CS 6440 Project Final Submission

Project/Application Name – Final Submission
Term: Fall 2023
Enoch Kang

Section I: Project Overview

Project Title: *SDoH-Ku*
Team Members and Roles/Responsibilities (If Applicable)
- *Enoch Kang – everything (Solo)*

TA Mentor: *Mike Romano*

Project Task Status

- Literature review to select relevant socioeconomic factors: DONE
- Find an appropriate dataset: DONE
- Develop a result screen: DONE
- Develop an application that has access to necessary resources: DONE
- *Learn the general workings of ClarityNLP: ABORTED*
- Select the appropriate classification algorithm for this project: DONE
- Prepare the training and testing datasets for the learning model: DONE
- *Apply ClarityNLP to organize SDoH information: ABORTED*
  - Switched to: retrieve relevant SDoH information through LOINC codes: DONE
- Train and test the learning model: DONE
- Learn to use Flask: DONE
- Make it so that the application can access the classification model: DONE
- Incorporate the trained model into the final application: DONE
- Ensure functionality with incorporation of necessary components: DONE

Section II – Project Artifacts

Deployed Application URL: *https://launch.smarthealthit.org/*
App's Launch URL (type in @SMART Sandbox Launcher):
https://eboy77.github.io/smart-on-fhir-tutorial/example-smart-app/launch-smart-sandbox.html
GitHub Repository Link: https://github.com/eboy77/smart-on-fhir-tutorial
Dataset Link: https://synthea.mitre.org/downloads
  - "1K Sample Synthetic Patients Records, FHIR R4" (81 MB)

Section III – Project Presentation

Please see the Canvas Assignment page for the current semester for general guidelines on the presentation.

Presentation Link: *https://youtu.be/RRQF6MKqD-0*

Section IV – Project Documentation

Create a directory in your GitHub repository called "Documentation". Within this directory provide the following:

- Technical and/or User Manual: saved as *UserManual.md*
- Research: within *Research* folder
- Architecture Diagram: saved as *ArchitectureDiagram.png*
- Documents: other documents such as this document, previous sprint reports, the academic paper, and the presentation file.

For each item included, provide a labeled direct links. Use full URLs, do not embed the link in a word or phrase.

All of the documentation that you submit with your final project should be treated as an official deliverable – this includes the technical/user manual(s). Documentation that is not well structured or clearly written may result in point loss, as it can impact use and thus grading of the application.