Project Design Phase-I

Solution Architecture

Date	23 October 2023
Team ID	Team-592199
Project Name	Disease Prediction Using Machine Learning
Maximum Marks	4 Marks

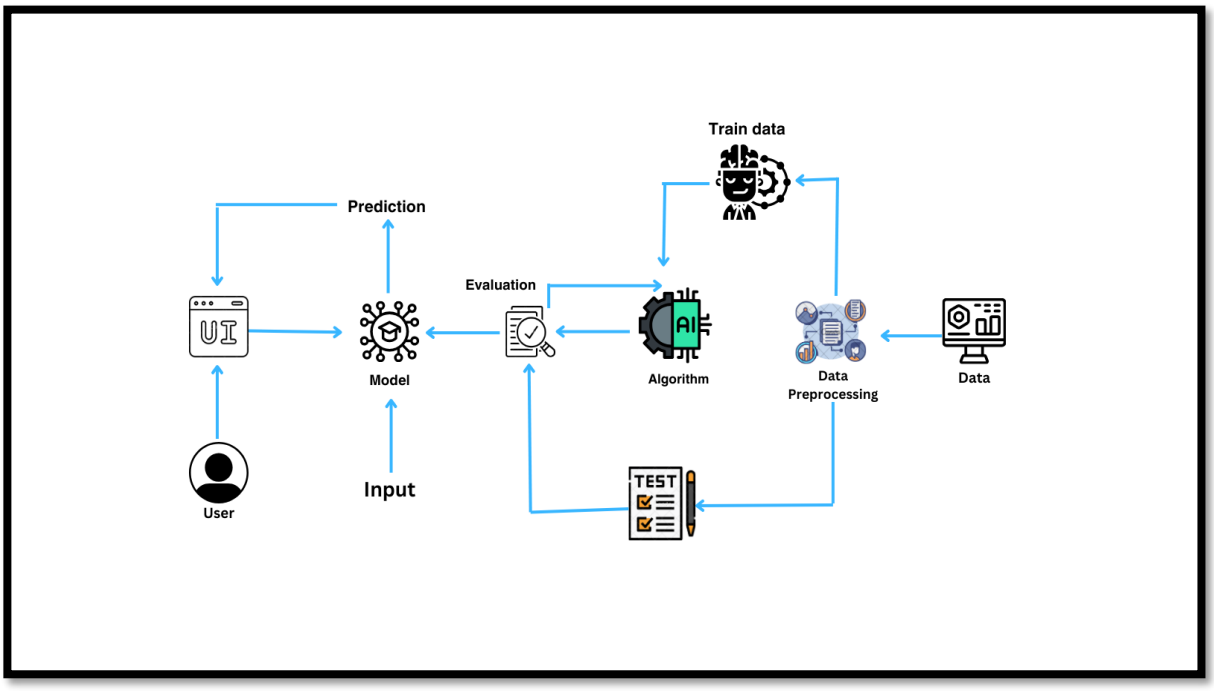
Solution Architecture:

The proposed solution involves a web application for predicting diseases based on symptoms, aiming to address the challenges of limited time for healthcare and the reliance on generic Google searches. Here are key points for the solution architecture:

- **Input:** Users enter symptoms; no personalized data is required.
- **Model:** A highly accurate machine learning model predicts up to 42 diseases.
- **Purpose:** Emphasizes preventive diagnosis, encouraging early intervention by healthcare professionals.
- **Interface:** User-friendly design displays predicted diseases and relevant information.
- **Consultation:** Allows doctors to access predictions for online consultations.
- **Privacy:** Ensures user privacy by not collecting personal information.
- **Education:** Provides clear information on model limitations and the need for professional medical advice.
- **Feedback:** Includes a user feedback loop for continuous model improvement. **Integration:**
- Explores integration with existing healthcare systems.
- **Compliance:** Adheres to legal and ethical standards in healthcare. **Scalability:**
- Designed for potential increases in user traffic.
- **Updates:** Regular model updates based on new medical research.
- **Cost:** Considers the cost implications of maintenance and scalability.

By considering these architecture points, the proposed web application can serve as a valuable tool for preliminary disease prediction, promoting early intervention and supporting both users and healthcare professionals in making informed decisions.

Solution Architecture Diagram:



Reference:

https://drive.google.com/file/d/1KUbtlqAGnaQFqNG5p91N2oHBf6TJ_VIs/view