

Evaluation of Unit 6 v Unit 11 assignment

In Unit 6 we produced our Design Document describing the health application we will develop for NASA. Our web health application would be developed in a secured manner, by encrypting all data transferred, we would hash passwords and provide proper authentication to access the application. The astronauts on board the International Space Station would connect to our domain and upload their health metrics automatically through their IoT wearable devices or manually using our API. From the headquarters on Earth, doctors and medics would have their own accounts in our application where they could access the data uploaded from the astronauts and send them their personalised medical opinion.

Our health application would be developed using Python, Flask would be used for developing the web application, a PostgreSQL for storing the data, Fernet for encrypting and decrypting data and Bcrypt for hashing passwords.

In Unit 11 we developed the actual web application using all tools mentioned above, however, we did come across a few deviations from our initial design:

- The current system only supports the manual input of health records by the astronauts using the system. If the app was to continue in development, the next step would be to allow the system to ingest data from third party sources, such as any health monitoring IoT devices worn by the astronauts onboard the ISS.
- The current system does not validate the data input by astronauts, but rather allows any string input up to twelve characters. However, we did not determine this a big issue as the system is only accessible by trained astronauts, therefore no inappropriate data would be entered.

Following the completion of the assignment, I cannot help myself but feel proud for my team and myself for completing the web application successfully in a professional manner.