Project Title: Heart Disease Prediction Using Machine Learning

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Objective:
This project aims to predict the presence of heart disease in a patient using clinical features from a dataset. We use a logistic regression model to classify whether a patient has heart disease or not.

Dataset Description:
The dataset consists of 12 columns and 1190 rows. Features include:

- Age, Sex, Chest Pain Type, Resting BP, Cholesterol, Fasting Blood Sugar
- Resting ECG, Max Heart Rate, Exercise Angina, Oldpeak, ST Slope
- Target (0 = No Heart Disease, 1 = Heart Disease)

Steps Followed:

1. Data Loading and Cleaning
2. Exploratory Data Analysis (EDA)
3. Feature Selection
4. Splitting data into training and test sets
5. Logistic Regression Model Training
6. Evaluation using Accuracy and Classification Report

Model Used:
Logistic Regression

Results:

- **Accuracy:** 86.1%

- The model showed balanced precision, recall, and F1-scores.

Conclusion:

This project demonstrates a basic ML pipeline for binary classification. Logistic regression performs well in predicting heart disease based on clinical data.