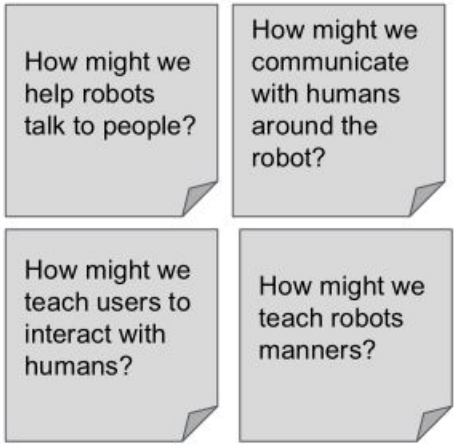


Incident Prevention and Recovery

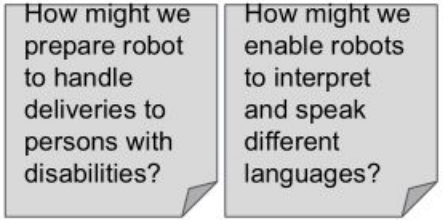
Human/Robot Interaction



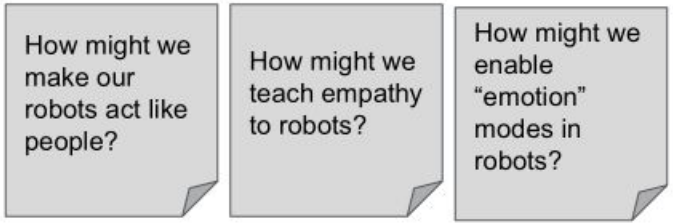
Delight



Communication with people



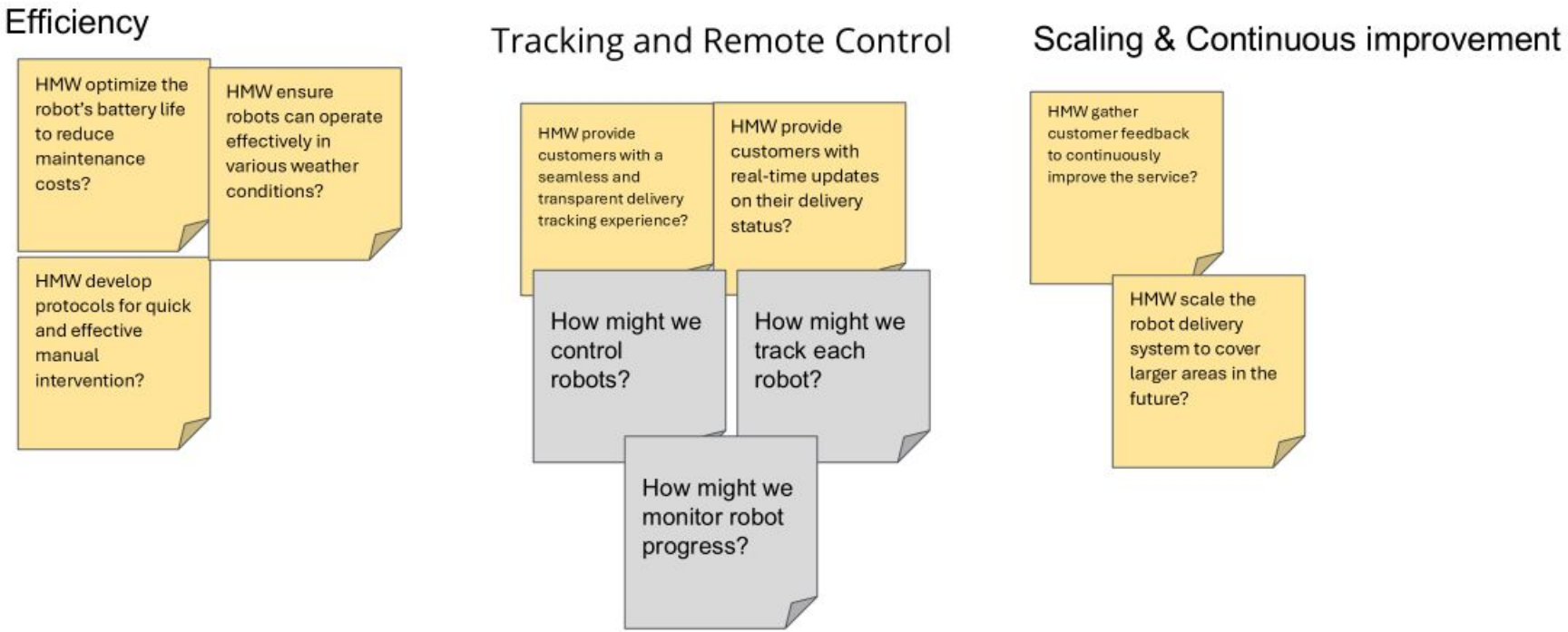
Deliveries for everyone



Human-like

How Might We

Use these digital stickies to capture your ideas. Feel free to rearrange. Colorize. Etc



Others

HMW leverage AI to enhance the decision-making capabilities of the robots?

Sprint Focus

Focus	Tracking and Remote control
Slide #	Slide 11
I selected this theme because	I have chosen this Theme because of these reasons: 1- Critical for Initial Deployment: 2- Operational Efficiency 3- Customer satisfaction 4- Data collection and analysis 5- It is important for expansion.

