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

Date	03 October 2022
Team ID	PNT2022TMID06900
Project Name	Project – A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION
Maximum Marks	4 Marks

Technical Architecture:

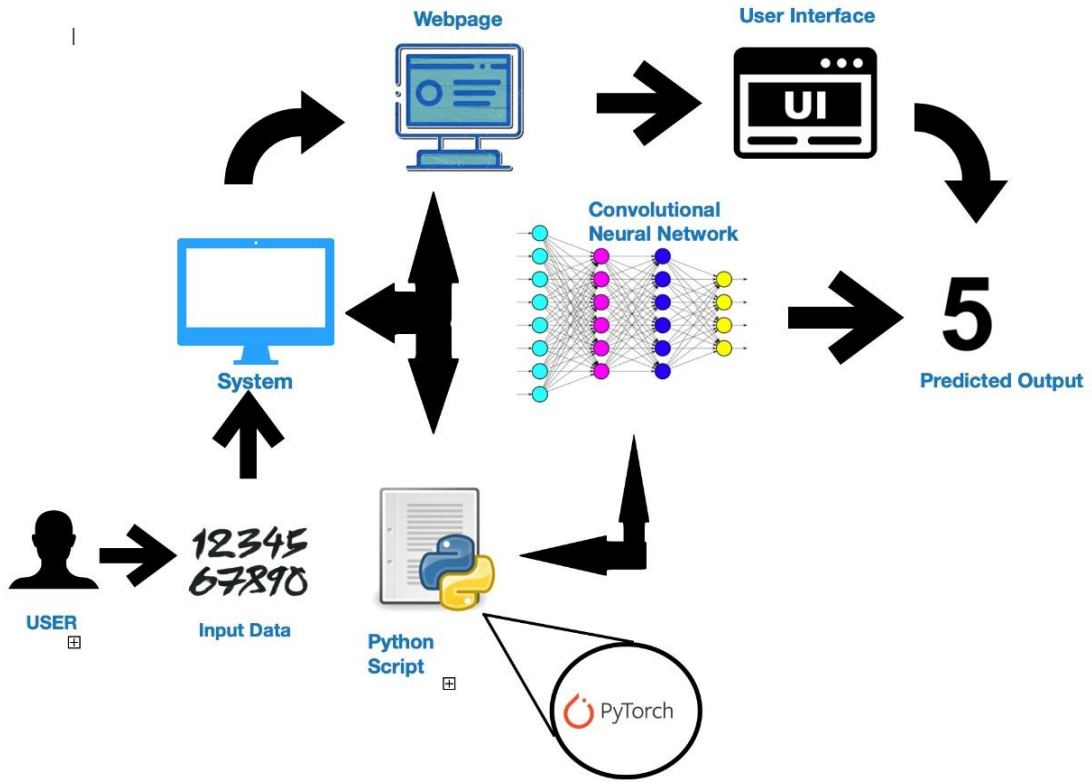

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the application by using the Web UI	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	CNN and Pytorch
4.	Application Logic-3	Logic for a process in the application	IBM Watson Studio
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM Cloudant
7.	File Storage	File storage requirements	IBM storage or Local FileStorage
8.	External API-1	Purpose of External API used in the application	-
9.	External API-2	Purpose of External API used in the application	-
10.	Machine Learning Model	Purpose of Machine Learning Model	Convolutional Neural Network(CNN)
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration Cloud Server Configuration	IBM CLOUD SERVICE

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	CNN, TENSOR FLOW
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	User Authentication by password authentication
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	AWS service
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	IBM load balancers
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM load balancers