Documentation for Repository Cruise_ship_analysis

Repository Link: [Cruise_ship_analysis]

Repository Structure

data/
- Contains dataset files used for analysis.

scripts/
- Data Cleaning.ipynb: Jupyter Notebook for dataset preprocessing and cleaning.
- Vessel1_Analysis.ipynb: Jupyter Notebook focusing on performance trends of Vessel 1.
- Vessel2_Analysis.ipynb: Jupyter Notebook focusing on performance trends of Vessel 2.
- utilities.py: Python script containing utility functions used across analysis notebooks.

documents/
- Contains essential project documents.

Instructions for Running and Navigating the Repository

1. **Download Instructions:**
   - Clone or download the entire repository from the [GitHub page].

2. **Data Cleaning:**
   - Open `Data Cleaning.ipynb` located in the `scripts` directory.
   - Execute the data cleaning section to preprocess and separate data for Vessel 1 and Vessel 2, which will be stored in the `data` folder.

Also please read instructions given in the notebook especially while choosing your path for loading data.

3. **Vessel 1 Analysis:**
   - Navigate to `Vessel1_Analysis.ipynb` in the `scripts` directory.
   - Run each cell sequentially or execute all cells to perform analysis on the performance trends of Vessel 1.
   - Each graph and analysis output is preceded by explanations detailing the observed results and their significance.

4. **Vessel 2 Analysis:**
   - Access `Vessel2_Analysis.ipynb` within the `scripts` directory.
   - Follow the same structure as Vessel 1 analysis for exploring the performance trends of Vessel 2.
   - Detailed explanations accompany each analysis output, providing insights into the findings and their implications.

5. **Utilities:**
   - Refer to `utilities.py` in the `scripts` directory for reusable utility functions and modules used across the analysis notebooks.
   - These utilities can be utilised for further analysis or extending functionalities within the project.

6. **Documents:**
   - Explore the `documents` directory for additional project documentation, including schema of the dataset and other relevant information.