Define

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

Future press review

- The self-driving robot food delivery system is designed for **DoorDash** customers, including busy professionals, students, and families who value convenience and timely food delivery.
- This system addresses the challenges of delivery delays and high operational costs. By using autonomous robots for short-distance deliveries, Imagine you're a busy professional working from home. You order lunch through DoorDash, and instead of waiting for a human Dasher who might be delayed by traffic, a sleek, autonomous robot arrives at your doorstep within minutes. This not only saves you time but also provides a seamless and futuristic delivery experience.
- Customers will love this system because it offers speed, reliability, and a touch of innovation. The autonomous robots ensure that their food arrives hot and fresh, and the novelty of receiving deliveries from a robot adds an exciting element to their day.

Success Metrics

- Set at least two user-centered *goals*
- Identify changes in user behavior will *signal* success in reaching the goal
- Create a *metric* to measure each signal

	Goals	Signals	Metrics
Happiness	Easily order an item from DoorDash	Positive feedback, high ratings	Customer satisfaction rating
Engagement	Increase frequency of orders	Frequent app usage, repeat orders	Orders per user per month
Adoption	Share with friends	New user sign-ups from referrals	Referral sign-up rate
Retention	Retain customers with reliable service	Low churn rate, high repeat customer rate	Repeat order rate
Task Success	Ensure timely and accurate deliveries	On-time deliveries, minimal delivery errors	Delivery success rate

