

Action Plan for the Iris Flower Classification Project

Project Goal Definition

The objective is to classify Iris flowers into their respective species (Setosa, Versicolor, Virginica) using sepal and petal measurements.

Data Acquisition

Dataset: Iris dataset from Scikit-learn library or Kaggle repository.

Environment Setup

Tools: Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn.

Exploratory Data Analysis (EDA)

Perform descriptive statistics and create visualizations (histograms, scatter plots, box plots) to understand feature distributions and relationships.

Model Selection

Implement Logistic Regression, KNN, and Decision Tree models.

Model Training and Evaluation

Split the dataset into training (70%) and testing (30%) sets, train each model, and evaluate performance using accuracy and optionally confusion matrices.

Documentation and Reporting

Document the project process, findings, and final results.

Timeline

Week 1: Data acquisition and environment setup.

Week 2: Exploratory Data Analysis.

Week 3: Model building and evaluation.

Week 4: Documentation and final report preparation.