

# DishDash

## 1. Stakeholder (Customer):

- The stakeholder is a non-profit organization dedicated to reducing food waste and supporting local communities.
- Their mission is to create a user-friendly platform that connects food donors, such as restaurants and grocery stores, with local charities and individuals in need.

## 2. Goals:

1. Facilitate food donations from businesses and individuals.
  2. Connect donors with nearby food banks and charities.
  3. Raise awareness about food waste and encourage more people to donate.
  4. Provide an intuitive and visually appealing user interface.
- How will the application support the customer's goals:
    - The application will provide an easy-to-use platform for food donation, including a map-based interface to locate nearby donation centers, a donation scheduling system, and educational content on food waste reduction.

## 3. Success Measures:

- Quantitatively measure success with the following metrics:
  1. Number of successful food donations per month.
  2. User engagement metrics, such as the number of registered users and their activity levels.
  3. Reduction in food waste within the community, measured by the weight of donated food.
  4. User satisfaction ratings through feedback forms.
- Desired values for these measures:
  - Increase food donations by 20% per month.
  - At least 5,000 registered users within the first year.
  - Achieve a 10% reduction in food waste within the community annually.
  - Maintain an average user satisfaction rating of 4 out of 5.

## 4. Competition Analysis:

- Similar platforms include "**too good to go**" & "**Love Food Hate Waste**". They have successfully attracted a user base and facilitated donations, but many lack a seamless and intuitive donation process, clear communication, and information about the impact of their donations.

## 5. Functional Requirements

- Describe the required functionality of the application, focusing on what the app will do.

- Functions:

1. Donor registration and profiling of receivers:

- Allow users to create accounts and manage their profiles.
- Enable donor and customer registrations.

2. Donation Listings:

- Display available donations, including type, quantity, and location.
- Allow donors to create listings and set availability times.

3. Donation Scheduling:

- Enable users to schedule pickups or deliveries for donations.
- Send notifications and reminders for scheduled events.

4. Interactive Map:

- Display donation centers, charities, and available donations on a map.
- Enable users to search for nearby options.

- The application should allow restaurants to mark their location on the map and provide information on the amount and type of food available for donation. App users can then view these points on the map and access the details of each restaurant to coordinate the pickup or delivery of the food. (this point is added, its the only modification)

5. Educational Resources:

- Provide articles, videos, and infographics on food waste reduction.

6. Feedback and Support:

- Offer a feedback mechanism for users to report issues or provide suggestions.
- Collect performance data.

## **6. Non-Functional Requirements:**

- **\*\*Performance:\*\***

- The application should load within 3 seconds on average.
- It should be able to handle concurrent users without significant performance degradation.

- **\*\*Security:\*\***

- Implement strong encryption for user data and payment information (if applicable).
- Regularly update and patch security vulnerabilities.
- Implement user authentication and authorization mechanisms.

- **\*\*Availability:\*\***

- Aim for 99.9% uptime, with planned maintenance communicated in advance.
- Implement redundancy and failover mechanisms to ensure availability.

- **\*\*Software Quality:\*\***
  - Adhere to coding standards and best practices.
  - Implement automated testing for critical functionalities.
  - Conduct regular code reviews to maintain code quality.
- **\*\*Documentation:\*\***
  - Maintain comprehensive documentation for developers and users.
  - Provide clear instructions for using the platform and its features.
- **\*\*Maintainability:\*\***
  - Develop the application in a modular and maintainable manner.
  - Ensure that future updates and feature additions can be easily integrated.
- **\*\*Scalability:\*\***
  - Design the application architecture to scale horizontally and vertically as needed.
  - Monitor resource utilization and scale accordingly.
- **\*\*Accessibility:\*\***
  - Ensure the platform is accessible to users with disabilities, following WCAG guidelines.
- **\*\*Compliance:\*\***
  - Adhere to relevant data protection regulations, such as GDPR.

## **7. Schedule:**

- **\*\*Milestone 1: Project Kickoff (01/01/2024 - 07/01/2024)\*\***
  - Define project scope, goals, and requirements.
  - Create a project plan and assign roles.
- **\*\*Milestone 2: Front-End Design (08/01/2024 - 22/01/2024)\*\***
  - Create wireframes and mockups for the user interface.
  - Design the user experience and visual elements.
- **\*\*Milestone 3: User Registration and Profiles (18/01/2024 - 07/02/2024)\*\***
  - Implement user registration and login functionality.
  - Develop user profile management features.
- **\*\*Milestone 4: Donation Listings (08/01/2024 - 01/02/2024)\*\***
  - Design and implement the donation listing interface.
  - Enable users to create and manage donation listings.
- **\*\*Milestone 5: Donation Scheduling and Map (18/01/2024 - 07/02/2024)\*\***
  - Develop donation scheduling features.
  - Implement the interactive map with location-based features.
- **\*\*Milestone 6: Educational Resources (07/02/2024 - 14/02/2024)\*\***
  - Create and populate the educational content section.

- **Milestone 7: Feedback and Support (18/01/2024 - 30/01/2024)**
  - Implement feedback submission and support mechanisms.
- **Milestone 8: Testing and Quality Assurance (15/02/2024 - 30/02/2024)**
  - Conduct thorough testing of all functionalities.
  - Address any bugs and issues found during testing.
- **Milestone 9: Documentation (01/03/2024 - 10/03/2024)**
  - Create user documentation and developer guides.
- **Milestone 10: Deployment and Launch (11/03/2024)**
  - Prepare for production deployment.
  - Launch the platform to the public.
- **Milestone 11: Post-launch Monitoring and Optimization (Ongoing)**
  - Continuously monitor performance and user feedback.
  - Make necessary improvements and optimizations.
- **Milestone 12: Compliance and Security Updates (Ongoing)**
  - Regularly update and maintain security features and compliance with regulations.

