Heart Disease Prediction

# Dataset

The dataset used for this project (heart.csv) contains several medical attributes such as:  
- Age  
- Sex  
- Chest pain type  
- Resting blood pressure  
- Serum cholesterol  
- Fasting blood sugar  
- Resting electrocardiographic results  
- Maximum heart rate achieved  
- Exercise-induced angina  
- ST depression induced by exercise relative to rest  
- The slope of the peak exercise ST segment  
- Number of major vessels colored by fluoroscopy  
- Thalassemia  
- Target (indicating presence or absence of heart disease)

# Project Workflow

The project involves the following steps:  
1. Data Loading and Exploration  
2. Data Preprocessing  
3. Modeling  
4. Model Evaluation  
5. Deployment

# Usage

To run this project:  
1. Clone the repository:  
 ```bash  
 git clone https://github.com/your-username/Heart-Disease-Prediction.git  
 ```  
  
2. Install the required dependencies:  
 ```bash  
 pip install -r requirements.txt  
 ```  
  
3. Run the Jupyter notebook:  
 ```bash  
 jupyter notebook Heart\_Disease\_Prediction.ipynb  
 ```

# Results

The best-performing model in this project achieved an accuracy of X%. The confusion matrix and classification report can be viewed in the notebook.

# Contributions

Feel free to open an issue or submit a pull request if you want to improve the model or add new features.