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

Date	25 October 2022
Team ID	PNT2022TMID22252
Project Name	Project – A Novel Method For Handwritten Digit Recognition
Maximum Marks	4 Marks

Technical Architecture:

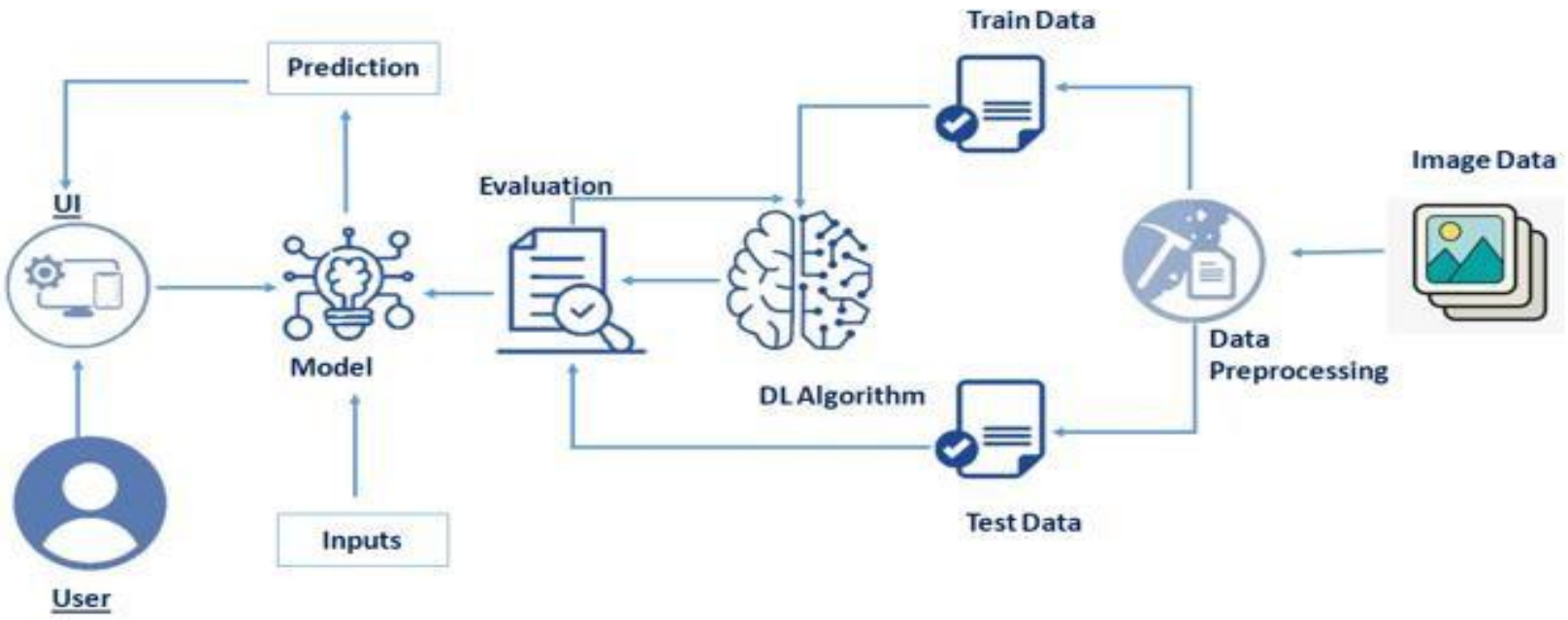

Table-1: Components & Technologies:

S.NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python, CNN
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	Local File system
8.	Machine Learning Model	Purpose of Machine Learning Model	Image Recognition Model, etc.
9.	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	List the open-source frameworks used	Technology of Open source framework-PyCharm, anaconda navigator, flask framework.
2.	Security Implementations	List all the security / access controls implemented, useof firewalls etc.	Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	PyCharm
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Web applications to access the system.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Convolutional Neural Network.