

IHCI First Project Submission

Rules

- Submit a Google Doc, NOT a PDF or a Google slide.
- Use the default fonts, line spacing, and font size unless specifically required in the assignment.
- After submission, the Google Doc will get automatically locked, so you won't be able to make any changes.
- Standard plagiarism rules apply.
- Your submission will not be considered for grading and feedback if you do not follow these guidelines.

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Project Group Number:A_G7_P1

HCI Group No.:7

Requirement Gathering

Stakeholders:

1 Restaurants/food providers: Want an extremely easy way to donate excess food at the end of day to reduce waste, manage timely pickups/drop-offs, get tax benefits for donations. Concerned about potential liability issues.

2 Food banks/shelters: Need significant increase in volume of food donations, better management of inventory and coordination of volunteers to meet growing demand. Want to be able to reach and serve more people in need in their community.

3 Volunteers: Want to donate their time to help others in need in their local area. Need seamless shift signups based on availability, reminders, routes etc.

4 People in need: Require increased access to free, healthy meals and groceries. Very interested in finding locations nearby, arranging pickup or delivery if possible, accommodating dietary restrictions.

5 App developers: Primary goals are driving social impact and building a sustainable business model. Key focuses are drastic reduction of food waste and seamlessly connecting providers with recipients in need.

User Research:

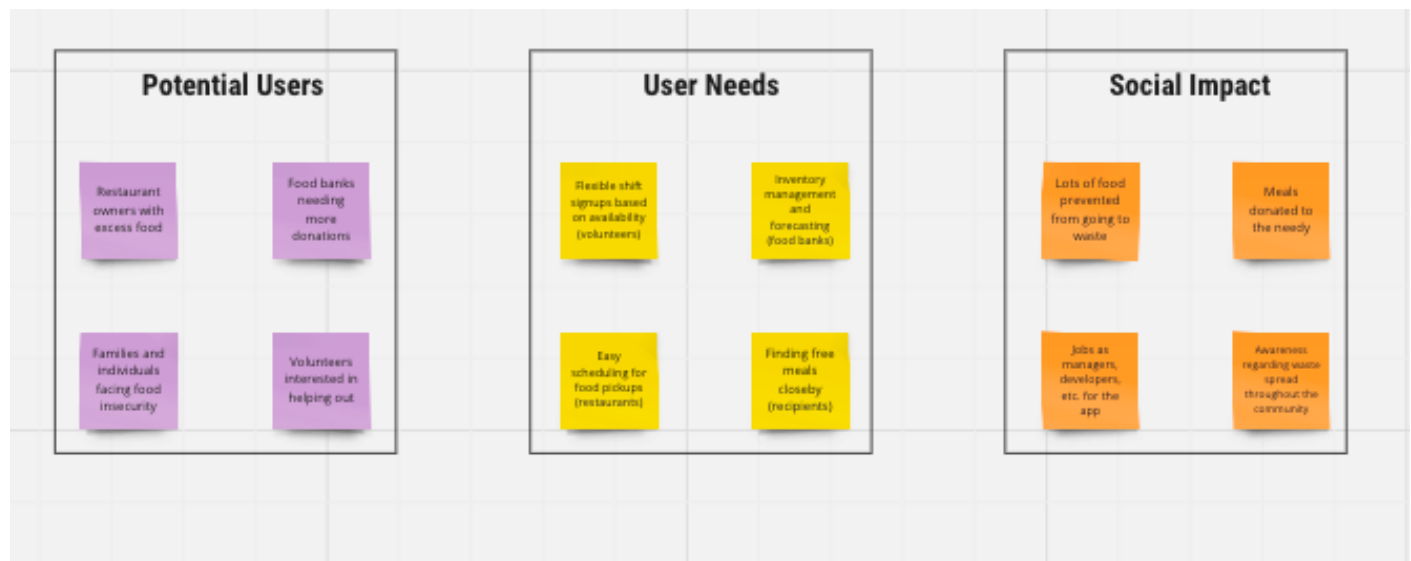
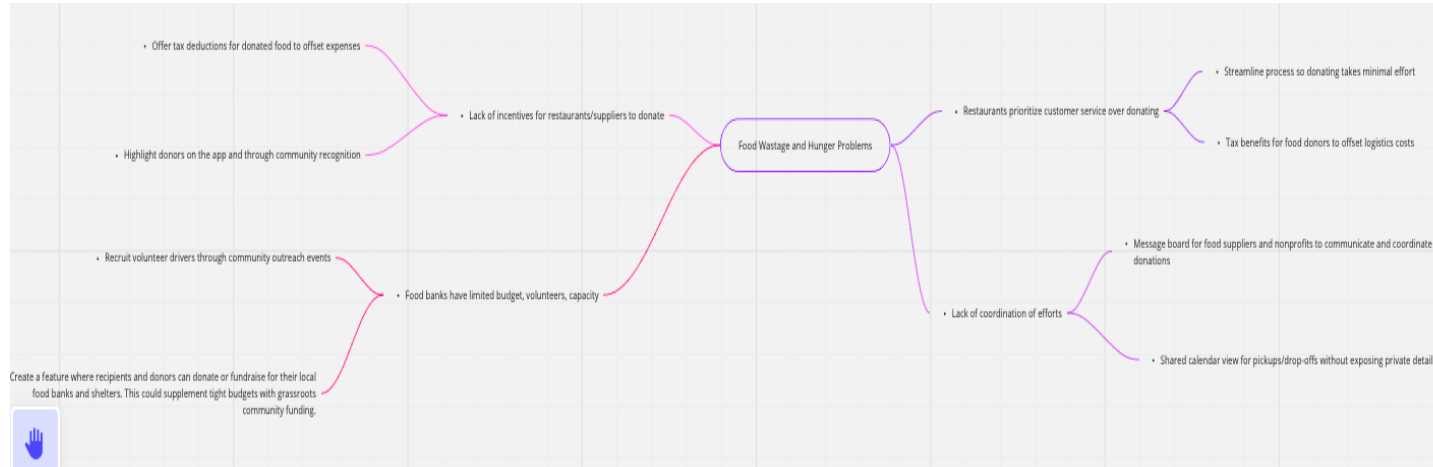
- In-depth interviews with restaurants reveal excess edible food is often thrown out at end of day simply due to logistical issues and lack of easy transportation options. Most state they would happily donate this food if system was straightforward and convenient.
- Surveys distributed to large sample of food banks indicate the unpredictability of day-to-day food donations makes inventory management and long-term planning very difficult. More volume of donations and advance notice would aid greatly in serving their communities.
- Focus groups of volunteers highlight strong desire to devote free time to helping those in need in their area. However, current systems are highly unorganised with poor coordination leading to frustration. Technology for optimized scheduling and routing seen as major opportunity.
- Ethnographic observations of at-risk communities demonstrate expanded access to food donations is critical, especially in underserved urban and rural areas. Important factors are accessibility, dietary restrictions, and cultural preferences.

