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Quazard

Final Presentation

Background

Qualtrics is a survey tool used by many social science researchers. It is similar to Google Forms but with more functionalities.
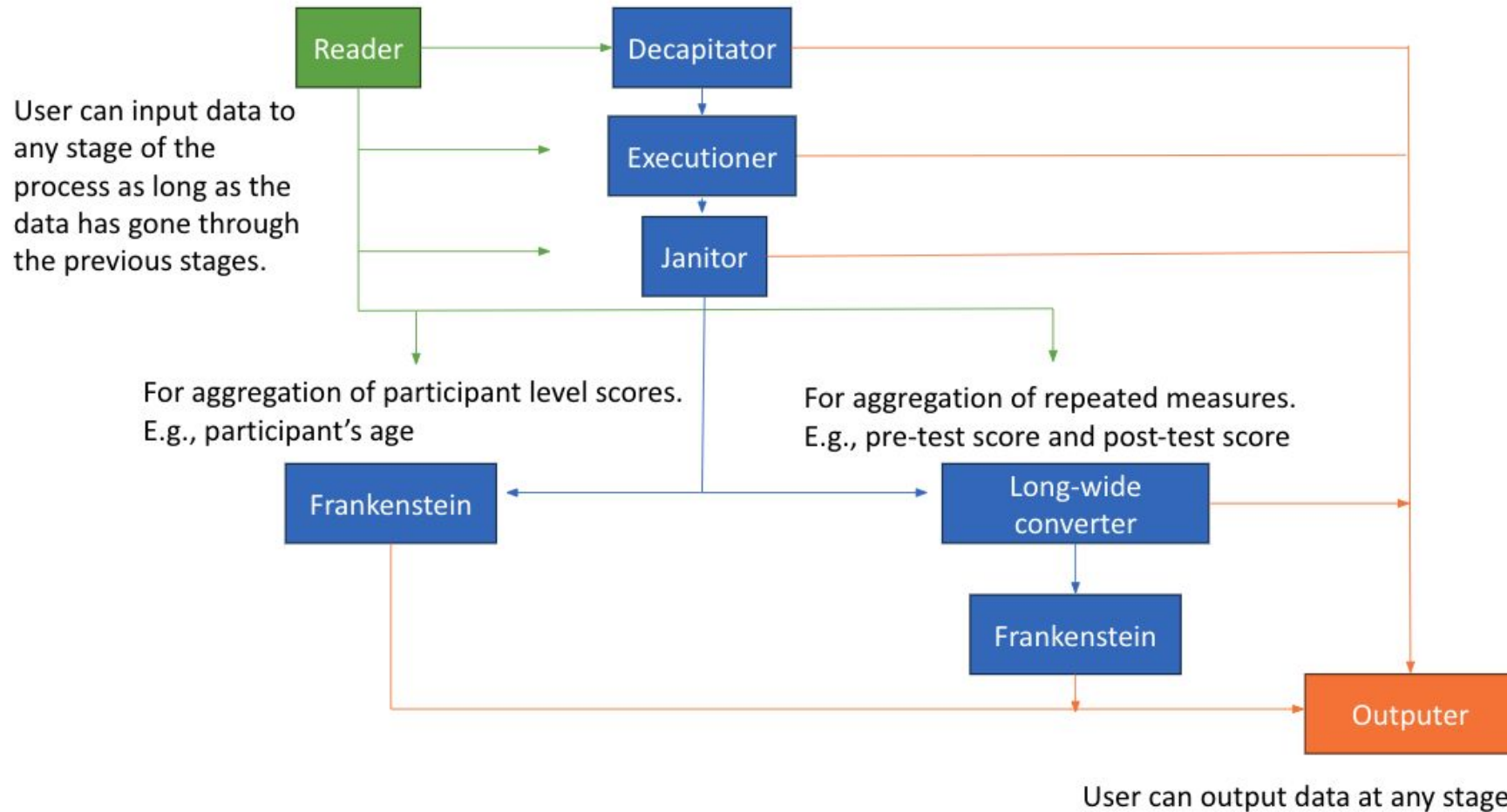
However, the exported data file from Qualtrics can be messy and requires cleaning and reorganizing by the user before data analysis can happen.

This project aimed to create a tool to quickly and easily clean, organize, and reorganize data collected using Qualtrics.

Components

1. Reader: converts a csv file into an internal dataframe

2. Decapitator: removes duplicate header rows and re-infer the value type of columns

3. Executioner: removes unwanted rows based on parameter input

4. Janitor: removes unused columns based on input

5. Long-wide Converter: reconfigure wide format data (each repeated measure/trial has its own column) to long format (each repeated measure/trial has its own row)

6. Outputer: converts a dataframe into a csv file

7. GUI: allows the user to interact with each component. Using Tkinter.

General Flow Chart

Demo

Collaboration Strategies

- Each team member was responsible for a portion of the components

- Code reviewing before merging code into main branch

- Shared documents

  - Google Drive

  - Github

  - Discord (for asynchronous communication)

- Tracking system for the progress of each component and project management

In the process…

Challenges

- Creating GUI
- Stylistic differences
- Combining components

Lessons Learned

- Importance of shared naming system/style
- Debugging ability
- Thorough documentation

Future Directions

- Ability for the wider community to suggest/request new components

- Having the project shipped as a self-contained executable so the users do not need to manually set up the environment.