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

| Date | 15 October 2022 |
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| Team ID | PNT2022TMID10909 |
| Project Name | A Novel Method for Handwritten Digit Recognition System |
| Maximum Marks | 4 Marks |

Technical Architecture for Handwritten Digit Recognition System:

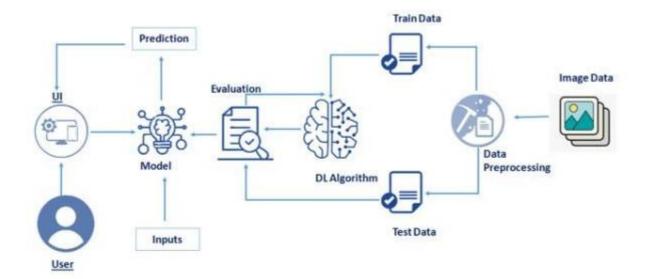


Table-1 : Components & Technologies:

| 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 |
| 3. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 4. | File Storage | Storage of user files of handwritten image | IBM Block Storage or Other Storage Service or Local Filesystem |
| 5. | Machine Learning Model | Machine learning model is used to identify the handwritten image uploaded by users | Object Recognition Model, etc. |
| 6. | 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 |
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| 2. | Security Implementations | Firewall is implemented | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Availability | The application will be available in all regions | Distributed servers |
| 4. | Performance | Higher efficiency of performance. The application can give response to requests within seconds. | Testing. |