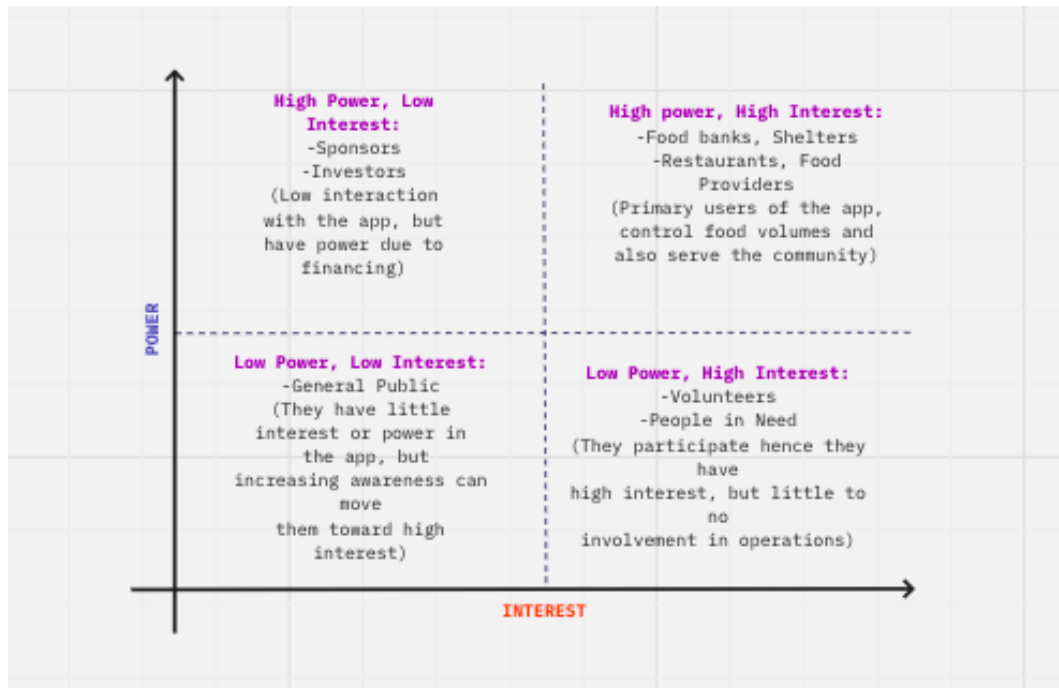
Key Requirements:

- Extremely seamless automated food pickup scheduling, coordination, reminders for restaurants/caterers. Integrations with Point of Sale systems to track excess.
- Robust inventory tracking, forecasting of demand, optimization of routes and schedule for food bank managers and volunteers. Ability to reach more recipients.
- Easy to use shift signups, reminders, and directions for volunteer drivers based on real-time availability and traffic data. Satisfaction from helping community.
- Searchable databases of food bank locations displaying availability, delivery options, dietary options. Favorites list and notifications for recipients.
- Gamified participation through points/badges, social community building. Ratings systems for providers, food quality assurance.

