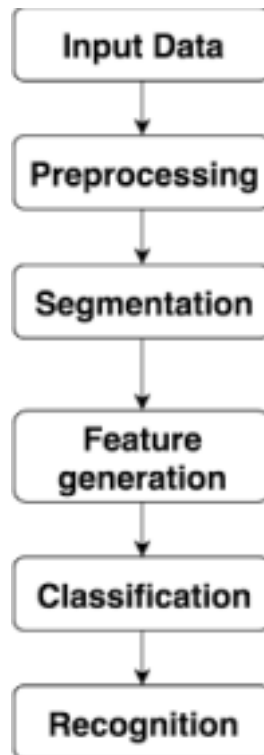


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	03 October 2022
Team ID	PNT2022TMID20889
Project Name	Project - A Novel Method for Handwritten Digit Recognition System
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, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	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	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant
7.	File Storage	File storage requirements	IBM Block Storage
8.	External API-1	Purpose of External API used in the application	IBM Weather API
9.	External API-2	Purpose of External API used in the application	Aadhar API
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Open source framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256, Encryptions, IAM Controls, OWASP

3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	3 – tier, Micro-services
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Distributed servers, IBM cloud
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Number of requests per sec, use of Cache, use of CDN's