

Practicum Sprint #4: Status Check-In #2

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1 ACCOMPLISHMENTS

1.1 Develop an application that has access to necessary resources

I now have a Javascript source file for an application that has access to necessary resources and is launchable by the SMART launcher. This was done by closely following the tutorial that the mentor provided and make some necessary modifications. At this point, only the marital status of a patient is obtained and displayed. Other socioeconomic factors (i.e. educational level, income level, and employment status) that require natural language processing are to be incorporated with the use of ClarityNLP.

1.2 Develop a result screen

The result screen will be kept simple by making only necessary changes to what was provided by the tutorial. Currently, the result screen looks like Figure 1, which was obtained by launching the application with a randomly selected patient.

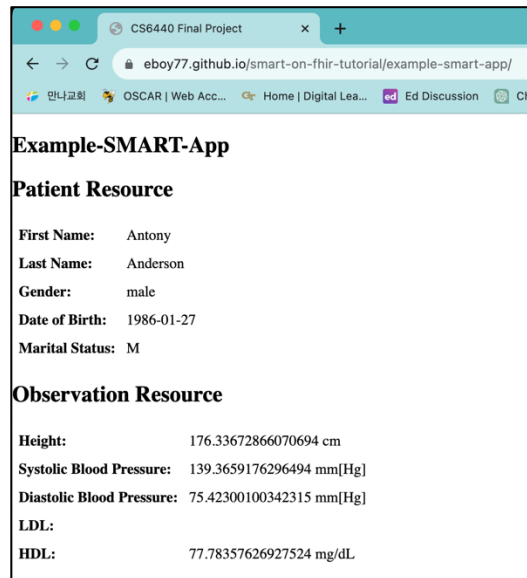


Figure 1— the result screen; note that only the marital status section is relevant to this project.

2 CHALLENGES

While I did study general workings of ClarityNLP, it seems quite complicated; especially when aiming to incorporate it into a simple application like that in this project, it may not be as simple. In the following week, if embedding ClarityNLP into this project does not seem realistic, I would have to re-determine relevant socioeconomic factors that would not require natural language processing.

Only after the confirmation of the socioeconomic factors that I would focus on, I could proceed with the training and testing of the learning model. One challenge not foreseen is that to train supervised classification learning models, I may need to label the data myself. This may require additional time.

3 SPRINT PLANS

The schedule is modified as follows:

- Week 13
 - Decide on the use of ClarityNLP
 - Finalize the socioeconomic factors to focus on (depending on the use or disuse of ClarityNLP)
 - Develop a result screen that displays all socioeconomic factors
- Week 14
 - Select the appropriate classification algorithm for this project
 - If necessary, label the dataset
 - Train and test the learning model
- Week 15
 - Incorporate the trained model into the final application
 - Ensure functionality with incorporation of necessary components