- Powerful analytics for all parties on food waste reduction, carbon footprint, people served, demographics. Impact reporting for grants and sponsors.

-Above mentioned points/badges can be used as coupons in other applications, also giving way for sponsorships to make application profitable.

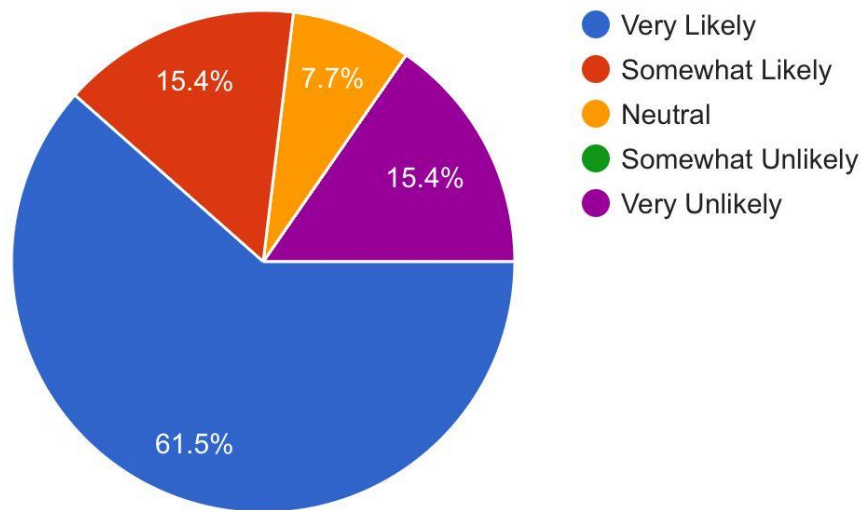




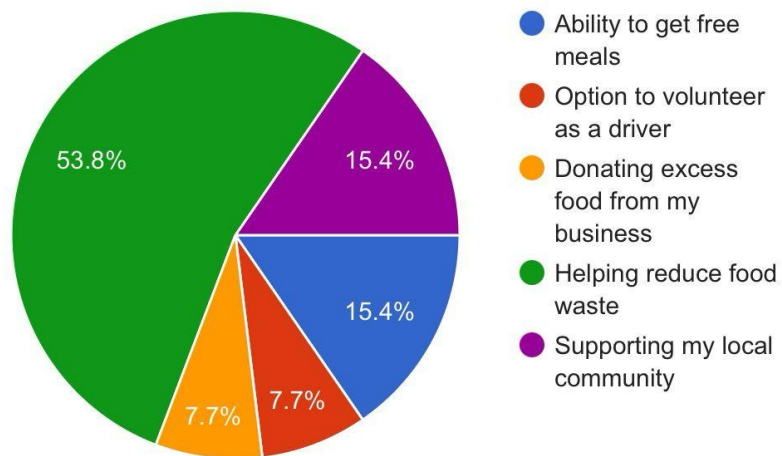
MIRO LINK-

https://miro.com/app/board/uXjVNWPjWnc=?share_link_id=263500970910

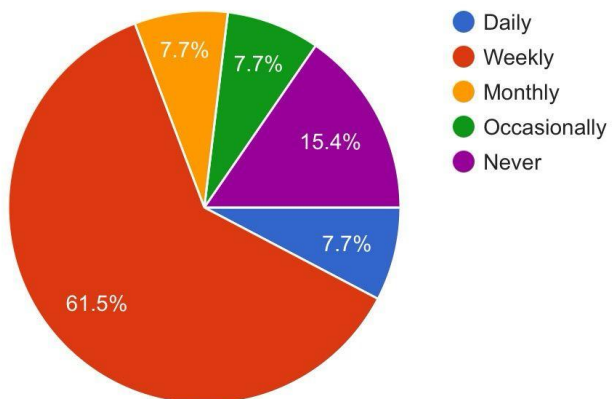
How likely would you be to use an app that connects excess food from restaurants to food banks and people in need?



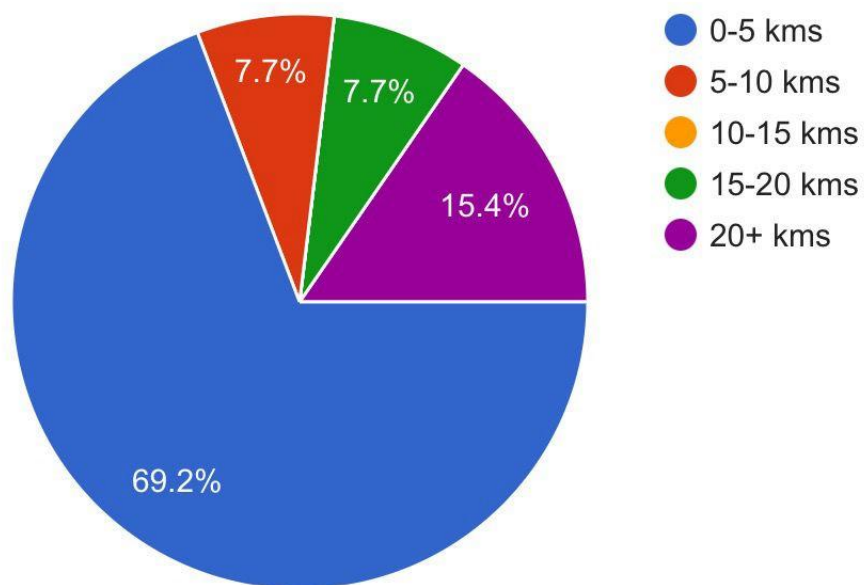
What feature would convince you to try this app?



