

**Project Design Phase**  
**Solution Architecture**

Date	15 February 2026
Team ID	LTVIP2026TMIDS82253
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	4 Marks

## **Solution Architecture**

Solution architecture defines how the proposed system addresses the business problem of early detection of Diabetic Retinopathy (DR) by combining medical imaging, deep learning, and web technologies. It acts as a bridge between the healthcare problem and the technical implementation of the solution.

### **Objectives of the Solution Architecture**

- Identify the most suitable technology stack to automate retinal image analysis.
- Clearly describe the system structure, components, and interactions for stakeholders such as doctors, developers, and administrators.
- Define functional features, development stages, and system requirements.
- Provide a scalable and manageable blueprint for implementation, deployment, and future enhancements.

## Example - Solution Architecture Diagram:

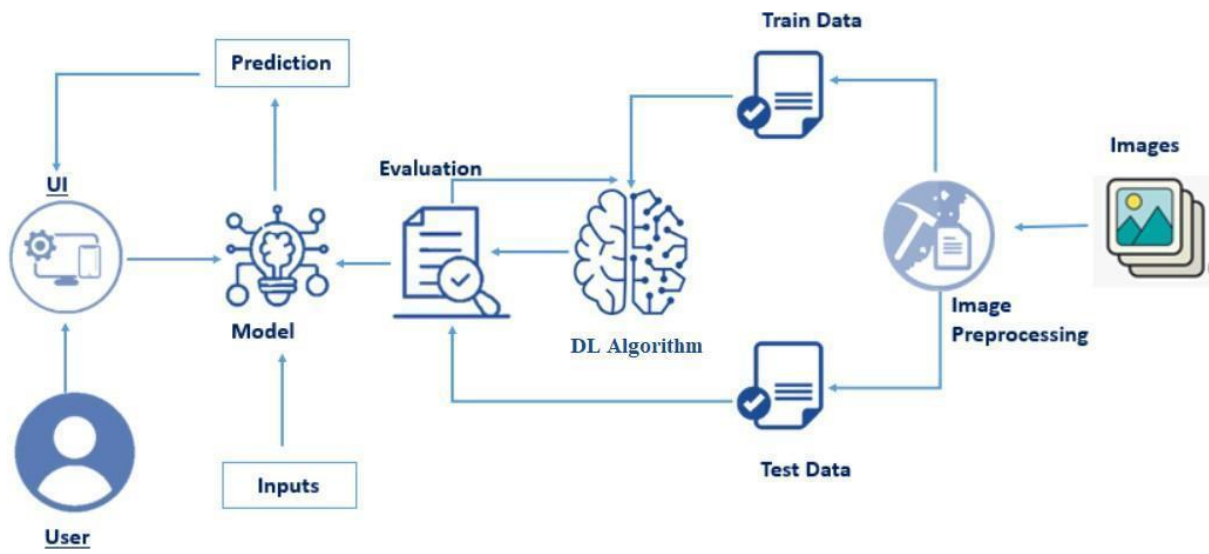


Figure 1: Architecture and data flow of the voice patient diary sample application