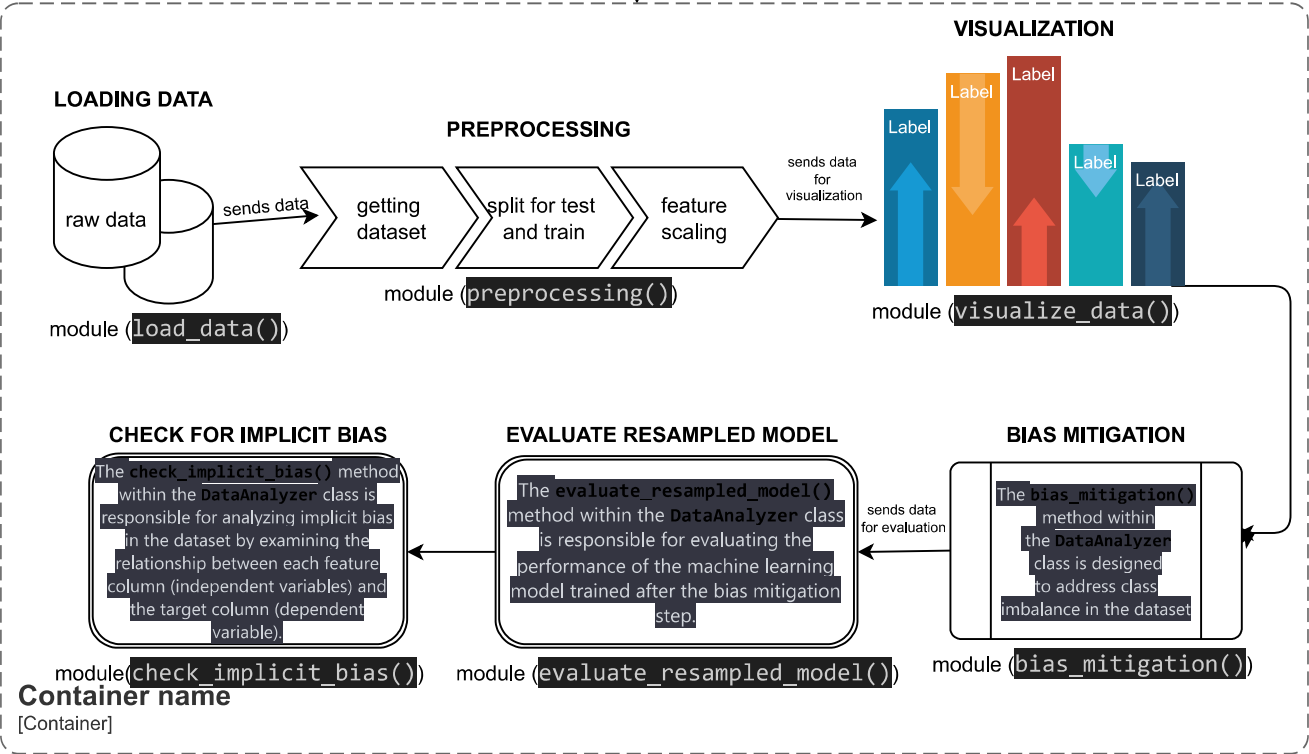# BIAS MITIGATION
Component Diagram

DATA_ANALYZER()
[Component:]

DataAnalyzer designed to perform various data analysis tasks including data loading, preprocessing, visualization, bias mitigation, model training, evaluation, and checking for implicit bias in the dataset

LOADING DATA

raw data

module (load_data())

sends data

PREPROCESSING

getting dataset

split for test and train

feature scaling

module (preprocessing())

sends data for visualization

VISUALIZATION

Label
Label
Label
Label
Label

module (visualize_data())

CHECK FOR IMPLICIT BIAS

The **check_implicit_bias()** method within the **DataAnalyzer** class is responsible for analyzing implicit bias in the dataset by examining the relationship between each feature column (independent variables) and the target column (dependent variable).

module (check_implicit_bias())

EVALUATE RESAMPLED MODEL

The **evaluate_resampled_model()** method within the **DataAnalyzer** class is responsible for evaluating the performance of the machine learning model trained after the bias mitigation step.

module (evaluate_resampled_model())

sends data for evaluation

BIAS MITIGATION

The **bias_mitigation()** method within the **DataAnalyzer** class is designed to address class imbalance in the dataset

module (bias_mitigation())

Container name
[Container]

sends bias mitigated models for fair real life ai models