

This process uses a Flask API to run the modeling code, due to easy integration with both Python and Docker, located in the 'api.py' file. The Dockerfile contains specifications for the Docker image, and 'requirements.txt' contains the package requirements. The 'run_api.sh' script can be used to run the API within the Docker container.

All functions were extracted into a source file called 'functions.py', and 'test_functions.py' contains the unit tests for these functions written in the pytest framework. The 'constants.py' file contains the constant against which values were compared to retrieve the business outcome. The model itself was written out to the 'model.pickle' file, and the final variables selected in the model were written out to the 'variables.json' file. The 'GLM_Model_26_refactored.ipynb' code contains the code from 'GLM_Model_26.ipynb' refactored to import the new functions.py module.

The 'check_pep8.py' file can be run to ensure that all of the python files in the directory are compliant with pep8 style standards. The 'csv_to_json.ipynb' notebook was used to convert the test data csv file to json for testing the API.