OfferFit Engineering

Web/Full Stack Home Assignment

Data visualization for marketing personalization solution

World Grocer is a premium grocery chain. For several months, you have been working with World Grocer to implement a next-generation marketing personalization solution. The solution uses advanced statistical techniques to recommend which offer to send each customer to maximize Customer Lifetime Value (CLV).

The upcoming pilot consists of a development period followed by a 2-month “go live & measure uplift” period. You have been asked to develop a data visualization tool to enable World Grocer stakeholders to analyze the performance over the course of the go-live period. A workshop with World Grocer helped define the requirements:

Build a visualization app in Vue.js that can

- Show aggregate statistics up-to a particular date
- Show important KPIs at the top of the page:
    - Total offers sent to all customers
    - Total repeaters (split by experimental group vs. control) to date
    - Total CLV (split experimental group vs. control) to date
- Daily trending view of CLV, split between experiment group and control group

This aggregated data will be available to you in our mock reporting service.

Feel free to go above and beyond minimum requirements, but you should focus on the quality and functionality of the visualization, not non-visualization related features (authentication, data calculations, etc.).

We’ve created a basic Vue project template to get you started. It contains a one page SPA, mock data, and a mock API service to return the data.

If you’d rather create your own solution from scratch, you can download just the mock data separately here. If you do provide a custom solution, please don’t forget to include a README with clear instructions on how to install and run your application.

We’d like you to complete this assignment in a day but you shouldn’t need more than a few hours developing this prototype. When you are finished, please compress your solution (including a README with clear instructions on how to install and run your application) and upload it to the submission portal. Good luck!