Source Code Documentation

Project name: TASMU Robotics
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Comments:
There will be comments throughout the web application to provide context and explanation for code blocks or specific lines of code. Comments are the lines of line placed after a "#"

Docstrings:
There will be docstrings that will provide a detailed description of functions, classes and modules in the Flask application. Docstrings are the texts that are enclosed between triple quotes.

Structure and Organization:
The structure of the application is all in a folder that contains other folders called: data, template, and static.

- Data Folder: contains all the data that will be used in the application or the ML model
- Template Folder: contains all html templates that will be used for the design of the application.
- Static Folder: contains all the images and css style folders that are used to design the files in the template folder.

Aside from the other folders, there are files that serve as the main files of the application functionality.

- **Env.py:** This file is what runs the application and contains all the directories of the application and main functionalities.
- **Prediction.py:** This file contains the machine learning model that was built using Random Forest and took in data from the data folder. The data has around 410,000 records and predicts the output of stress and no stress. At the end of the file, there is a function that basically saves the model as a pickle file to be used and loaded all over the application.
- **Model.pkl:** The saved prediction model, that if needed to be used will have to be loaded into the file that is being used.

README file:

After completion of the application phase, there will be a README file that is created and contains normal markdown text that will Include an overview of the project, its purpose, dependencies, installation instructions, and usage guidelines that is a lot more specific to this project.