PROJECT OUTLINE

**WLS (Weight loss Surgery) Dinning Out App**

# project description

The objective is to create an enhanced mobile application precisely designed to aid individuals who have undergone weight loss surgery (WLS patients) with navigating dining out encounters while adhering to their dietary guidelines and advocating healthy eating choices.

# Summary

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| Date 7/13/2025 |
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| Problem addressing: The challenges faced by bariatric patients that must abide by special dietary guidelines, including portion control and meal structure. For instance, difficulties faced finding bariatric friendly dishes on a restaurant menu. |
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| Platform: Android |
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| Front/back-end support: Front-end (mobile application interface): **a.** **User interface (UI) and user experience (UX)** features: simple navigation and search functions for restaurant & menu items, personalized recommendations derived from dietary restrictions and preferences, simple food intake & portion sizes tracking capabilities, visually appealing elements, for instance, food logging that includes photos **b. offline functionality:** Users can access saved restaurant information and customized dietary guidelines (even w/out internet connectivity) **c. Integration w/native features:** Admittance to the device’s camera for barcode scanning and food logging, and GPS navigation for location nearby food establishments **d. Push notifications:** Provisioning for timely meal reminders, water intake, vitamin supplements, and user-defined goals progress tracking  Back-end (server-side support): **a. Data storage and data management:** Protecteddatabase: stores user profiles, dietary info, meal tracking, restaurant data utilizing Azure or Google Cloud; Restaurant and menu database: Exhaustive and cutting-edge database of restaurants and their menu items; Recipe database: bariatric-friendly recipes available through the app **b. User authentication & authorization:** two-factor authentication,biometric verification **c. API Integration:** Restaurant APIs, Nutrition APIs, Wearable Integration API devices **d. Methodology:** Customization and recommendations engine, Progress monitoring, Communication with healthcare professionals **e. Scalability** and **reliability:** back-end system customized to accommodate growing user base and maintain consistent operation of the application **f. Security and compliance:** vigorous security measures and proper adherence to healthcare data regulations (HIPPA) |
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| Functionality: **Restaurant locating and recommendation** (search and filter, restaurant ratings and detailed information)  **Menu analysis and customization** (Bariatric menu recommendations, nutrient profile, and substitution & customization features)  **Meal/nutrition tracking and charting progress** (Food log, fluid intake monitoring, body composition monitoring, data visualization platform)  **Learning resources** (post-operative guidelines, educational columns, bariatric-friendly recipes)  **Community and support** (Support groups and forums, Social Features)  **Enhanced features** (Barcode Scanner, Restaurant Dining Cards, Push notifications & reminders, Integration with wearable devices) |
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| DESIGN (Wireframes): (High-level) Onboarding and User Profile Setup (Welcome screen, Sign-up/Login/Logout, Bariatric Profile, Quick start guide)  Main Navigation (Home screen/Dashboard)  Restaurant Search and Findings (Search bar, filters, map view)  Restaurant Details (address, phone numbers, hours, website link, user generated ratings and reviews)  Food diary and meal planner (nutrition tracking, barcode scanners for pre-packages restaurant items, hydration tracker)  Social Features and Community Support (Community forum, message/chat)  Enhanced Features and Settings (Reminders, Offline Access, Privacy setting and app preferences)  Visual Appeal (pleasant and assuring color palette and clear pictography) |
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