

CSC 488 International Space Station

Midterm Write Up

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CSC 488-01
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For module 8 of Principles of Distributed Software Systems I was tasked to create a Python script capable of reading and parsing xml data from the International Space Station. The assignment required using many of the software taught throughout the course including Pytest, Docker files, and Make files automation. Developing a script of this nature is an important development task, the data used from NASA international space station is written in xml and contains many indexes of data difficult to parse through. The script provides the user with a selection menu-based interface where the user input is used to determine how the xml data is parsed. This ranges from geolocations and their indexes to Epochs.

Users of the application can run it using Make file automation. The command “make startUp” pulls the Redis version 6 image from docker and starts the container on port 5001 and deploys the python script with a python container. Up to this point all this is done with one command. The user is then given the option to select specific information to print from the International Space Station. Close the container by executing “make shutdown”. Python unit test are executed on the python script using “make pytest”.