



INTRODUCTION

Individuals living with Irritable Bowel Syndrome (IBS) and digestive problems at large have to be extremely cautious about what they eat and keep track of everything. Certain groups of carbohydrates called FODMAPs can be a struggle for the body to break down and absorb, aggravating the symptoms of IBS.

The problem is, not everyone is a nutritionist who knows what foods to eat and avoid. The FODMAP tracking app, Candor, change this, providing a guide to a low FODMAP diet and a healthier way of eating and living for those with IBS and other stomach issues.

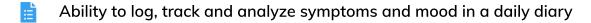
FEATURES

The Candor IBS tracking app aims to help new individuals looking to get in on a low FODMAP diet, while as well serving as a guide for those aiming to reintroduce high FODMAP foods back into their diet.

In either case, it helps to ease the transition by way of the following features:

- News feed containing content around GI topics and more
- Trends list of popular treatments and low FODMAP foods, with users having the ability to vote for said foods and other ranked lists
- Graph feature to show the correction between the user's food intake and corresponding bowel movements





Users can track the duration of bowel movement

Calendar view feature to track diet and gut health across the month

Users can download PDFs of their history

© CHALLENGE

The calendar implementation and also calculations to provide the graph with the food data uploaded by the user was one of the challenges we magnified and sought to solve. During the development of the digestive tracker app Candor, we also identified some other challenges as follows:

Manual addition of food by the user: The initial design we went with came with predetermined lists of foods but users were unable to manually add their own foods into the diary. We were able to solve this in the development phase.

- **Calendar implementation:** Another hurdle we determined was creating a calendar feature that would help users track the foods/drinks, symptoms, and BMs across every day of the month.
- **Graph of food data:** We wanted to build a fitness tracker app that would allow for the visual representation of food data as input by the user

PROPOSED SOLUTION

To create a nutrient-tracking app that could meet our solutions and solve the aforementioned challenges, we had to divide and conquer the design work into two phases.

User Types: End users

Platform:
Mobile application (iOS & Android)

PHASE 1

The first phase of our project to build the digestion tracking app Candor entailed planning the scope of the project to match the expectations of our client and user base. To do that, we proceeded with phase 1 as follows:

- Conducted a consultative meeting with the client
- Designed the wireframe for the app
- Created a prototype of the app
- Built an ER diagram



With approval from the client, we went ahead to implement a sample of the Candor app, involving its rudimentary features as stipulated by the client. Our prototype was well received by the client and met his expectations in terms of data analytics and UX design.

PHASE 2

We got the app development process underway in phase 2, where we implemented cloud technologies and built the app's database using MySQL. We choose this relational data database system due to its scalability and 24/7 uptime.

In addition, we also carried out the following tasks in phase 2:

- Front-end development to create a native iOS and native Android app
- Implemented Node.js for the backend due to its high performance
- Carried out testing to bug-proof the application for a smooth UX
- Developed capabilities for the user to manually input food data

Finally, we deployed the Candor app to track stomach issues to both the Apple App Store and Google PlayStore, after extensive optimization for the platform and SEO to ensure better visibility and app discovery. The transition from the prototype to the final functional app was a success as we were able to eradicate the minor errors that cropped up mid-testing.

RESULTS

Based on the fitness app UX case study we conducted, users have taken a liking to the interface and overall user experience. The Candor- IBS, low FODMAP diet app has amassed over 1,000 downloads on the PlayStore while enjoying a stellar 4.0-star rating. Additionally, the client was also pleased with how we were able to bring his desired features and vision to life for the app and thanked every member of our team who contributed to its creation. We would also like to send our gratitude to the entire team involved in the development of this health app case study and the Candor application as well.