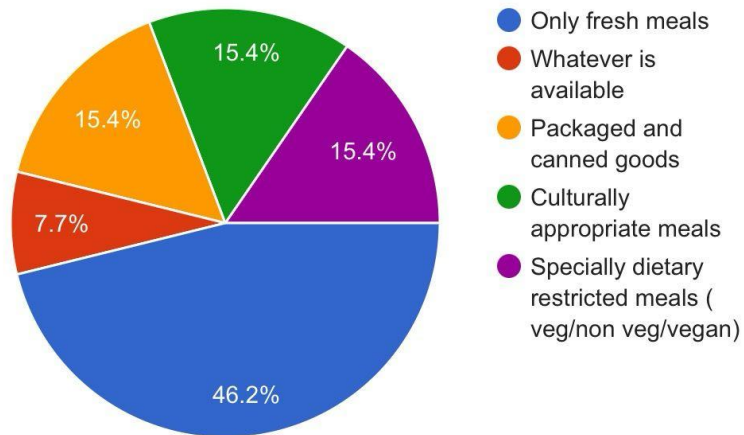
How frequently would you use the app?



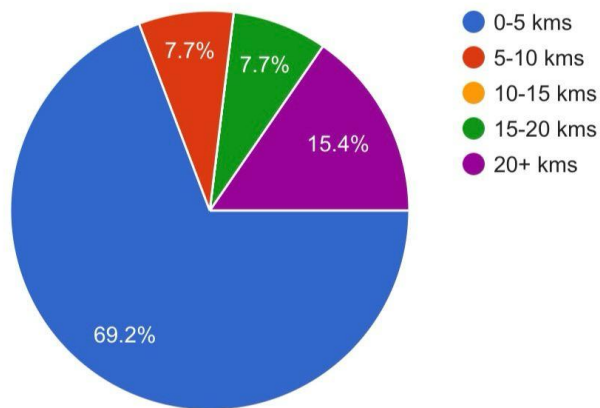
How far would you be willing to travel to pick up free donated meals?



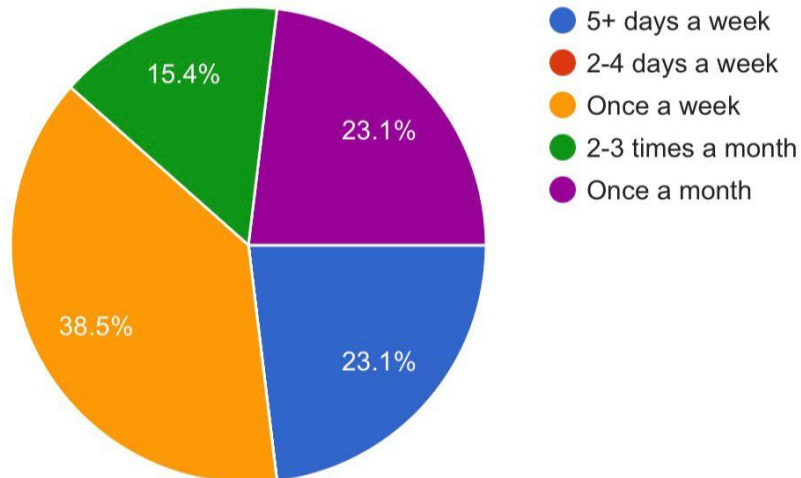
What type of meals would you hope to get through this app?



How far would you be willing to travel to pick up free donated meals?



How often do you eat out at restaurants currently?



Personas and Scenarios


Kokila Ben

FRUSTRATIONS(DONOR)

- Waste Reduction: Many donors might be frustrated with the amount of food they waste
- Reputation: Restaurants might be concerned about their public image

NEEDS

- Need for Food Waste Reduction: Donors need a way to reduce food waste and make more sustainable choices
- Need for Improved Reputation: Donors may want to enhance their public image



DEMOGRAPHICS

AGE: 34
 GENDER: FEMALE
 LOCATION: NOIDA, UP
 EDUCATION: MTECH
 YEARLY INCOME: >30 LAKH (Owner of Restaurant)
 APP STATUS: DONOR

PHYSICAL ATTRIBUTES

VISION: CLEAR
 DISABILITIES: PROSTHETIC LEG
 MEDICAL CONDITIONS: NONE
 MENTAL HEALTH: GOOD

PRIORITIES

Reduce Food Waste:

Convenience:

Reputation Enhancement:

Ben Zamaowski

FRUSTRATIONS(RECIPIENT)

- **Affordability:** People in need may struggle with high food costs. Your app can offer lower-priced, accessible options for quality food.
- **Availability:** Access to donated food can be inconsistent.