Sketch

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

8 Sketches

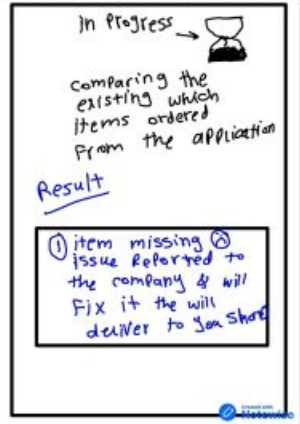
Delivery updates

Tracking experience

Delay reporting

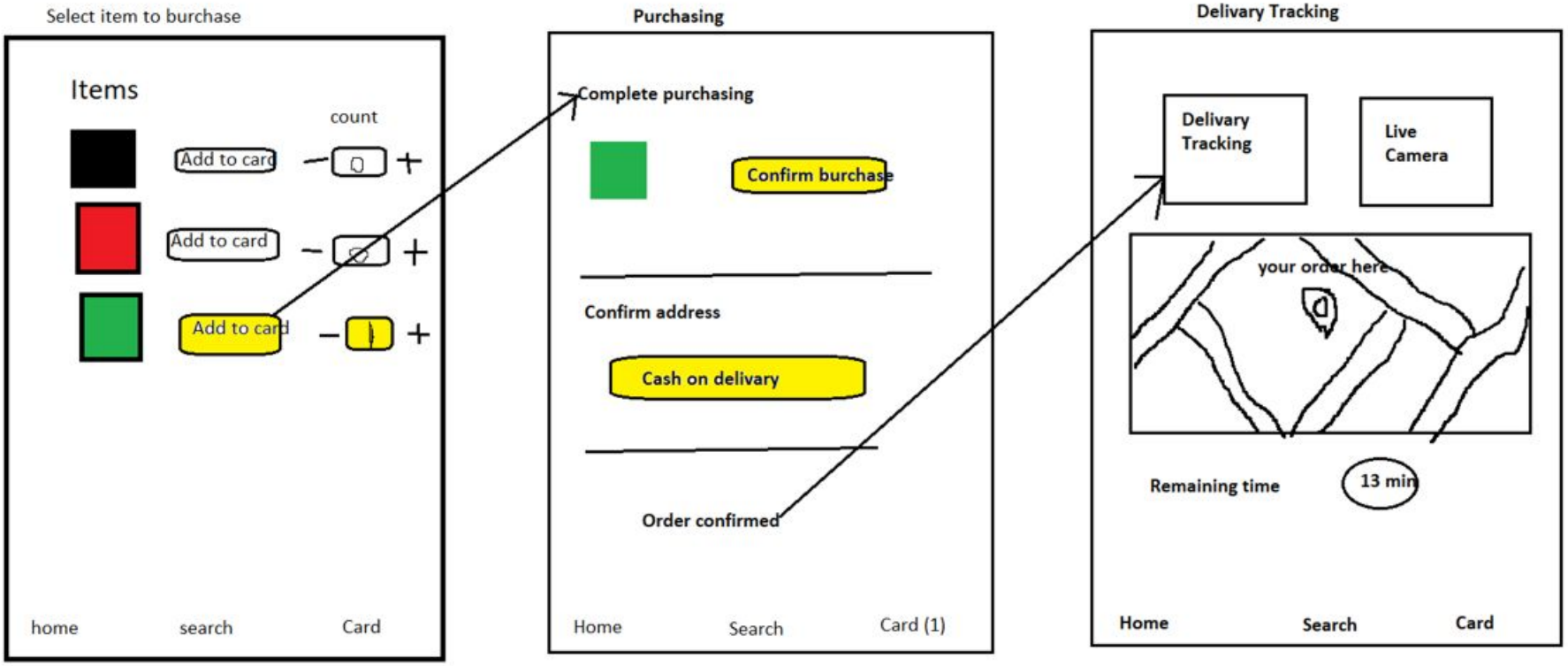
Cancellation feature

Missing items reporting

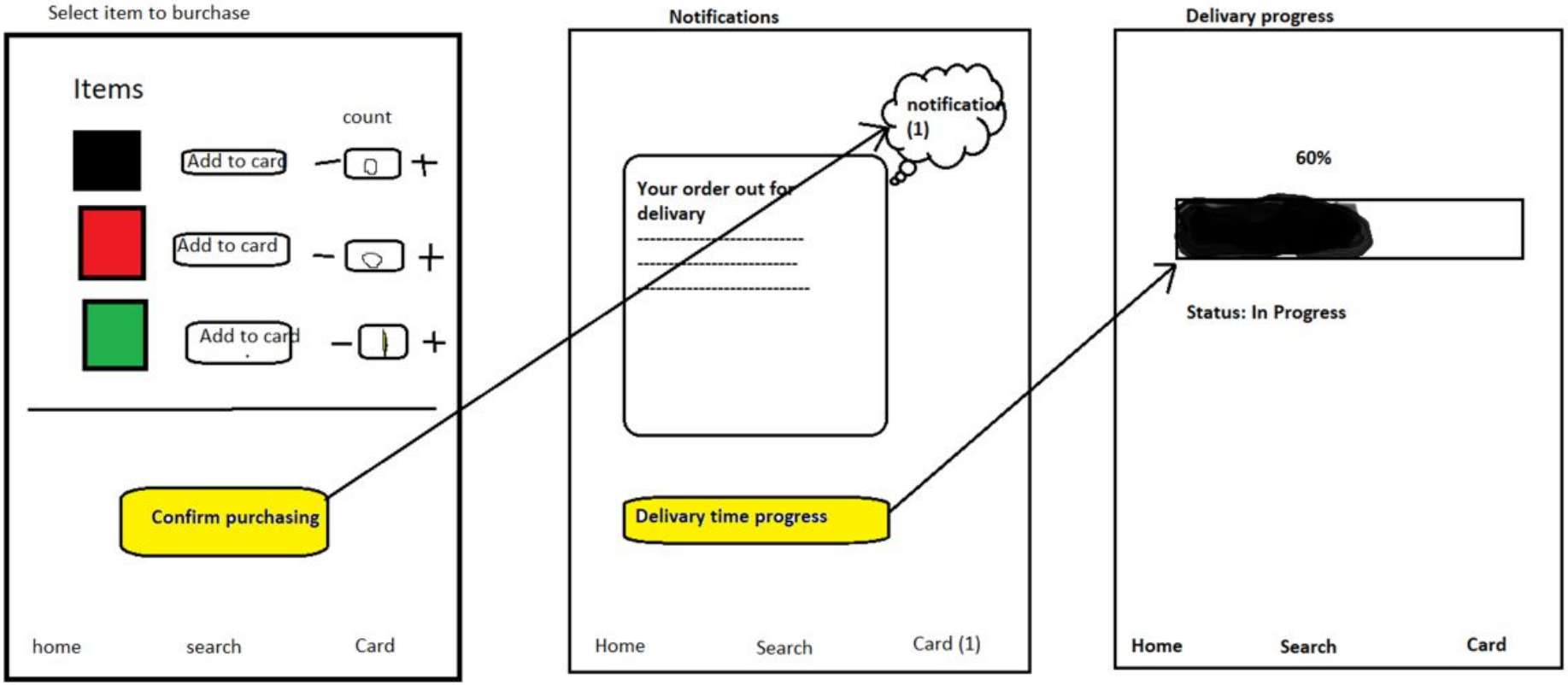


Confirm address

Solution Sketch 1



Solution Sketch 2



Decide

Pick the final concept that you develop into a prototype

Decision

Decision	Delivery tracking
Rationale	**Customer Satisfaction**: Enhancing the delivery tracking experience directly impacts customer satisfaction. When customers can see real-time updates and track their orders, it builds trust and reduces anxiety about their delivery.

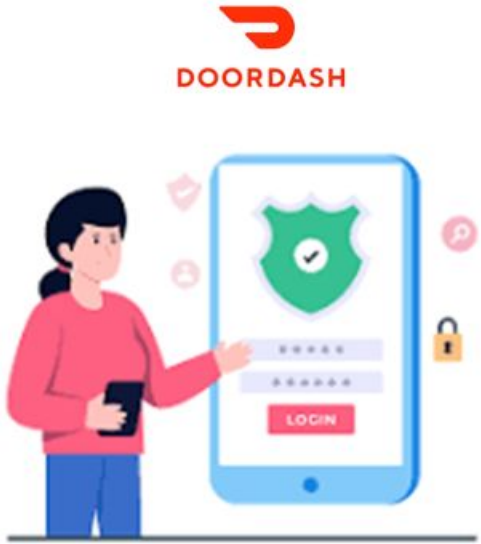
Prototype

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

Storyboard

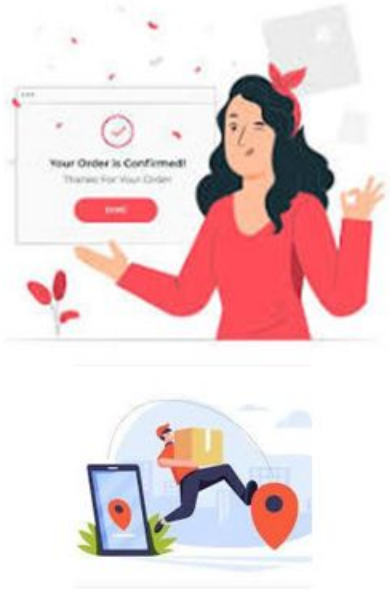
Script

Ema's beloved cat, Simba, is meowing loudly. The furry feline's food bowl is empty, and the dry food supply has run out. It's late at night, and all the pet stores are closed. Ema's heart aches as she watches her hungry cat pace around, searching for food. Desperate, she tries to figure out what to do to satisfy her cat's rumbling tummy.



