**Description of PerRec Explainable Interfaces**

Github repository for user interfaces:

Github for React application:

Overview:

The application is simple and intuitive

HTML, CSS, and JavaScript were used to develop PerRec web application. This application was developed with the goal to be used in the study of visualization techniques on recommender systems (particularly visualization recommender systems).

User Interfaces:

**Version I**

The homepage of the PerRec is displayed below (Figure 1).

A screenshot of a social media post

Description automatically generated

Figure 1: PerRec Homepage

This following section explains the workflow of the prototypes. PerRec works as users enter the file upload page and upload their data file in the CSV format upon clicking ‘Browse’ button (Figure 2). Users choose the file to upload and the webpage will then display the sample of the data (in the case that the data file is bigger than four columns). By displaying this page, users can check if they upload the right data file or not.

A screenshot of a cell phone

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Figure 2: PerRec Displays Sample of Data from CSV File

Then, users enter a page with questionnaire to ask about their profile and personality (Figure 3).

A screenshot of a computer

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Figure 3: User Profile Page

Then, they will get the visualization recommendation based on their personality and profile (shown in Figure 4).

A screenshot of a computer

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Figure 4: PerRec Page to Recommended Types of Visualization

A screenshot of a cell phone

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Figure 5: Explanation and Flow Chart

**Version II**

This version is aiming at making an explainable recommendation page in the table format. Radar chart is used to help users see relationship between their personality traits and the generated recommended charts. Also, users have an option to see the rating of the chart.

A screenshot of a computer

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Figure 6: PerRec with Radar Chart and Rating