NEEDS

- **Need for Affordable Food:** Recipients need access to low-cost, nutritious food to address financial constraints.
- **Need for Accessibility:** Recipients in underserved areas need a solution that provides equitable access to affordable food.



PRIORITIES

Consistency: ☒ ☒ ☒ ☒ ☐

BUDGET(5- most expensive; 0- cheapest): ☒ ☐ ☐ ☐ ☐

Accessibility: ☒ ☒ ☒ ☐ ☐

Privacy: ☒ ☒ ☒ ☐ ☐

DEMOGRAPHICS

AGE: 22
GENDER: MALE
LOCATION: NEWYORK, USA
EDUCATION: High School Graduate
YEARLY INCOME: >8 LAKH
MARITAL STATUS: RELATIONSHIP

PHYSICAL ATTRIBUTES

VISION: NO GLASSES
DISABILITIES: FRACTURED LEG
MEDICAL CONDITIONS: NONE
MENTAL HEALTH: AVERAGE

Max Trevor

FRUSTRATIONS (VOLUNTEER)

- **Scheduling:** Some potential volunteers may be unable to commit to fixed schedules.
- **Recognition:** Volunteers may desire recognition or incentives for their contributions.

NEEDS

- **Need for Opportunities:** Volunteers seek opportunities to contribute to their community and make a positive impact.
- **Need for Flexibility:** volunteers need flexible volunteering options that can accommodate their availability.



PRIORITIES

Motivation: ☒ ☒ ☒ ☒ ☐

Flexibility: ☒ ☒ ☒ ☒ ☒

Opportunities: ☒ ☒ ☒ ☒ ☐

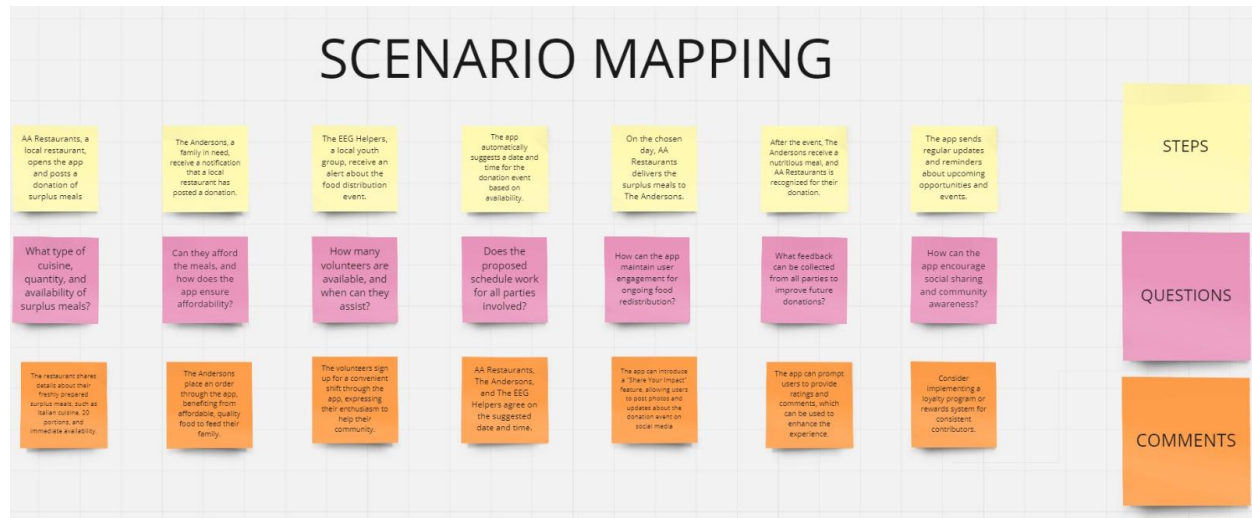
Recognition: ☒ ☒ ☒ ☐ ☐

DEMOGRAPHICS

AGE: 27
GENDER: MALE
LOCATION: TOKYO, JAPAN
EDUCATION: MASTERS IN FINANCE
YEARLY INCOME: >50 Lakh
MARITAL STATUS: ENGAGED

PHYSICAL ATTRIBUTES

VISION: GLASSES
DISABILITIES: NONE
MEDICAL CONDITIONS: HIGH BP
MENTAL HEALTH: STRESSED



SCENARIO

1. Donors - The Local Restaurant:

Need: The restaurant, named "AA RESTAURANT," has just closed for the day and realizes they have a surplus of prepared, high-quality meals.