Script

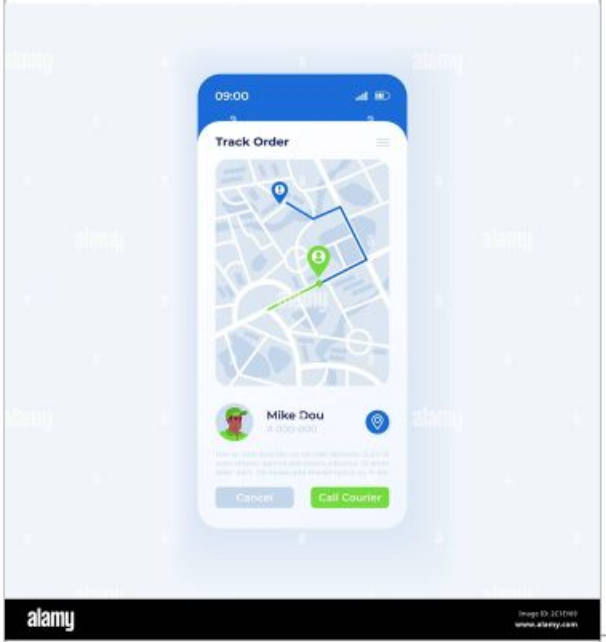
Ema remembered the handy DashDoor app she'd heard about. With a stroke of luck, she realized it could be her cat's food savior. DashDoor offered convenient on-demand deliveries right to her doorstep, even in the late hours. Quickly, she downloaded the app and signed in using her email, eager to see if they offered pet food delivery.



Script

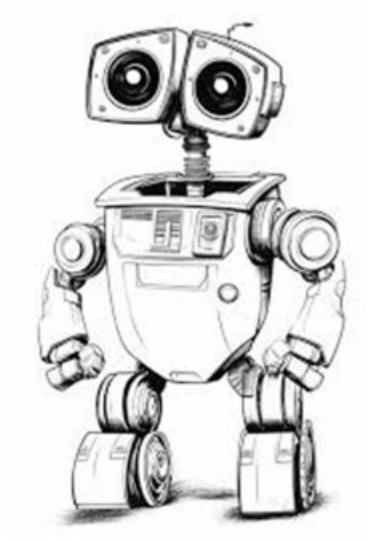
Ema swiftly placed an order for cat food on the DashDoor app, her heart filled with relief. The app confirmed her order immediately, displaying a convenient "Track Order" button. With this, Ema could follow the progress of her cat's food delivery in real time.

Storyboard



Script

Ema, brimming with anticipation, tapped the "Track Order" button on the DashDoor app. A map instantly appeared on her screen, pinpointing the location of the DashDoor delivery driver. As she watched, the driver's icon moved along the route, updating in real time. Ema could now visualize the journey her cat's food was taking, her excitement growing with each passing moment.



Script

Ema, feeling a surge of curiosity, noticed a new option on the DashDoor app: "View Live Feed." Intrigued, she tapped the button, and her screen instantly transformed into a live camera feed from the delivery driver's vehicle. Now, she could witness firsthand the driver's journey, adding an extra layer of transparency and excitement to the delivery process.

Script

Ema's excitement reached a crescendo as she received a notification from DashDoor, alerting her that the delivery driver was nearby. Moments later, another notification arrived, announcing the successful delivery of her cat's food. With a sigh of relief, Ema knew her furry friend would soon be feasting. As a token of appreciation, the DashDoor app prompted Ema to rate the delivery experience, providing her with an opportunity to share her thoughts and contribute to the platform's improvement.

Storyboard

Script

Ema's heart swelled with joy as she watched Simba eagerly devour the freshly delivered dry food. The DashDoor app had come to the rescue, ensuring her furry companion's happiness and satisfaction.

Prototype

Description

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

The prototype demonstrates a real-time order tracking system. It allows users to track their orders on a map, watch the delivery driver's progress, and even view live video from the driver's vehicle. The system provides notifications for order status updates and allows users to rate their delivery experience.

Assumptions

- Any assumptions within the prototype

The prototype assumes a reliable internet connection for real-time tracking and live video streaming. It also assumes that the delivery drivers have smartphones with cameras and GPS capabilities. Additionally, it assumes that the app has access to accurate maps and location data. Finally, it assumes that the users are willing to share their location information with the app.

Tasks

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

Place an order and receive confirmation. Track the order's progress on a map. View live video from the delivery driver's camera. Rate the delivery experience after receiving the order.

https://www.figma.com/proto/MDNcSycprqmTKUQgefXQpd/Doordash?node-id=2-8&node-type=canvas&t=GmosZg7lyix6Q3On-1&scaling=scale-down&content-scaling=fixed&page-id=0%3A1

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] Research Plan

PM: Heba Mohamed
STATUS: DRAFT

Objectives

How easy was it to find your way around the prototype and complete your desired tasks?
Were there any confusing elements or steps that slowed you down or caused frustration?
Can you describe your experience navigating through the prototype?
How satisfied are you with the overall design and functionality of the prototype?
Are there any specific features or elements that you particularly liked or disliked?
What improvements would you suggest to enhance your overall satisfaction with the prototype?
How long did it take you to complete the tracking delivery?
Did you encounter any difficulties or errors while completing the tracking?
What steps or features were most helpful in completing the order?
How long did you spend interacting with the prototype?
Which features or areas of the prototype caught your attention the most?
What kept you engaged with the prototype?

Cont. [DoorDash] Research Plan

PM: Heba Mohamed
STATUS: DRAFT

Research Approach:

Surveys: Conduct online surveys to gather feedback from potential customers on their preferences, needs, and willingness to use an on-demand delivery service.

Interviews: Conduct in-depth interviews with potential customers to gain a deeper understanding of their needs and motivations.

Focus Groups: Organize focus groups to discuss customer expectations, pain points, and desired features.

Competitive Analysis: Analyze existing on-demand delivery services in [Target Location] to identify their strengths, weaknesses, and market share.

Participants:

- **Potential Customers:** People who are likely to use an on-demand delivery service in [Target Location].
- **Restaurant and Store Owners:** Businesses that might partner with the service to offer their products for delivery.
- **Delivery Drivers:** Individuals interested in working as delivery drivers for the service.
- **Industry Experts:** Experts in the on-demand delivery industry, logistics, and technology.

