

COSTGO | Are You Fit for a Costco Membership?

Team Members: Andrey Kalashnikov, Sharvi Pujari, Grace Qiu, Sri Vaddadi, Advisor: Mrs. Taricco

Motivation and Target Audience

- Rising costs over the years (COVID-19, inflation) → general decrease in grocery affordability
- Average American consumers need help budgeting weekly food expenses
- No similar apps in the market

Description of App

- Math model-assisted app that asks users a series of questions related to spending behavior, food budgeting, and location to determine the effectiveness of a Costco membership
- Output to user is a score of 1-10 depending on how effective the membership is, and in-depth model statistics

Solution to Problem

We created an app using a math model to help the user quickly calculate if buying a Costco membership is worth their money.

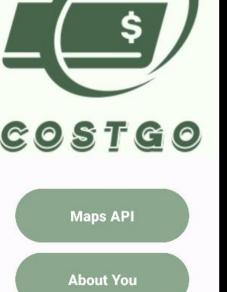
Features and functions + MVP

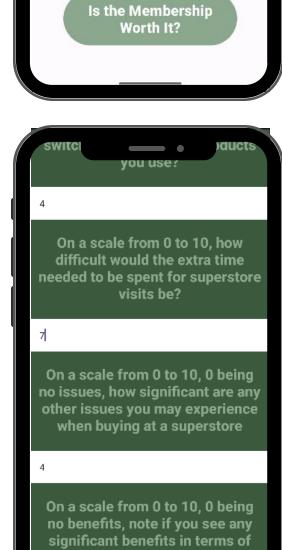
- The user can find the superstore nearest to them using Google Maps
- The user can answer questions about their personal situation
- An algorithm takes the user's data, estimates the value of a Costco Membership, and outputs a recommendation

Algorithm

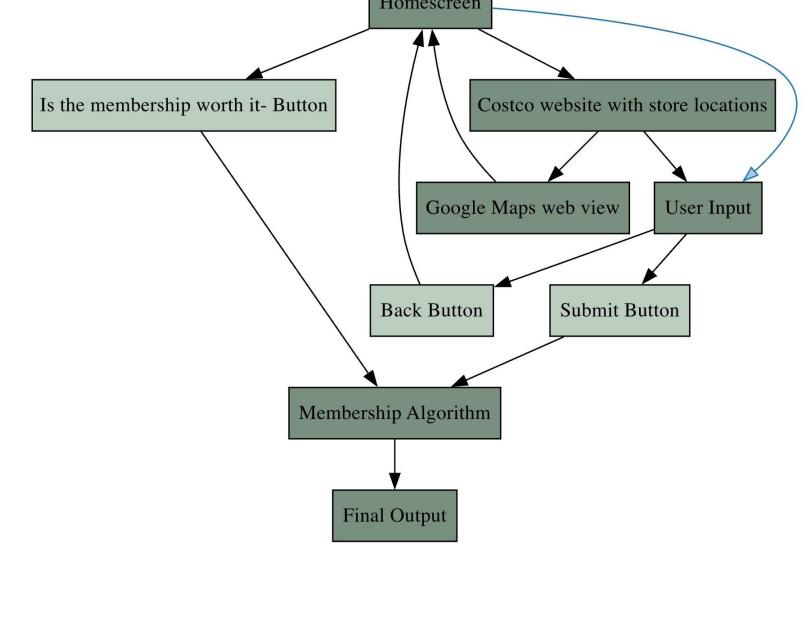
Uses information from the user to produce a value estimation of the worth of a Costco Executive Membership through a formula based on previous research.

COSTGO Maps API

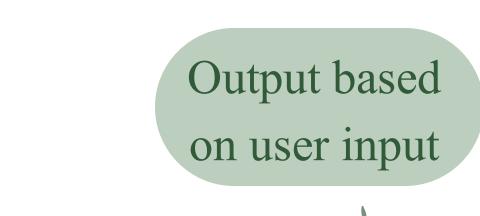


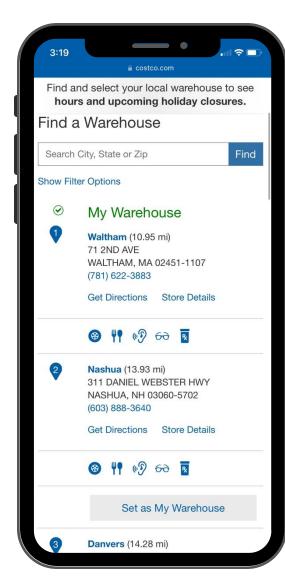


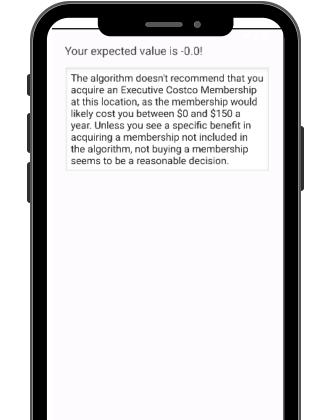
Architecture



Scrollable







3rd Party Tools

 Web Version of Costco locations in the world



 Costco website → redirects to Google Maps

Services the App Uses

- Touchscreen
 - Allows for user interaction
- Shared preferences
 - Save user input data
- Google Cloud Console
 - o Google Maps API



Future Extensions

- Add more stores (Sam's Club, BJ's, etc.)
- Add stores outside the United States
- Create a way for users to track what food items they currently have and plan out future superstore trips as necessary
- Create a schedule that the users can follow to schedule their in-store visits.
- Create a way for users to plan out superstore trips based on specific meals/recipes
- Continue working on UI/UX to make the app much more immersive and easily usable for users