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

Date	
Team ID	PNT2022TMID14753
Project Name	A Novel Handwritten Digit Recognition System
Maximum Marks	4

Technical Architecture:
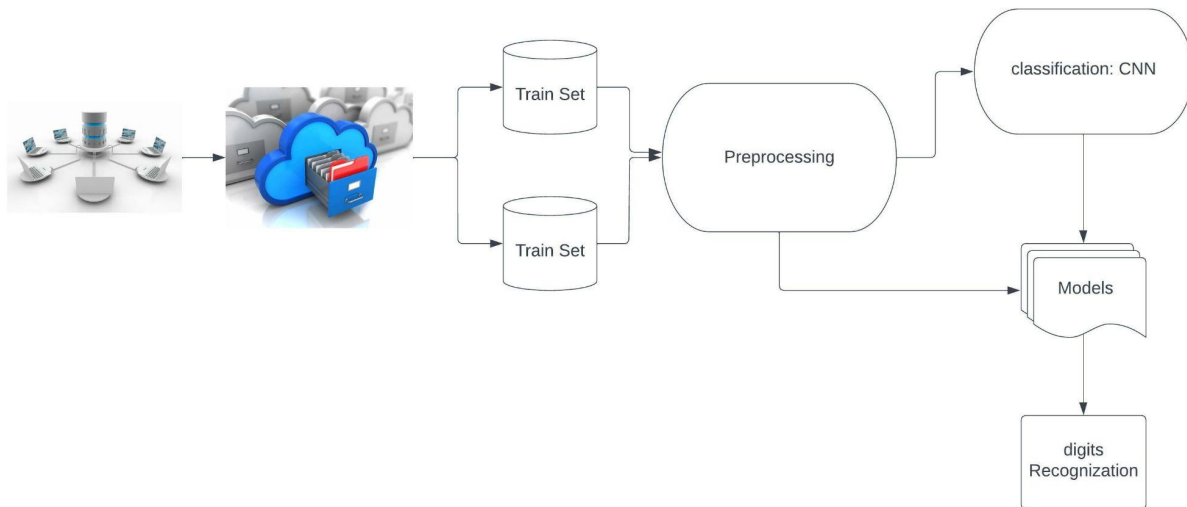
Table-1 : Components & Technologies:

S.NO	Component	Description	Technology
1	UI/UX(User Interface)	A User application for interaction	django,html,css
2	Functionalities	Application methods to execute and operate a process	Python
3	DataBase	Used to store data(structured	NoSql, Mysql Database

		data, unstructured data)	
4	Cloud Database	Provides a remote accessible database with a deployment models	IBM DB2, IBM Cloudant
5	File Storage	File storage requirements	IBM Block Storage
6	API	Interface between application and backend	Python (aadhar API)
7	Machine Learning Model	A model which is trained and preprocessed to do a specific task	Text recognition model

Table-2: Application Characteristics:

S.NO	Characteristics	Description	Technology
1	Open-Source Frameworks	Open Source vendor products cost efficient and community supported	IBM Cognos Analytics with Watson, Python ,Jupyter Notebook.
2	Security Implementations	Authentication and security is resilient	Encryptions (cloud encryptions provided by IBM)
3	Scalable Architecture	Efficient enough to scale as per the need	Application server – Python Database Server – IBM Cloud
4	Availability	The application is available for IBM Cloud users	IBM Cloud Hosting

References:
1. https://c4model.com/
2. https://developer.ibm.com/patterns/online-order-processing-system-duringpandemic/
3. https://www.ibm.com/cloud/architecture
4. https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d
5. https://www.leanix.net/en/wiki/ea/technical-architecture