[Doordash]: Interview Sessions

Introduction

Thank you for participating in our research study on on-demand delivery services. This interview will help us better understand your experiences and preferences regarding food delivery apps like DashDoor.

Background Questions

[Questions that we want to know about the user before we get started]

Tasks

Age: How old are you?
Gender: What is your gender?
Location: Where do you currently live?
Occupation: What is your current occupation?
Technology Usage: How frequently do you use smartphone apps for ordering food or other services?

Task 1

Imagine you're a busy professional living in Cairo. You just finished a long day at work and are craving a delicious meal from your favorite restaurant. You decide to use DashDoor to order dinner.

[DoorDash]: Interview Sessions

Task 2

Imagine you've just placed an order on DashDoor. You're eagerly awaiting your meal and tracking the delivery driver's progress on the app.

Overall

- **Thank you for your participation in our research study!** Your insights and feedback are invaluable in helping us improve the DashDoor app.
- **Please share your overall impressions of the app:**
- **Would you recommend DashDoor to a friend or family member?**
- **What are the app's biggest strengths?**
- **What areas do you think could be improved?**

User Testing: Participant 1 “Samy” Key Findings


Link your audio recording

What worked well	The user found the app's interface easy to navigate and understand. The ordering process was straightforward and quick. The real-time tracking feature was appreciated for providing visibility into the delivery process. The estimated delivery times were generally accurate, which helped manage expectations
Where participants got stuck	*None*
Other observations	The user suggested offering more promotions and discounts to encourage repeat usage The user felt it would be helpful to have a direct communication channel with the delivery driver. The user suggested adding more payment options, such as mobile wallets.

Participant 1: Interview Notes

Positive Feedback:

- Intuitive interface
- Efficient ordering process
- Accurate delivery estimates
- Real-time tracking

Areas for Improvement:

- More payment options (mobile wallets)
- Customization options (special instructions, substitutions)
- Direct communication with delivery driver
- More promotions and discounts

Overall Impression:

Satisfied with the app but suggests improvements for a better user experience.

User Testing: Participant 2 “Neven” Key Findings

What worked well	The participant appreciated the live camera feature, which provided a sense of transparency and trust. The delivery was relatively fast, meeting the participant's expectations. The app provided timely notifications and updates throughout the delivery process.
Where participants got stuck	The participant would like to see improved customer support options, such as live chat or phone support.
Other observations	The participant felt that the prices were slightly higher compared to other delivery services. The participant suggested expanding the range of restaurants available on the platform.

Participant 2: Interview Notes

Positive Feedback:

- **Live Camera Feature:** The participant appreciated the live camera feature, which provided a sense of transparency and trust.
- **Quick Delivery:** The delivery was relatively fast, meeting the participant's expectations.
- **Clear Communication:** The app provided timely notifications and updates throughout the delivery process.

Areas for Improvement:

- **Pricing:** The participant felt that the prices were slightly higher compared to other delivery services.
- **Variety of Restaurants:** The participant suggested expanding the range of restaurants available on the platform.
- **Customer Support:** The participant would like to see improved customer support options, such as live chat or phone support.

Overall Impression:

The participant was generally satisfied with the DashDoor app but expressed concerns about pricing and the variety of restaurants. They believe that addressing these areas could enhance the overall user experience.

Handoff

Updated PRD

Background

DashDoor is an on-demand delivery service that connects customers with local restaurants and businesses. The platform offers a convenient way for users to order food, groceries, and other items for delivery.

Problem

The current on-demand delivery market is fragmented, with various platforms offering different services. DashDoor aims to provide a comprehensive and user-friendly platform that stands out from the competition.

Goals

- **Enhance user experience:** Provide a seamless and intuitive user experience, from placing an order to receiving the delivery.
- **Expand service offerings:** Increase the variety of products and services available on the platform.
- **Strengthen partnerships:** Build strong relationships with restaurants and businesses to offer a wider selection of options.
- **Improve delivery efficiency:** Optimize delivery routes and processes to ensure timely and accurate deliveries.
- **Expand market reach:** Increase the geographic coverage of DashDoor's services.

Key Features:

- **Real-time order tracking:** Allow users to track their orders on a map and view live video from the delivery driver's camera.
- **Notifications:** Send notifications to users about order status updates, estimated delivery times, and any issues that may arise.
- **Rating system:** Enable users to rate their delivery experience and provide feedback to DashDoor.
- **Payment options:** Offer a variety of payment methods, including credit cards, mobile wallets, and cash on delivery.
- **Customer support:** Provide reliable and responsive customer support channels, such as live chat or phone support.

Additional Considerations:

- **User interface:** Design a user-friendly and intuitive interface that is easy to navigate.
- **Mobile optimization:** Ensure the app is optimized for mobile devices and provides a seamless experience on both iOS and Android.
- **Integration with restaurants:** Develop a user-friendly system for restaurants to partner with DashDoor and manage their orders.
- **Marketing and promotion:** Create effective marketing campaigns to promote DashDoor and attract new users.
- **Data analytics:** Utilize data analytics to track user behavior, measure performance, and identify areas for improvement.

Updated PRD (page 2)

Key Features & Scope

Priority	Feature	Description
P0	**Real-time Order Tracking**	Allow users to track their orders on a map with live updates on the delivery driver's location.
P0	**Live Video Streaming**	Enable users to watch a live video feed from the delivery driver's vehicle for added transparency.
P1	**Push Notifications**	Send real-time notifications to users about order status updates, estimated delivery times, and any issues.
P1	**Customer Ratings and Reviews**	Allow users to rate their delivery experience and leave reviews to help other users make informed decisions.
P1	**Expanded Payment Options**	Offer a wider range of payment options, including cash on delivery, mobile wallets, and corporate billing.
P2	**Scheduled Deliveries**	Allow users to schedule deliveries in advance for specific dates and times.
P3	**Subscription Plans**	Introduce subscription plans with discounts or perks for frequent users.

