OMS CS6440: Introduction to Health Informatics

Sprint #4 - Status Check In #2

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1 PROJECT TOPIC - SLEEP PATTERN ANALYSIS APP (SPAA)

1.1 Accomplishments

Overall the project has been running on time and I was able to achieve everything I had planned out as per the Practicum Sprint #2 - Project Planning document. Here are the details week wise:

Week #	Accomplishments for the week
Week 11 18th Mar - 24th Mar	● Research for sleep engine (sleep stages) ● Started work on sleep engine (scoring) calculations. ● Updated formulas for calculating efficiency more accurately. ● Updated formulas for calculating duration (using 2 methods) and added an error check for >5%. ● Updated JSON processing (part of code cleanup) ● Added proper error handling code (part of code cleanup) ● Updated console logs for better debugging (part of code cleanup)
Week 12 25th Mar - 31th Mar	● Research for sleep engine (specifically regarding sleep stages) ● Completing work on sleep engine (scoring) calculations. ● Rectifying issues with sleep engine logic. (majority time went here) ● GitHub Pages deployment maintenance. ● Preparation for the next sprint - Learning about data visualizations and exploring its available libraries.

1.2 Challenges

The only major challenge I faced this sprint was with detecting and scoring the sleep stages for each instance of sleep. It took some time to get the scoring system aligned (it used to sometimes score too granularly), but I was able to fine tune it and work as expected in time (by the end of the week).

For the next sprint I anticipate I might face some minor challenges when working on the libraries for data visualizations.

1.3 Sprint Plans - Project Timeline

As mentioned above, there are no changes to the project scope or timeline.

Sprint	Week	Start Date	End Date	Tasks
5	13	1st Apr	7th Apr	Data Visualizations
	14	8th Apr	14th Apr	Export Feature + Testing
6	15	15th Apr	21st Apr	Code Cleanup + Testing + Documentation + Final Submission

1.4 Deployment Plans

For deployment, I had completed it during the first 3 weeks as part of the project setup - deployed on GitHub Pages. Currently facing no major/blocking issues. Here is the publicly accessible link -

https://github.gatech.edu/pages/vunadkat6/sleep-pattern-analysis/