

1 Package: BuildModel

- a. Module: train_model
 - i. Class: ModelFinder
 - 1. Method: train_test_split
 - a. Argument: path of dataset source_path
 - b. Return: train, test
 - 2. Method: x_y_split
 - a. Argument: data
 - b. Return: x,y
 - 3. Method: get_best_params_for_random_forest
 - a. Argument: data
 - b. Return: x,y

2 Package: Archive

- a. Module: archive
 - i. Class: move_file
 - 1. Method: to_archive
 - a. Argument: source_path
 - b. Return: None

3 Package: DataBaseAction

- a. Module: database
 - i. Class: DB_define
 - 1. Method: create_coll
 - a. Argument: collection_name
 - b. Return:
 - 2. Method: insert_into_db
 - a. Argument: None
 - b. Return: None
 - 3. Method: extract_from_db
 - a. Argument: collection_name
 - b. Return: None

4 Package: DataPreprocessing

- a. Module: predict
 - i. Class: predict_preprocess : Argument(path)
 - 1. Method: fill_na_value
 - a. Argument: None
 - b. Return: None
 - 2. Method: create_cluster
 - a. Argument: None
 - b. Return: None
- b. Module: train
 - i. Class: train_preprocess: Argument(path)
 - 1. Method: fill_na_value
 - a. Argument: None
 - b. Return: None
 - 2. Method: find_best_clusters
 - a. Argument: None
 - b. Return: None
 - 3. Method: KMeanCluster_model
 - a. Argument: None
 - b. Return: None
 - 4. Method: create_cluster
 - a. Argument: None
 - b. Return: None

5 Package: DataValidation

- a. Module: PredictionDataValidation
 - i. Class: predict_data_validation
 - 1. Method: file_name_validate
 - a. Argument: folder_path
 - b. Return: None
 - 2. Method: file_column_validation
 - a. Argument: None
 - b. Return: None
 - 3. Method: entire_column_missing

- a. Argument: None
- b. Return: None

b. Module: TrainDataValidation

- 1. Method: file_name_validate
 - a. Argument: train_folder_path
 - b. Return: None
- 2. Method: file_column_validation
 - a. Argument: None
 - b. Return: None
- 3. Method: entire_column_missing
 - a. Argument: None
 - b. Return: None

6 Package: Logger

- a. Module: logger
 - i. Class: logs
 - 1. Method: write_log
 - a. Argument: process_name, log_msg, log_level
 - b. Return: None

7 Package: Model_save

- a. Module: ModelSave.py
 - i. Class: model_load
 - 1. Method: to_save
 - a. Argument: model, filename
 - b. Return: None
 - 2. Method: to_load
 - a. Argument: filename
 - b. Return: None