REFERENCE
REMOVE BEFORE SUBMITTING

Appendix:

How Might We Stickies

How Might We Other Team Member Stickies

Kaiser Permanente project scenario

REFERENCE
REMOVE BEFORE SUBMITTING

Kaiser Permanente is looking to enter into the preventative care space to help their patient base increase physical activity and improve on healthy habits. While the overall goal is improved patient satisfaction and well being, the specific financial goal is reduced cost by emphasizing improved health prior to any adverse conditions developing. Overall, KP wants to decrease spending on conditions such as type 2 diabetes

Encourage good habits

Incentives

How might we gamify healthy habits?

How might we create a rewards system?

How might we reward people for good behaviors?

How might we reduce healthcare costs for healthy patients?

Accountability

How might we make patients feel accountable?

How might we build a social support system?

Routines

How might we promote health habits?

How might we get people to build healthier habits?

Change specific behaviors

How might we make it easier to make healthy choices?

How might we warn users about unhealthy choices?

How might we prevent patients from making unhealthy choices?

Prevent bad choices

How do we teach patients how to mediate?

How might we help reduce high blood pressure?

How do we reduce a patient's alcohol intake?

How might we help patients stop smoking?

How might we encourage people to drink more water?

Change other behavior

How do we convince people to exercise regularly?

How might we get people to walk 30 minutes every day?

How might we reduce sedentarism?

Be more active

Planning & Tracking

How might we create a personalized plan?

How might we help patients set health goals?

Personalized planning

How might we provide activity tracking?

How might we provider diet tracking?

How might we help patients monitor their goals?

How might we help people manage their weight?

Personal tracking towards plan

Education

How might we help people better understand diabetes?

How might we make people aware of risk factors?

How might we raise awareness across society?

General education

How might we identify and warn pre-diabetic patients

How might we make people aware of their current state of health?

Personal assessment

How might we build good habits at a young age?

Young age

Other

How might we provide better insights to doctors?

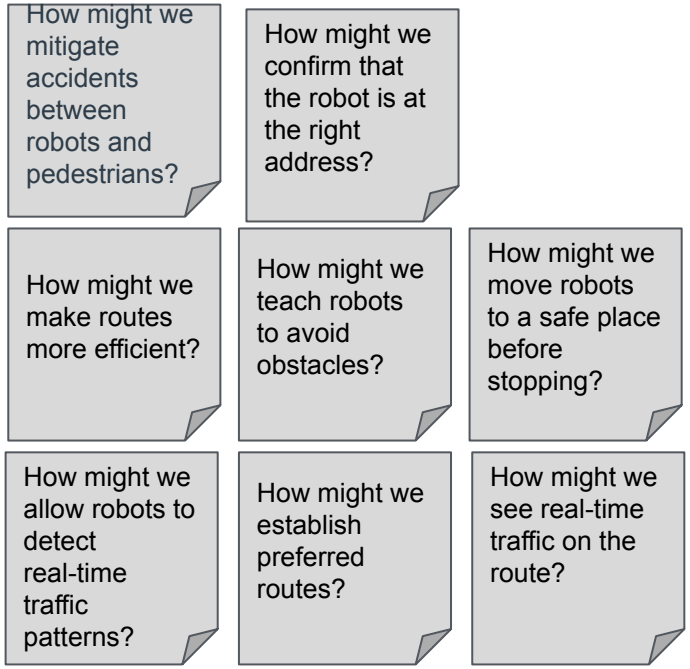
How Might We
Other Team
Member Stickies

DoorDash
project scenario

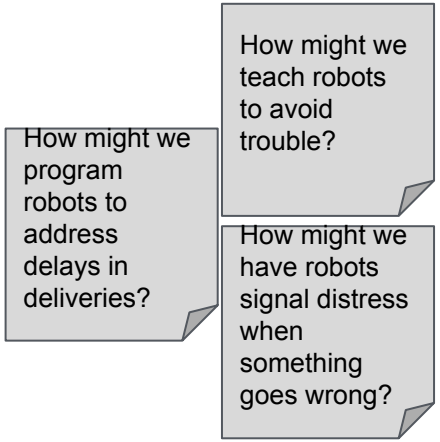
REFERENCE
REMOVE BEFORE SUBMITTING

Doordash is looking to automate food delivery using self-driving robots for trips that are less than 2 miles in order to reduce its operating costs and provide more reliable delivery times. The long term goal is that these delivery robots will navigate sidewalks fully autonomously. But initially there may be times when manual intervention will be required. Your team has been tasked with building a tool for the operations team-- to view status of deliveries and remotely take control of robots that need intervention (ie: rerouting)

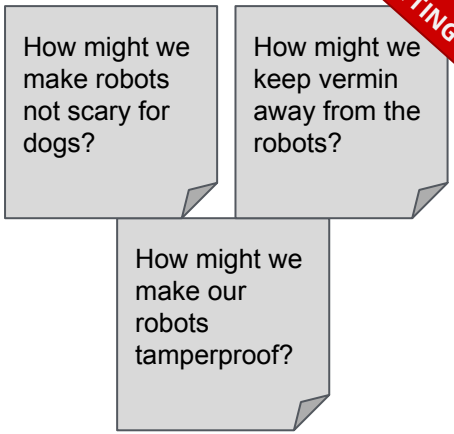
Routing and delivery



Routing



Issues on route



Environmental Factors

When things go wrong

How might we share robot progress with consumers?

