Practicum Sprint #5:
Status Check-In #3

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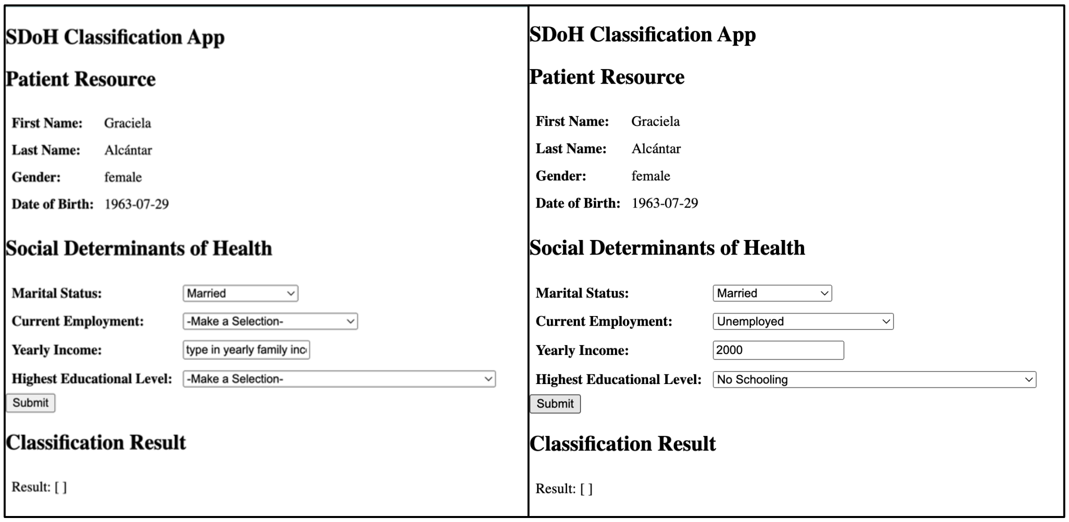
1 ACCOMPLISHMENTS

1.1 Develop code to obtain socioeconomic factors

I now have code to obtain the socioeconomic factors of a given patient. Instead of using ClarityNLP, I decided to use given associated FHIR components.

1.2 Develop user interface

In the case of missing information regarding the socioeconomic factors, the user (provider) can select or type in relevant information as shown in Figure 1.



SDoH Classification App

Patient Resource

First Name:	Graciela
Last Name:	Alcántar
Gender:	female
Date of Birth:	1963-07-29

Social Determinants of Health

Marital Status:	Married
Current Employment:	-Make a Selection-
Yearly Income:	type in yearly family inc
Highest Educational Level:	-Make a Selection-

Classification Result

Result: [ ]

SDoH Classification App

Patient Resource

First Name:	Graciela
Last Name:	Alcántar
Gender:	female
Date of Birth:	1963-07-29

Social Determinants of Health

Marital Status:	Married
Current Employment:	Unemployed
Yearly Income:	2000
Highest Educational Level:	No Schooling

Classification Result

Result: [ ]

Figure 1— (Left) the app automatically obtains social determinants of health if present in the patient's medical records; in this case, only the marital status of the patient was available. (Right) the user can type in or select relevant information to run the classification.

1.3 Develop a sample classification model

Using Python and a sample dataset (of about 500 generated records), I have trained a sample classification model that classifies a given patient's social determinants of health.

2 CHALLENGES

The final step of the project is to connect the Python-developed classification model to the app that runs based on Javascript so that the user can access the classification model from the app.

While I have been told that it is doable by use of resources like FastAPI or Flask, I am not familiar with these. I need to learn to use either resource to finalize this project.

3 SPRINT PLANS

With only one week remaining, my plan is as follows:

- Monday, Tuesday
    - Learn to use Flask or FastAPI
    - Make it so that the application can access the classification model
    - Finalize the codes to complete a functional application
- Wednesday, Thursday
    - Communicate with the mentor on final deliverables
    - Start working on final documents
- Friday, Saturday, Sunday
    - Finalize the documents
    - Submit the deliverables