Priority: Their priority is to minimize food waste and reduce disposal costs.

In the same neighborhood, the Andersons, a hardworking family, were facing tough times. They were struggling to make ends meet, and putting food on the table had become increasingly challenging.

2. Recipients - The Family in Need:

Need: A family in their neighborhood, the Andersons, are going through a financially challenging period and are struggling to put food on the table.

Priority: Their primary concern is affordable, nutritious meals for their family.

Meanwhile, a local youth group, known as the "EEG Helpers," was always on the lookout for opportunities to make a positive impact on their community.

3. Volunteers - The Local Youth Group:

Need: A local youth group is always on the lookout for volunteer opportunities that help the community.

Priority: They prioritize opportunities to make a positive impact and are looking for flexible options to accommodate their schedules.

HOW OUR APP MAKES THE IMPACT:

1. Donors (Restaurant): AA RESTAURANT opens your app and posts a donation of surplus meals. They input details like the type of cuisine, quantity, and availability. The app provides guidelines on safe food handling and tax incentives for food donations. The restaurant is pleased that your app simplifies the process and helps reduce food waste.
2. Recipients (Family in Need - The Andersons): The Andersons are registered users of your app. They receive a notification that a local restaurant has just posted a donation of freshly prepared meals at an affordable price. They place an order through the app, knowing that they can enjoy quality food without breaking their budget.
3. Volunteers (Local Youth Group): The youth group is part of your app's network of volunteers. They receive an alert about a food distribution event happening at AA RESTAURANT. They sign up for a volunteer shift that suits their schedules, and your app provides them with all the necessary information

Problem Understanding

Target Users:

Community Members: Individuals and organizations willing to donate surplus food to reduce waste and support their local communities.

Local Governments: Municipalities and city authorities interested in promoting food waste reduction and supporting community well-being.

App Developers: Tech-savvy individuals or companies interested in creating and maintaining the MealConnect platform.

Food Rescue Teams: Organizations and volunteers dedicated to rescuing and distributing surplus food to those in need.

Recipients: Individuals or families in need of food assistance, including homeless shelters and other food distribution centers.

Food Providers: Restaurants, cafes, grocery stores, and other businesses with surplus food to donate.

Proposed Solution:

The proposed solution, "mealconnect" is a comprehensive approach to tackling food waste and ensuring more efficient food sharing. It seeks to create a harmonious ecosystem for food providers, community organizations, and individuals to reduce waste and help those in need. meal connect offers several features and services to achieve these goals:

Food Rescue Service: FoodHarmony offers a food rescue service where volunteers can sign up to collect surplus food from providers and deliver it to community organizations. This service should include a scheduling system for volunteers and real-time tracking of food rescue efforts.

Donation Matching: The platform should intelligently match food donations with the specific needs and preferences of community organizations and recipients. This includes considering dietary restrictions and cultural preferences.

Inventory Management: Food providers can list surplus food items with details such as type, quantity, and estimated expiration date. The platform tracks the available inventory to minimize waste.

Sustainability Metrics: FoodHarmony promotes sustainability by providing data on the amount of food saved from waste, the environmental impact of the saved food, and the carbon footprint reduction.

Payment Integration: To support the operational costs of the platform and facilitate donations, FoodHarmony may integrate a payment system for users to make financial contributions.

Communication Hub: The platform serves as a communication hub for all users, enabling messages, alerts, and notifications about food availability, volunteer opportunities, and food donation events.

User-Friendly Mobile App: FoodHarmony offers a mobile app for users to access the platform on the go, making it easy for food providers, volunteers, and recipients to participate.

Educational Resources: The platform provides information and resources on food waste reduction, sustainable living, and community engagement to raise awareness and foster a sense of responsibility.

Local Partnerships: FoodHarmony actively seeks partnerships with local businesses, government agencies, and community organizations to create a network of support and resources.