How might we enable robots to detect missing items in the order during pickup?

How might we allow users to help us with tracking and feedback?

How might we program robots to address customer returns?

How might we alert consumers if their delivery is delayed?

How might we program robots to address order cancellations?

Delays, Missing Items, and Cancellations

How might we address a sudden power outage?

How might we keep robots odor free, even when carrying smelly food?

How might we determine when to recharge robot batteries?

How might we anticipate mechanical failures?

Maintenance and mechanical issues

How might we alert operators of need for robot intervention conveniently?

How might we handle edge case issues that may arise?

How might we overcome technical glitches during a delivery?

How might we ensure food gets delivered without incident?

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

How might we detect when a robot needs help?

How might we build redundancy into our system?

Incident Prevention and Recovery

How might we control robots?

How might we track each robot?

How might we monitor robot progress?

Tracking and Remote Control

Human/Robot Interaction

REFERENCE
REMOVE BEFORE SUBMITTING

How might we have robots entertain customers at delivery?

How might we give robots a personality?

How might we use robots to make people excited about our brand?

How might we make interacting with robots more fun?

Delight

How might we help robots talk to people?

How might we communicate with humans around the robot?

How might we teach users to interact with humans?

How might we teach robots manners?

Communication with people

How might we prepare robot to handle deliveries to persons with disabilities?

How might we enable robots to interpret and speak different languages?

Deliveries for everyone

How might we make our robots act like people?

How might we teach empathy to robots?

How might we enable “emotion” modes in robots?

Human-like

Other

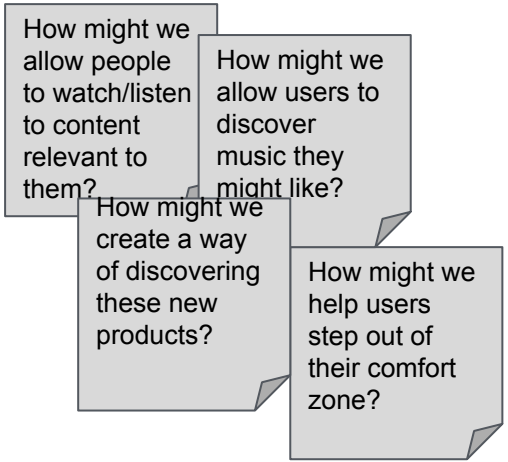
How Might We Other Team Member Stickies

Amazon project scenario

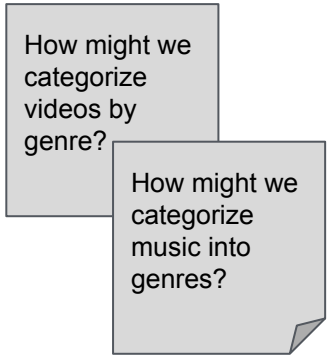
REFERENCE
REMOVE BEFORE SUBMITTING

Amazon is the world leader in self publishing for books. They would now like to explore entering into another self publishing media vertical and are considering either self published videos or self published music.

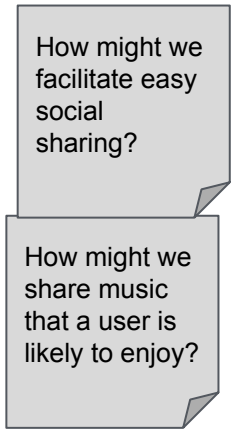
Best User Experience



Content Discovery



Content Browsing



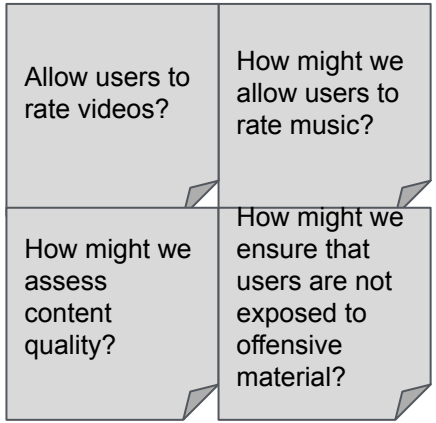
Social

Accessibility

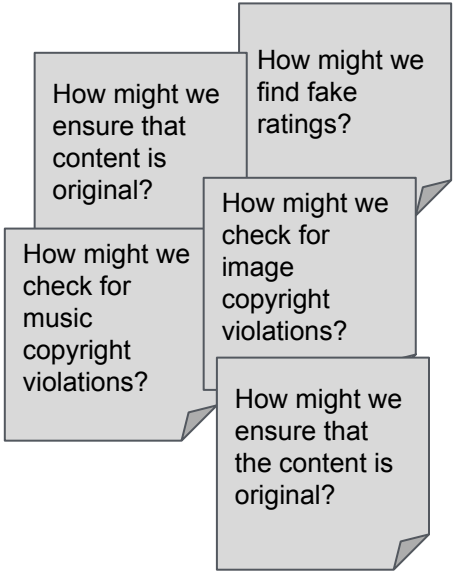
Simple and fast

Family

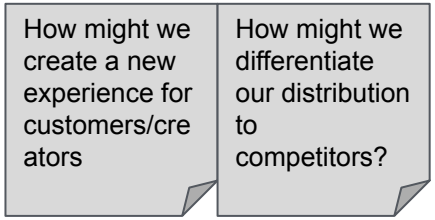
Build a Powerful Platform



High quality content



Prevent abuse



Differentiation

Empower Content Creators

How might we encourage creators to come to our platform?

How might we convert book authors to other media?

More Creators

How might we make it easy to upload music and videos?

How might we make content uploads easy and quick?

How might we allow users to create and upload their own videos online?

Simple and fast

How might we provide music editing tools?

