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**Project: Island Eats**

# Project Overview

# There are a significant number of food deserts concentrated in low-income neighborhoods on Long Island. These areas lack easy access to affordable, healthy food options like fresh fruits, vegetables, and whole grains. Residents in food deserts often have to rely on convenience stores and fast-food restaurants, which typically offer limited selections of fresh produce and prioritize processed foods. This limited access to healthy options has a significant impact on overall health, contributing to diet-related problems like obesity, diabetes, and heart disease.

Island Eats aims to create a comprehensive food access and community support platform designed to address this critical issue. This platform will combine features for locating fresh produce, organizing community support, and providing information on free food resources. The goal is to offer an easy-to-use, multifaceted tool that helps residents access nutritious food, participate in community initiatives, and stay informed about local resources.

By addressing food deserts and increasing access to healthy food options, the project has the potential to create a lasting positive impact on Long Island.

# World Assumptions

* Users have access to the internet and suitable devices (i.e smartphone, computer, internet access)
* Users have a mode of transportation (public transport, personal vehicle, etc)
* Users have a lack of awareness about existing community resources for healthy food access and are willing to learn
* There is a lack of knowledge about healthy eating and budget-friendly nutrition among users affected by food deserts
* Residents in food deserts are most likely tight on budgets and may prioritize cost over other factors when it comes to food
* There is a network of community organizations and volunteers interested in supporting initiatives to reduce food deserts

# User Requirements

* User-friendly interface, with an intuitive design that is easy to navigate for all age groups
* Interactive map and calendar functionalities
* Access to reliable information about community pantries, markets, free food resources
* Features for sharing healthy recipes, planning affordable meals, organizing volunteer activities
* Users can search for resources by location, type, and operating hours
* Notifications should be sent to inform users of any changes in resource availability and or special events
* User data should be protected with encryption and secure storage
* Should be compatible with a wide range of devices, including smartphones and tablets on both iOS and Android platforms
* Should have fast load times and responsive performance, as well as reliability and stability with minimal downtime

# Specifications (and interface needs)

* A responsive web application that works on different devices as well as both iOS & Android platforms
* Accessible via major web browsers
* Secure user authentication and data encryption since users will create accounts
* Basic functionalities for locating food resources, scheduling, and community interaction (where users can share information about nutrition workshops, food pantries, etc.)
* A forum or discussion board for users to share tips, ask questions, and support each other
* Integration with maps and calendar APIs
* The interface should be available in multiple languages
* Recipe section should be categorized by affordability and dietary needs
* Settings, including language, notification preferences, and privacy options
* Ensure users can easily navigate between different sections of the app with minimal learning curve
* Use of high-quality images for resources and recipes to make the app visually appealing

# Program and Hardware

* Project Backend Written using Java and its frameworks
* Develop frontend using JavaFX
* Code should utilize encapsulation for possibly sensitive data to provide user security
* For data storage, a SQL Server or MySQL database may be required.
* For a code repository, GitHub will be used for code storage and collaboration.
* Maintenance should be performed as necessary to bug fix or possibly implement changes based on user feedback.
* The software should be supported and compatible with all major operating systems
* Object Oriented Programming principles and ample detailed comments shall be used to provide clean code and make the code easy to understand.