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

| Date          | 15 October 2022   |
|---------------|---|
| Team ID       | PNT2022TMID35466  |
| 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 table 1 & table 2

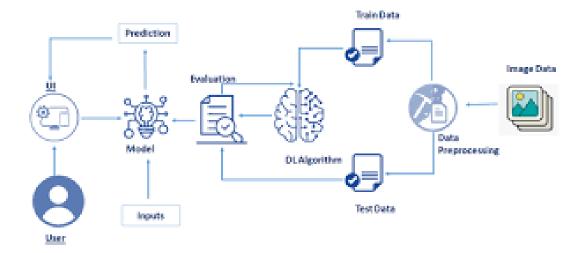


Table-1 : Components & Technologies:

| S.No | Component                       | Description  | Technology  |
|------|---------------------------------|--|---|
| 1.   | User Interface                  | Web UI   | HTML, CSS, JavaScript   |
| 2.   | Application Logic-1             | Image processing and recognition   | Python  |
| 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                        | Dataset  | System  |
| 6.   | Cloud Database                  | Database Service on Cloud  | IBM DB2, IBM Cloudant etc.  |
| 7.   | File Storage                    | File storage requirements  | IBM Block Storage or Other Storage<br>Service or Local Filesystem |
| 8.   | Machine Learning Model          | Purpose of Machine Learning Model  | Object 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 | Flask is a micro web framework written in Python. It is classified as a micro framework because it does not require tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions. | flask      |