

Directory structure for fatigue-prediction package version 1

Welcome to the folder structure documentation for our project! In this document, we will explore the organized and efficient layout of our project's directory, aiming to provide a clear understanding of its contents and functionalities.

| Directory / Files | Contents |
|---|---|
| <code>architecture/</code> | The "architecture" directory is dedicated to the heart of our project - the Machine Learning model architecture. Here, you will find detailed information about the ML models used in our application. This includes descriptions of the model architecture, layers, parameters, and any specific configurations that are vital for understanding the model's behavior and its integration into the project. |
| <code>common/</code> | The "common" directory holds essential code and resources that are shared and utilized across various parts of the project. It encapsulates reusable functions, utilities, and constants, promoting code modularity and minimizing redundancy throughout the codebase. |
| <code>config/</code> | <p>The "Config" directory stores configuration files that define various settings and parameters of our application. These configurations enable us to customize the behavior of our software without modifying the underlying code, enhancing flexibility and maintainability.</p> <p><code>config.yaml</code> : Contains information about the directory structure and files. <code>constants.yaml</code> : Contains information about all the constant parameters used in the module. <code>input_config.yaml</code> : Contains all the parameters that can be manipulated to predict the results. <code>input_user_list.txt</code> : List of users for whom the pipeline will be run iteratively.</p> |
| <code>data/raw/user-features</code> | Contains all user features for all the years |
| <code>data/raw/sleep-profiles</code> | Contains all sleep profile for all the years |
| <code>data/raw/sleep-periods</code> | Contains all sleep periods for all the years |
| <code>data/raw/sleep-daily</code> | Contains all sleep daily data for all the years |
| <code>data/raw/shift-instances</code> | Contains all shift instance for all the years |
| <code>data/raw/readi-score</code> | Contains all ready score data for all the years |
| <code>models/users/</code> | Contains directory with user ids and their respective sleep_minutes and sleep_start_time models for both day and night shifts. |
| <code>main_extraction_pipeline.py</code> | This program extracts user data from the dataset dump. |
| <code>main_preprocessing_pipeline.py</code> | This program preprocesses user data and generates features for modelling. |
| <code>main_modelling_pipeline.py</code> | This program will train the model and produce the accuracy of trained models. |
| <code>main_training_pipeline.py</code> | This program will extract, preprocess and train the model for the user provided. It will chronologically execute <code>main_extraction_pipeline.py</code> , <code>main_preprocessing_pipeline.py</code> and <code>main_modelling_pipeline.py</code> . |
| <code>main_prediction_pipeline.py</code> | This program will predict the results for the user(s) based on prediction start date and days of prediction. |
| <code>result.csv</code> | Contains the predicted results. |