## Responsibilities

1. **Alex (Linguistic Background, Beginner Python, SQL, Super Basic CSS & HTML):**
  - Content Creation and Copywriting: Alex can focus on creating engaging and informative content for the website, including descriptions, guidelines, and instructions for users and donors.
  - Basic HTML and CSS: Alex can assist with basic HTML and CSS tasks, such as formatting text and simple styling.
2. **Pavol (Programmer Background, Ruby on Rails, React, JavaScript):**
  - React Development: Pavol can take the lead in developing the front-end of the website using React, ensuring that the user interface is dynamic and responsive.
  - JavaScript: Pavol can handle more complex JavaScript tasks and interactivity on the website.
3. **Morenaso (SQL, CSS, HTML, Java, JSON, JavaScript a bit):**
  - CSS and HTML Styling: Morenaso can work on the styling and layout of the website using CSS and HTML to ensure it looks visually appealing.
  - JavaScript: Morenaso can contribute to JavaScript coding and interactivity, especially for UI enhancements.
4. **Marek (Applied Informatics Student with Front-End and Some Backend Experience):**
  - Front-End Development: Marek can assist Pavol in front-end development, leveraging his experience with native JS/TS and React to create a seamless user experience.

- Collaboration: Marek can also act as a bridge between the front-end and potential backend development, helping with data integration and communication between the front and back ends.

## SCENARIO

- recipient -> before scenario -> they bought food through supermarkets, and poor people usually couldn't buy all that he wanted because of his economic situation

After the scenario -> now they don't have problems buying food, because thanks to the app they can buy food cheaper due to it almost expired, and instead of wasting it dropping it to the trash, it's profitable.

- donator -> before scenario -> they were wasting a lot of food because of pretty much food were used, and how we know the food has a caducity time. Then it was dropping to the trash.

after scenario -> now they don't waste food, because the food that is almost expired updated to the app, in this way whoever recipient who has the app can take advantage of that buying food a good price, and the restaurant respects more the environment without wasting food.

**Some initial after scenario (suggestion) for the donor - Daniela Horvatova - based on our user persona at <https://github.com/PavolRepisky/DishDash/blob/main/docs/Donor%20user%20persona.png>:**

Daniela Horváthová, the owner of the neighborhood grocery store, found satisfaction and fulfillment after using the DishDash food waste reduction app. Through the app, she efficiently connected with local charities and streamlined the food donation process, eliminating the frustrations she had previously faced. Daniela's commitment to reducing food waste not only fostered a positive image for her store but also allowed her to be a responsible community member. By using the app, she minimized food waste, ensuring that surplus food from her store benefitted those in need. The app's user-friendly interface and simplified procedures eliminated the excessive paperwork and lack of transparency Daniela had experienced before. Through her active involvement in the app, Daniela Horváthová not

only reduced food waste but also created a lasting impact, demonstrating the power of community-driven initiatives and responsible business practices.

### One more scenario for donation(suggestion):

Before Scenario:

Setting:

Daniela is a socially responsible grocery shop owner, who wants to make a difference in her town. She is concerned about food waste and is determined to find a way to donate surplus food from local restaurants and grocery stores to those in need.

(Do-Goal):

Danielas goal is to find a convenient and efficient way to donate surplus food from her business to nearby food banks and charities.

(Be-Goal):

Daniela wants to reduce food waste in her community, help those in need, and raise awareness about the issue of food waste.

Actions to Achieve the Goal:

1. She searches online for local charities and food banks to donate to.
2. Daniela spends hours making phone calls and sending emails to coordinate food donations.
3. She faces challenges in scheduling and logistics, making the donation process time-consuming and less efficient.
4. Daniela is frustrated by the lack of a centralized platform to streamline the donation process.

End Result (Before Scenario):

Daniela manages to make a few food donations, but the process is cumbersome, time-consuming, and lacks a clear way to measure the impact of her donations. She wishes there were a more efficient and user-friendly solution to connect donors with local charities.

After Scenario:

Setting:

Daniela has heard about a new web application called "DishDash" that connects food donors with local charities and individuals in need. She decides to give it a try.

Persona's Goal (Do-Goal):

Daniela's goal is to easily and efficiently donate surplus food from her business to nearby food banks and charities using the DishDash platform.

Motivation (Be-Goal):

Daniela wants to reduce food waste, help those in need, and make a positive impact on her town with minimal effort.

Actions to Achieve the Goal:

1. Daniela visits the DishDash website and creates an account, providing her contact information and preferences.
2. She uses the interactive map feature on DishDash to locate nearby donation spots to deliver food there, or creates a spot for her grocery shop, so the receivers could pick it up by their own.

3. Daniela selects /creates a spot on the map, provides details about the available food that she could donate, and schedules a donation pickup with just a few clicks.
4. DishDash sends her a confirmation notification and a reminder about the scheduled pickup.
5. After the pickup, Daniela receives a thank-you message and information about the impact of her donation, including the weight of the donated food and the number of meals it will provide.

End Result (After Scenario):

Daniela can now easily make food donations, schedule pickups, and track the impact of her contributions. The process is efficient, and she feels a sense of accomplishment in reducing food waste and helping her community. Daniela continues to use DishDash to make regular donations and shares her positive experience with friends and family, encouraging them to join the platform as well.