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

Date	15 October 2022
Team ID	PNT2022TMID19491
Project Name	A Novel Method for Handwritten Digit Recognition System
Maximum Marks	4 Marks

Technical Architecture for Handwritten Digit Recognition System:

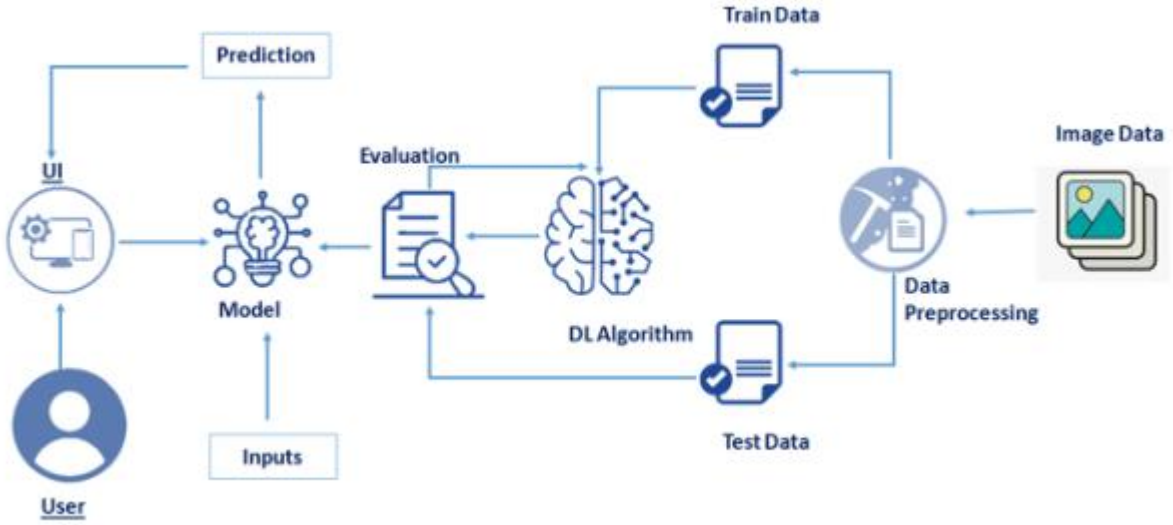

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts the application using a web app	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic	Login to access the application	Java / Python
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Storage of user files of handwritten image	IBM Block Storage or Other Storage Service or Local Filesystem
10.	Machine Learning Model	Machine learning model is used to identify the handwritten image uploaded by users	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: - Cloud Server Configuration :-	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used to freely access the public code	Angular JS / React JS
2.	Security Implementations	Firewall is implemented	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.

S.No	Characteristics	Description	Technology
4.	Availability	The application will be available in all regions	Distributed servers
5.	Performance	Higher efficiency of performance. The application can give response to requests within 5 sec.	-

References:

https://c4model.com/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d