Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	10 October 2022
Team ID	PNT2022TMID03873
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	4 Marks

Technical Architecture:

Project will fulfill the following information in this technology architecture.

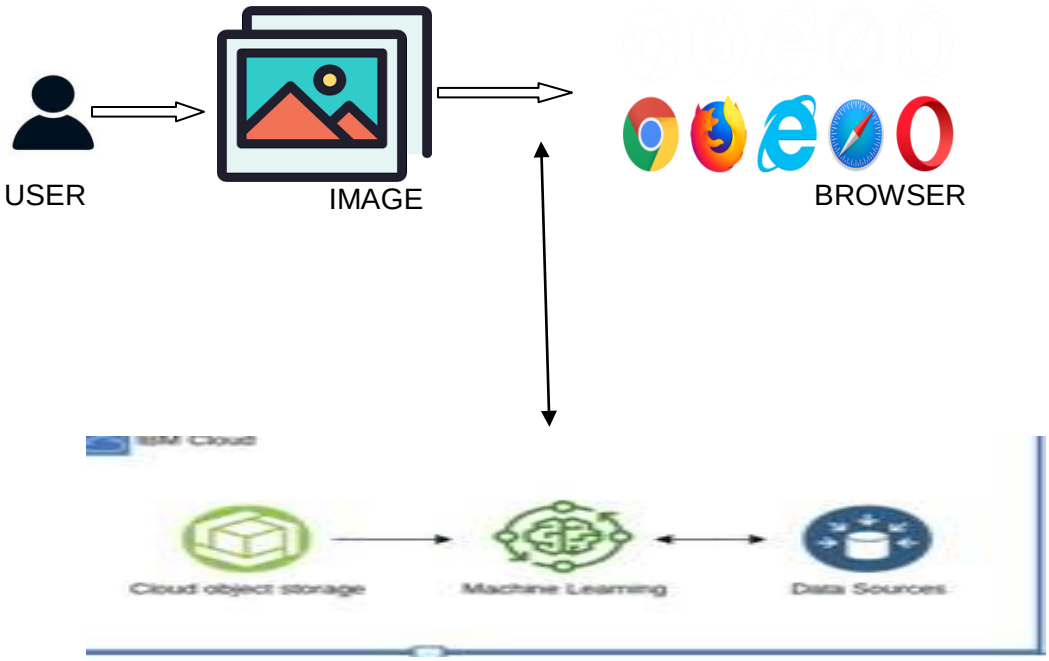

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Application user interface, mobile app, chatbot, etc..	HTML, CSS, JavaScript etc.
2.	Application Logic-1	a process's reasoning in the	Python, Flask
3.	Database	Types of data, configurations.	MySQL, NoSQL, etc.
4.	Cloud Database	Cloud database services	IBM DB2, IBM Cloudant etc.
5.	Machine Learning Model	A machine learning model's intended use	Diabetic Retinopathy detection

6.	Infrastructure (Server / Cloud)	Local Server Configuration for an Application Deployed on a Local System or a Cloud: Configuring a cloud server	Cloud.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Describe the utilised open-source frameworks.	Flask, TensorFlow. Keras. Numpy, Pandas
2.	Security Implementations	List every security and access control measure used, including firewalls..	built-in security.
3.	Scalable Architecture	Justify the three-tier architecture's ability to scale.	3-tiers.
4.	Availability	Justify the applications' accessibility (e.g. use of load balancers, distributed servers etc.)	Load balancer.
5.	Performance	Application performance (number of requests per second, use of Cache, use of CDNs, etc.) was taken into account during design.	Depending on the photographs