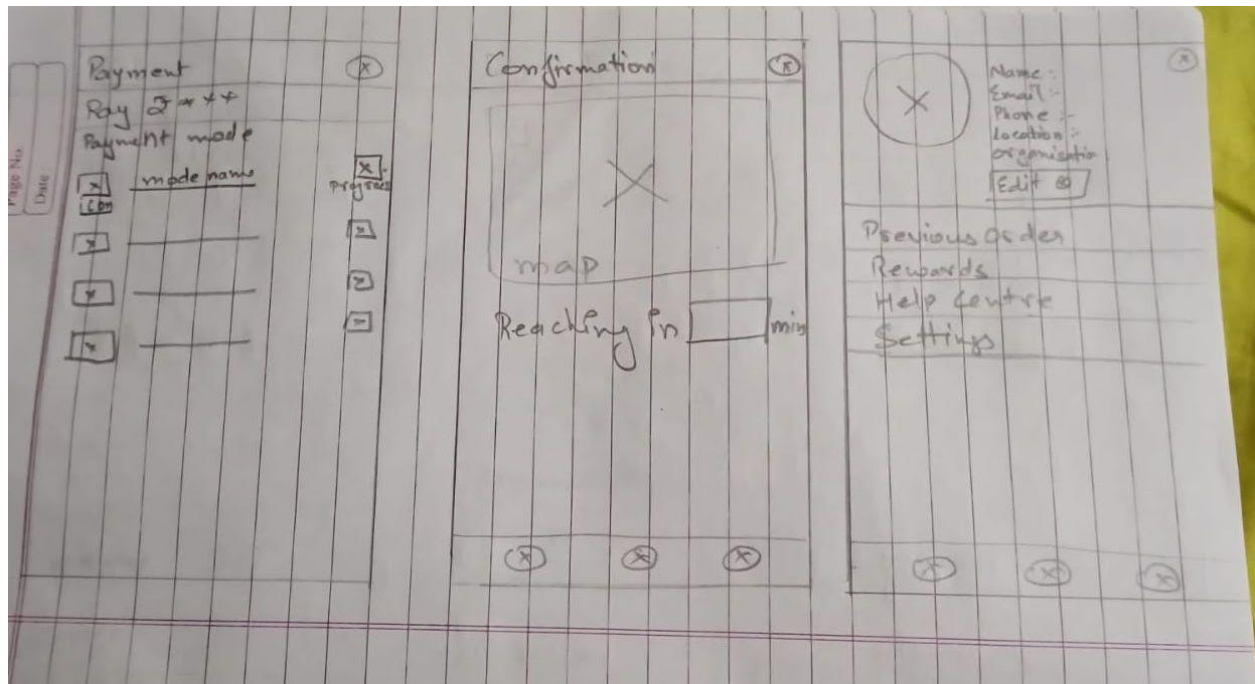
Privacy and Security: Ensuring the security of personal information and payment details is a top priority. The platform complies with data protection regulations.

Low-Fidelity Designs

The image shows two hand-drawn low-fidelity designs on lined paper. The left design is a login form with a 'Logo' placeholder at the top, followed by a 'QUOTE' button. Below this is a 'LOG IN' section with a text input for 'Email/Phone Number', a password input, a 'Forgot Password' link, a 'Create New Account' link, and a 'Submit' button. The right design is an account creation form with a 'Logo' placeholder at the top, followed by a 'CREATE NEW ACCOUNT' section. It includes a list of fields: '1) USERNAME', '2) Email/Phone no.', '3) Organization', '4) Location', '5) Create Password', and '6) Confirm Password', each with an asterisk indicating it is required. A 'Submit' button is at the bottom.

This hand-drawn low-fidelity design is for a 'FORGOT Password' interface. It features a 'Logo' placeholder at the top, followed by the title 'FORGOT Password'. Below the title is a text input for 'Enter Registered Email/Phone', a 'OTP' input field with a refresh icon, a 'Create New Password' link, a 'Confirm Password' link, and a 'Submit' button. At the bottom, there is a circled number '3'.

This hand-drawn low-fidelity design shows a user profile and navigation interface. At the top right is a 'Search' button. Below it is a 'Profile' section with a placeholder icon. The main content area is divided into three sections: 'Popular Hotels/Restaurant near U' with five placeholder icons, 'NGOS' with five placeholder icons, and 'Reviews' with three placeholder icons. At the bottom is a navigation bar with three items: 'Request/List', 'Home', and 'Cart', each with a placeholder icon.



Low-Fidelity Testing and Testing Methodology

Form for public testing of lofi

Are there any features or functions you believe are missing or could be improved in our app?

4 responses

The NGOs should be provided some discounts by the restaurants.

A missing feature could be a built in calorie tracker for the food items given.

none

festival discount option should be there in home screen

How would you rate the app's ease of navigation and user-friendliness?

4 responses

8

8/10

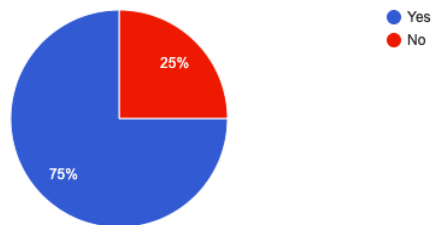
nice

9

Do you find the app's search and filtering options helpful in finding the food items you want?

 Copy

4 responses



How are you satisfied with the visual design and layout of the app?

4 responses

Decent

7/10. Need to work more on the design aspect

8

perfectly satisfied

Do you have any additional comments or suggestions for improving our food app?

4 responses

The review section need not to be separate. It can be present in the restaurant's page. And rating can be present before the page.

