

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

TEAM ID

PNT2022TMID50703

PROJECT NAME

Project - A Novel Method for Handwritten Digit
Recognition System

MAXIMUM MARKS

4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

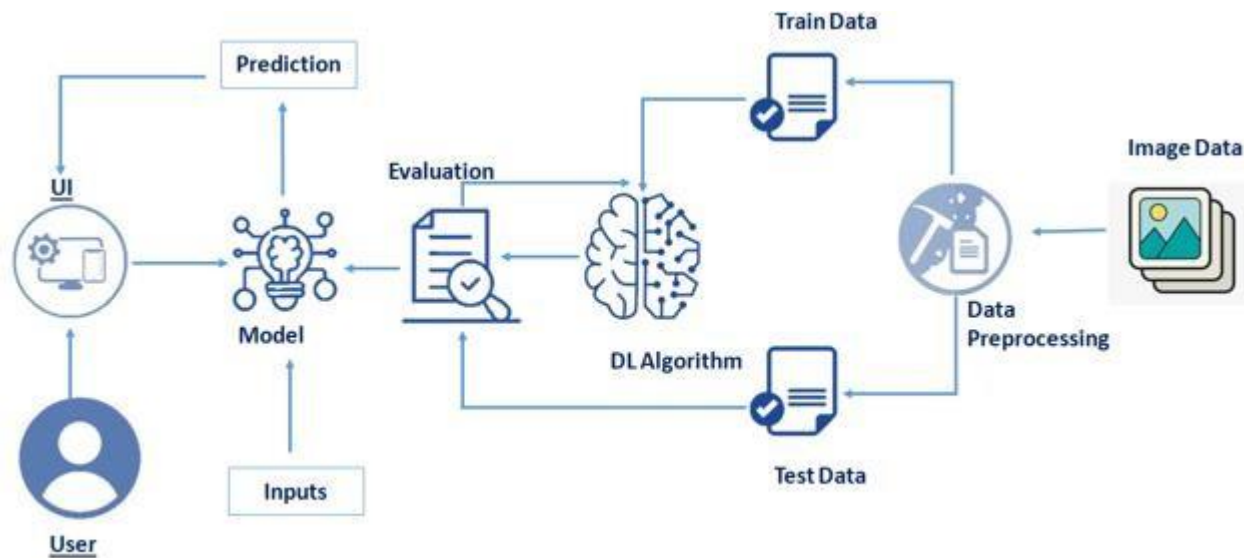


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI through mobile or desktop browser	HTML, CSS, JavaScript
2.	Application Logic-1	Using the machine learning process	Python
3.	Application Logic-2	Using the libraries to pre-processing the image	Python libraries like sklearn, numpy, pandas etc.
4.	Application Logic-3	Different visualization techniques	Python libraries like matplotlib, seaborn etc
5.	Application Logic-4	For routing and rendering	Python flask
6.	Database	Configurations	No SQL.
7.	Cloud Database	Database Service on Cloud	IBM Cloud
8.	File Storage	File storage requirements	Local Filesystem
9.	Machine Learning Model	To predict the handwritten digits	Handwritten Digit Recognition Model, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Cloud.	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Angular framework to design the frontend	Angular
2.	Scalable Architecture	3 – tier	Python flask
3.	Availability	Cloud platform	IBM cloud
4.	Performance	Withstand with many requests at a time	Online deployment to IBM cloud