**Heart Disease Prediction**

**1.Project Overview:**

Decision tree, logistic regression, and random forest are examples of machine learning models that will be used in this study to predict heart disease in patients. The project's goal is to identify people who are susceptible to heart conditions in the future by evaluating a dataset. Artificial intelligence approaches are employed to improve disease prediction accuracy, which facilitates early identification and prompt medical intervention.

**2. Project Goals:**

* Predict whether patients have heart disease by using machine learning algorithms.
* Examine a dataset to determine who is most likely to experience heart problems.
* Increase the precision of illness forecasting by utilizing artificial intelligence methods.
* To facilitate prompt medical intervention, make early identification of cardiac disease possible.

**3.Intended Audience:**

* Healthcare professionals interested in using predictive analytics for illness detection are among the project's target audience members.
* Researchers and data scientists investigating machine learning's potential applications in healthcare.
* Patients interested in learning more about how AI might be used to diagnose diseases early on.
* Stakeholders in the healthcare sector who want to use data-driven strategies to enhance patient care.

1. **Conclusion:**

The study comes to the conclusion that precise predictive models can help medical institutions detect patients who may have heart problems. These algorithms can be expanded to forecast mental health problems, diabetes, and cancer, among other illnesses. Healthcare providers can avoid cardiac arrests and enhance patient outcomes by proactively alerting patients and suggesting preventive actions through the use of artificial intelligence and advanced data analysis tools.