Try building a feature for scheduled orders

none

No

Interviews

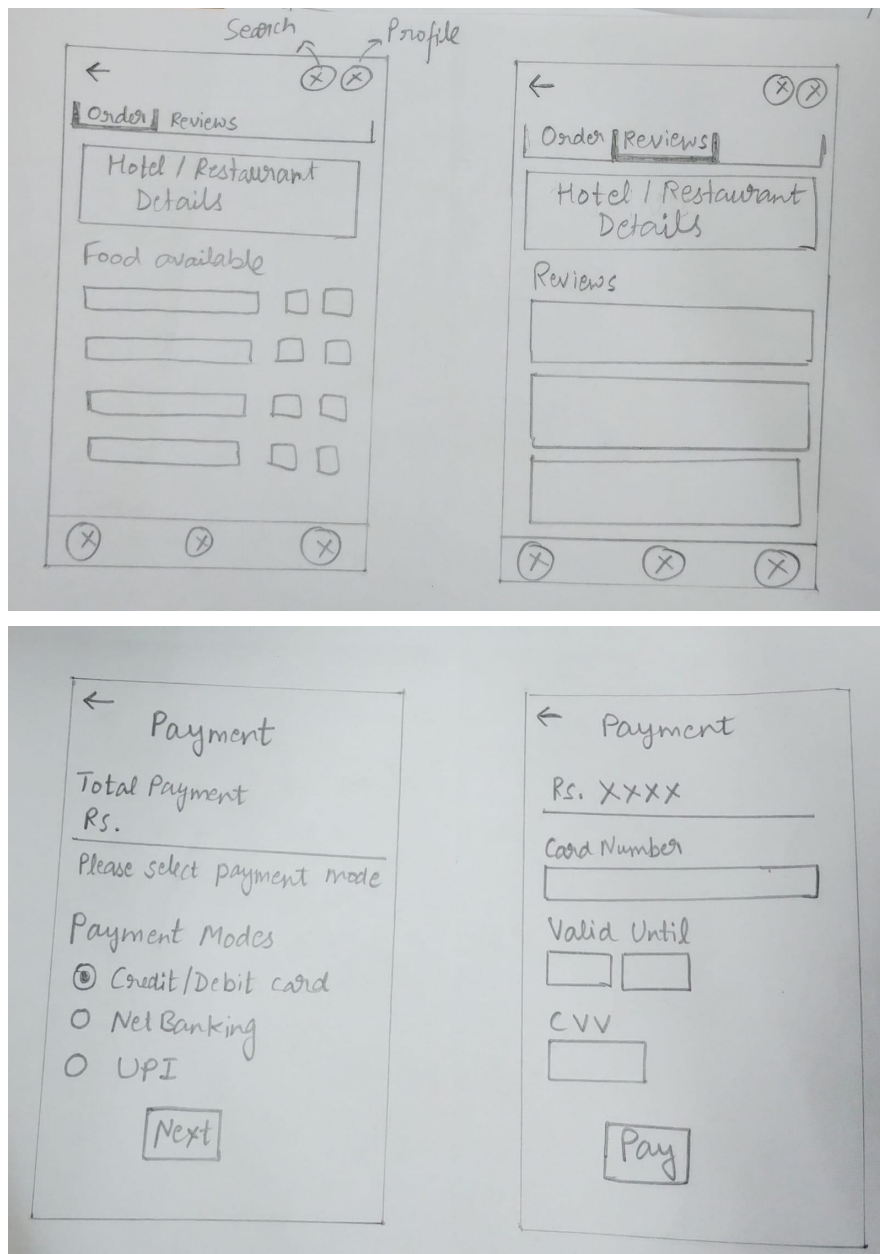
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Alternate Design

The image shows two hand-drawn wireframes for a mobile application. The left wireframe is for a 'Login' screen. It features a 'Logo' at the top, followed by the title 'Login'. Below the title are two input fields: 'Mobile No / E Mail' and 'Password'. A link 'Forgot Password?' is positioned below the password field. At the bottom of the form is a 'Login' button. Below the button is the text 'Don't have an account? SignUp'. The right wireframe is for a 'Forgot Password' screen. It features a 'Logo' at the top, followed by the title 'Forgot Password'. Below the title is an input field for 'Registered Mobile No / E Mail'. Below this is another input field for 'Verification code'. At the bottom of the form are two buttons: 'Resend code' and 'Verify'.

The image shows two hand-drawn wireframes for a mobile application. The left wireframe is for a 'Forgot Password' screen. It features a 'Logo' at the top, followed by the title 'Forgot Password'. Below the title are two input fields: 'Create New Password' and 'Confirm New Password'. At the bottom of the form is a 'Confirm' button. The right wireframe is for a 'MEALCONNECT' app screen. It features a header with the title 'MEALCONNECT' and two circular icons with 'X' marks. Below the header is a section titled 'Popular Hotels/Restaurants' with a table containing columns for 'Name', 'Location', and 'Rating'. Below the table are two input fields and a 'more' link. Below this is a section titled 'NGOs' with two input fields and a 'more' link. At the bottom of the screen are three circular icons with 'X' marks, labeled 'Request/List', 'Home', and 'Cart'. Above the screen are two labels: 'Search' and 'Profile'.



Contributions

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ALL HAVE CONTRIBUTED EQUALLY