WhatUEatin Mobile Application

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Abstract

- My research project is focused on creating a mobile application that helps alleviate or diminish unhealthy eating behaviors in underserved low-income communities, improve dietary behaviors and spread nutritional knowledge.
- The main goal is to positively impact health ailments such as obesity, heart disease and diabetes.
- This application is an extension of the **WhatUEatin** research project to provide portability and an improved user friendly interface and functionality.
- **WhatUEatin** is an app used to leverage technology and digital health strategies to assist individuals in making healthier food choices by offering replacements and healthy equivalents based upon user dietary needs and preferences.

Introduction

Technology and Health

- Researchers are increasingly examining how technology can play a role in addressing health issues outside of the hospital.
- Changing dietary behaviors can be challenging which may delay efforts to healthier lifestyles.
- Grimes [2] stated that technology has proven to facilitate interpersonal relationships, emotional support and the sharing of information through online support groups.

Low-Income Communities

- Low-income African American communities face a disproportionate amount of diet related health problems in the United States.. Grimes [3]
- African Americans suffer from diet-related diseases such as diabetes and obesity at higher rates for numerous reasons such as less access to nutritious foods. Grimes [2]

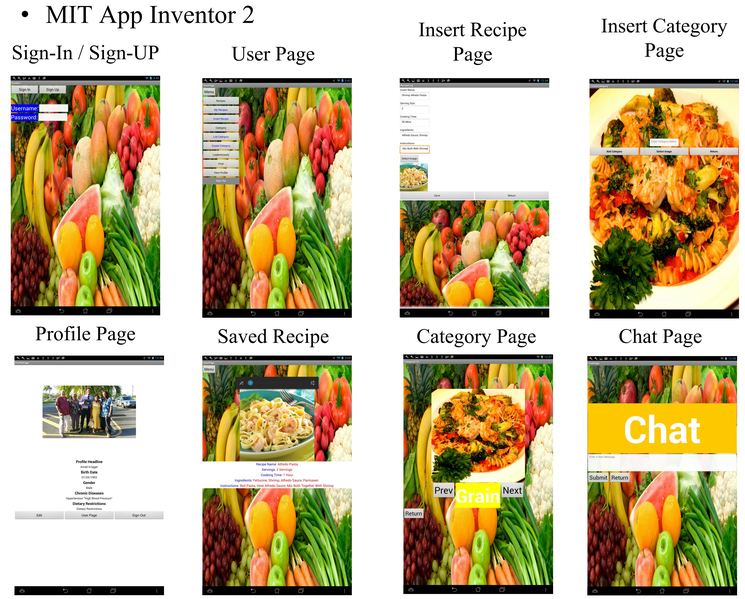
Methods

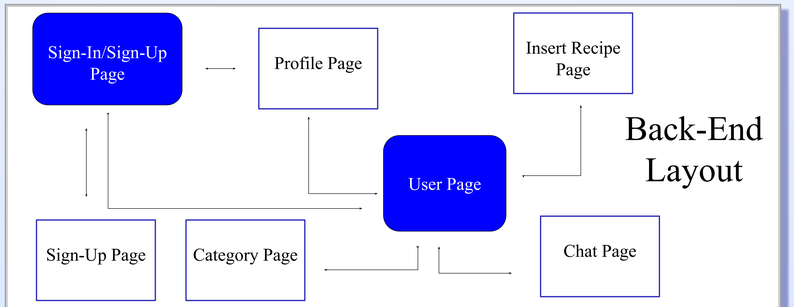
Design

- Users are able to save their own recipes and receive healthier alternatives to their ingredients via a healthifying algorithm.

Design Requirements

- United States Department of Agriculture API
- ASUS MEMO Pad (Tablet)
- Lenovo Laptop
- MIT App Inventor 2





Results

Design Overview

- MIT App Inventor 2 software TinyDB feature is used to store, retrieve and pass information to the different pages.
- Unique profile pages are created which allows users to edit the information and provide their unique chronic diseases and dietary restrictions which is later used to filter in the recipes best suited for them.
- The Insert Recipe page allows users to create and save recipe information such as ingredients, instructions, pictures, serving size, etc.
- This recipe is then saved by the user for future access.

Future Work

- Users will be able to search for specific types of recipes by interpolating them into distinct categories.
- All users will be able to see the recipes posted by other users.
- The leaderboards, chat and social media connection will encourage fun, social interaction and competition.
- Popular recipes and users will be posted at the top of the leaderboard page.
- The app will be tested and used for its impact in creating online support groups, emotional support, and the sharing of health knowledge.
- They will also be tested on what features are best and less-needed to improve the user's experience with the app.

References

1. Grimes, A. "Celebratory Health Technology.",<file:///C:/Users/CodeIT%20Day/Downloads/j19%20(1).pdf>(Jul 14, 2016).
2. Grimes, A. "Characteristics of Shared Health Reflections In A Local Community.",<file:///C:/Users/CodeIT%20Day/Downloads/p87-grimes%20(1).pdf>(Jul 14, 2016).
3. Grimes, A. "Sharing Nutrition-Related Memories In A Low-Income Community.",<file:///C:/Users/CodeIT%20Day/Downloads/p87-grimes%20(1).pdf>(Jul 14, 2016).