**­­Heart Disease Risk Prediction System**

**All Modules**

1. **Disease Prediction**
   * This module predicts the likelihood of heart disease based on patient data such as age, blood pressure, cholesterol, etc.
   * Machine Learning algorithms gradient boosting and logistic regression are used to analyze the data and classify the risk levels (low, medium, or high).
   * Provides personalized insights for early diagnosis and better treatment planning.
2. **View Diseases**
   * Displays information about various heart diseases, their symptoms, causes, and treatment options.
   * Helps users and doctors understand potential risks and make informed decisions.
3. **Lifestyle Assessment**
   * Allows users to input lifestyle habits (gender, age, occupation, sleep duration, quality of sleep, physical activity level, stress levels, BMI category, blood pressure, heart rate, etc.) to predict the initial chances of risk.
4. **Doctor Appointment Module**
   * Users can search for doctors by name, specialization, location, or availability.
   * Displays doctor profiles, including qualifications, experience, and ratings.
   * Users can select a date and time for consultation based on doctor availability.
   * Allows both in-person and virtual appointment options.
5. **Fitness Tracker**
   * To help users manage their fitness goals effectively. It provides features for tracking daily calories, reviewing food intake, searching for nutritional information, and tracking exercise calories burned.
6. **Health Deals and Checkup Alerts**
   * Notifies users about free health checkup events and medicine discounts.
7. **Role-Based Logins (Admin, User, Doctor)**
   * **Admin**: Manages the system, user accounts, and data.
   * **Doctor**: Views patient predictions and provides medical advice.
   * **User**: Submits personal health data and views prediction results.
8. **Community Module**
   * Provides a platform for users, doctors, and health professionals to interact.
   * Users can share experiences, ask questions, and get peer support.
9. **Search Your Doctor**
   * Allows users to search for doctors specializing in heart-related conditions based on their location or expertise.
   * Provides contact details and availability for consultations.
10. **Feedback System**

* Enables users and doctors to provide feedback on the system’s functionality and accuracy.
* Collects suggestions for improvements to enhance user experience.