How might we make the music sound better?

How might we provide video editing tools?

Tools to produce high quality content

How might we allow artists to collaboratively create content?

Collaboration

How might we allow users to promote their content on social media?

How might we share local concert informati

How might we make artist landing pages interesting?

Creator Engagement

How might we incentivize artists to share content on Amazon's platform?

How might we reward publishers for better content?

Incentives

Other

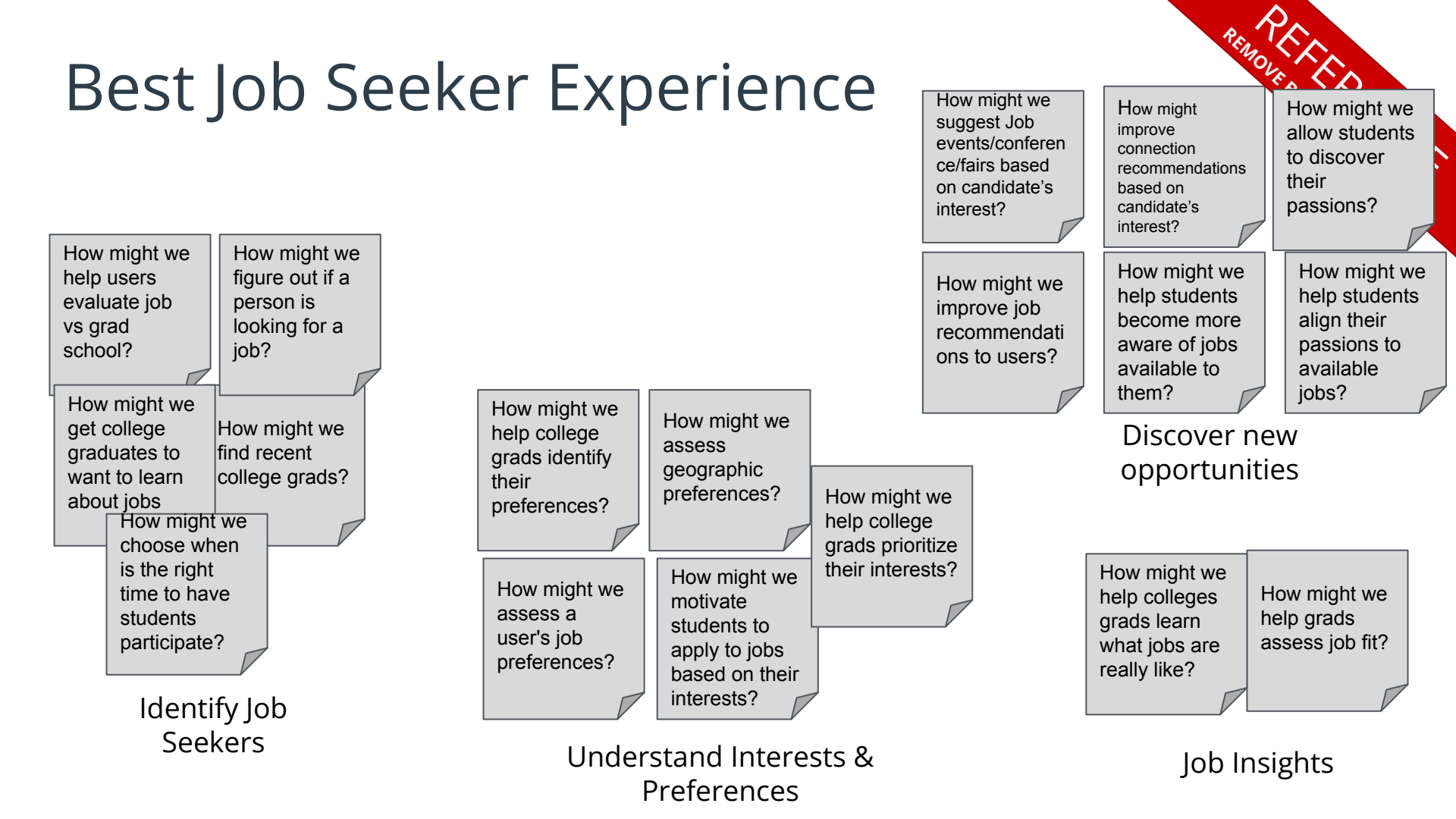
How Might We Other Team Member Stickies

LinkedIn project scenario

REFERENCE
REMOVE BEFORE SUBMITTING

LinkedIn is trying to expand its job market offerings by creating an app that will recommend the best jobs to recent college graduates based on their skills and preferences

Best Job Seeker Experience



Great Employee/Employer Matching

How might we find job openings for college grads?

How might we get accurate and timely job market information?

How might we request information from companies?

Identify Open Roles

How might we create accurate matches?

How might we create an accurate and reliable recommendation engine?

How might we match skills with employer needs?

Matching

How might we facilitate communication between user and employers?

Communication

How might we create a model and account for bias in our model and job areas?

Bias

How might we evaluate employer profile effectiveness?

How might we evaluate user profile effectiveness?

How might we improve user profile quality?

High Quality Profiles

Tools & Services

How might we connect users with mentors?

How might we connect users from the same schools?

How might we create a supportive social network for job seekers?

How might we build and improve professional mentorship community?

Community & Mentorship

How might we assess a user's job skills?

How might we help colleges grads calibrate their skills?

Skill Assessment

How might we recommend professional certifications, courses, conferences to employees?

Ongoing Education

How might we provide resume writing assistance?

Resume Help

Other

How might we market our app to users?

How might we give incentives to get friends using the app?

How might we incentivize students to use the new app?

How might we partner with college career centers?

How might we develop partnership with schools?

How might we protect user information?