COMENIUS UNIVERSITY IN BRATISLAVA
FACULTY OF MATHEMATICS, PHYSICS AND INFORMATICS

Project specification

DishDash - food donation platform

Web design technology and methodology

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1. Introduction

This document outlines the functional and non-functional requirements for a web application named DishDash. DishDash is designed to facilitate the efficient sharing of surplus food items with those in need. It offers a platform for food donors, receivers, and volunteers to connect, contribute, and help reduce food waste.

2. Specification

2.1. Users

The set of potential users of our app can be divided into 2 groups:

- Donators are individuals or businesses with surplus food or unsold inventory that they wish to donate to reduce food waste and support those in need.
- Receivers are typically low-income individuals, families, homeless shelters, food banks, and charitable organizations. They rely on these apps to access free or discounted food items, ensuring that they have access to nutritious meals and essential supplies.

2.2. Goals

Our application has two primary goals:

1. **Reduce Food Waste** - By connecting individuals and businesses with surplus food to those in need, the app aims to minimize food waste, which is a significant environmental and social issue.
2. **Food Access** - For receivers, the primary goal is to provide easy access to food resources, helping individuals and charities who struggle with food insecurity to find nourishing meals.

2.3. Success Measures

The success of our this application can be quantitatively measured with the following metrics:

- Number of successful food donations per month.
- User engagement metrics, such as the number of registered users and their activity levels.
- Reduction in food waste within the community, measured by the weight of donated food.
- User satisfaction ratings through feedback forms.

2.4. Competition Analysis

Similar platforms include "*Too Good To Go*" and "*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.

2.5. Functional Requirements

Our application will provide following functionalities:

1. **Registration** - Allow users to create accounts either as a donator or a receiver.

2. **Profile management** - Users will be able to manage their profiles, change their personal information and preferences.
3. **Donation posting** - Allow donors to post details of surplus food items they wish to donate, including type, quantity, expiration date, and location.
4. **Donation listings** - Display available donations, including type, quantity, and location.
5. **Donation booking** - Allow receivers to book specific donated food items at a reduced cost or in some cases for free.
6. **Interactive map** - Provide users with a visual and location-based tool to discover nearby food pickups and nearby charities.
7. **Educational resources** - Provide articles, videos, and infographics on food waste reduction.
8. **Feedback and support** - Offer a feedback mechanism for users to report issues or provide suggestions.

2.6. Non-Functional Requirements

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

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

3. **Software Quality**
   - Adhere to coding standards and best practices.
   - Implement automated testing for critical functionalities.
   - Conduct regular code reviews to maintain code quality.

4. **Maintainability**
   - Develop the application in a modular and maintainable manner.
   - Ensure that future updates and feature additions can be easily integrated.

5. **Accessibility**
   - Ensure the platform is accessible to users with disabilities.

2.7. Schedule

- **Milestone 1: Project Kickoff (19/09/2023 - 03/10/2023)**
  - Define project scope, goals, and requirements.
  - Create a project plan and assign roles.
  - Write project specification

- **Milestone 2: Prototyping (3/10/2023 - 24/10/2023)**
    - Model personas
    - Create scenarios, wireframes and storyboards
- **Milestone 3: Usability testing of the prototypes (24/10/2023 - 07/11/2023)**
- **Milestone 4: Implementation (7/11/2023 - 21/11/2023)**
    - Donation listing/adding/booking, interactive map (7/11/2023 - 14/11/2023)
    - Registration, login, forgotten password, reset password, profile management (14/11/2023 - 21/11/2023)
- **Milestone 5: Review (21/11/2023 - 5/12/2023)**
    - Review of the application, correction of errors and shortcomings
    - Educational resources creation.
    - Application improvements, bug fixing
- **Milestone 6: Final touches and testing (5/12/2023 - 20/12/2023)**
    - Completion of development, testing of the final application

2.8. Budget

Estimated cost of developing this application would be:

- Web application: 1000€, one time payment, approximately 100 man-hours
- Web hosting: 100€, yearly payment

2.9. Team and responsibilities

- **Oleksandr Lytvyn**
    - Role: Content Creator and Copywriter
    - Background: Linguistics
    - Skills: Linguistic analysis, Beginner programmer
    - Responsibilities: Content creation, copywriting, documentation
- **Pavol Repiský**
    - Role: Lead Web Developer
    - Background: Web Development
    - Responsibilities: Lead development of the website
- **Jogil Moreno Martínez**
    - Role: Web Designer
    - Background: Web Design
    - Responsibilities: Styling and visual design of the website and prototype
- **Marek Lichvár**
    - Role: Web Developer
    - Background: Web Development
    - Responsibilities: Development of website logic and functionality