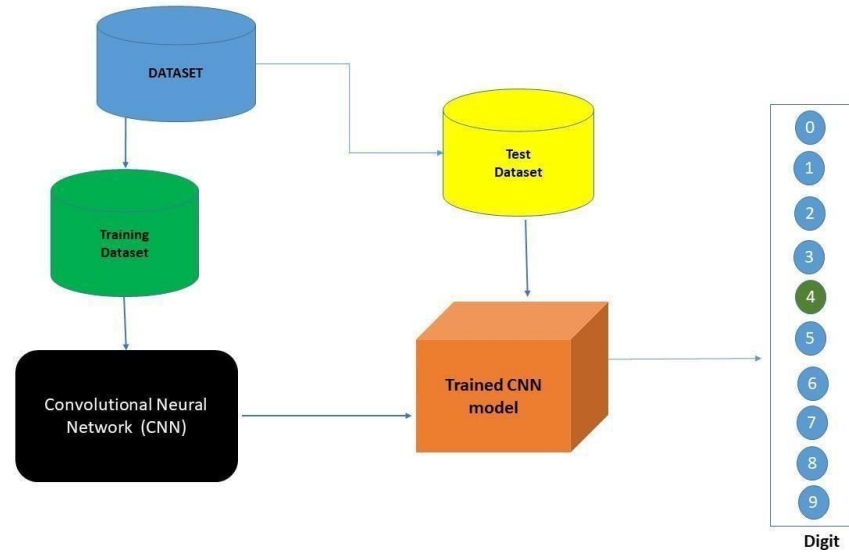


Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	05 October 2022
Team ID	PNT2022TMID46690
Project Name	Project - A Novel Method for Handwritten Digit Recognition System
Maximum Marks	4 Marks

Technical Architecture:

The architectural diagram of the model is as below and the Technology used is shown in Table1



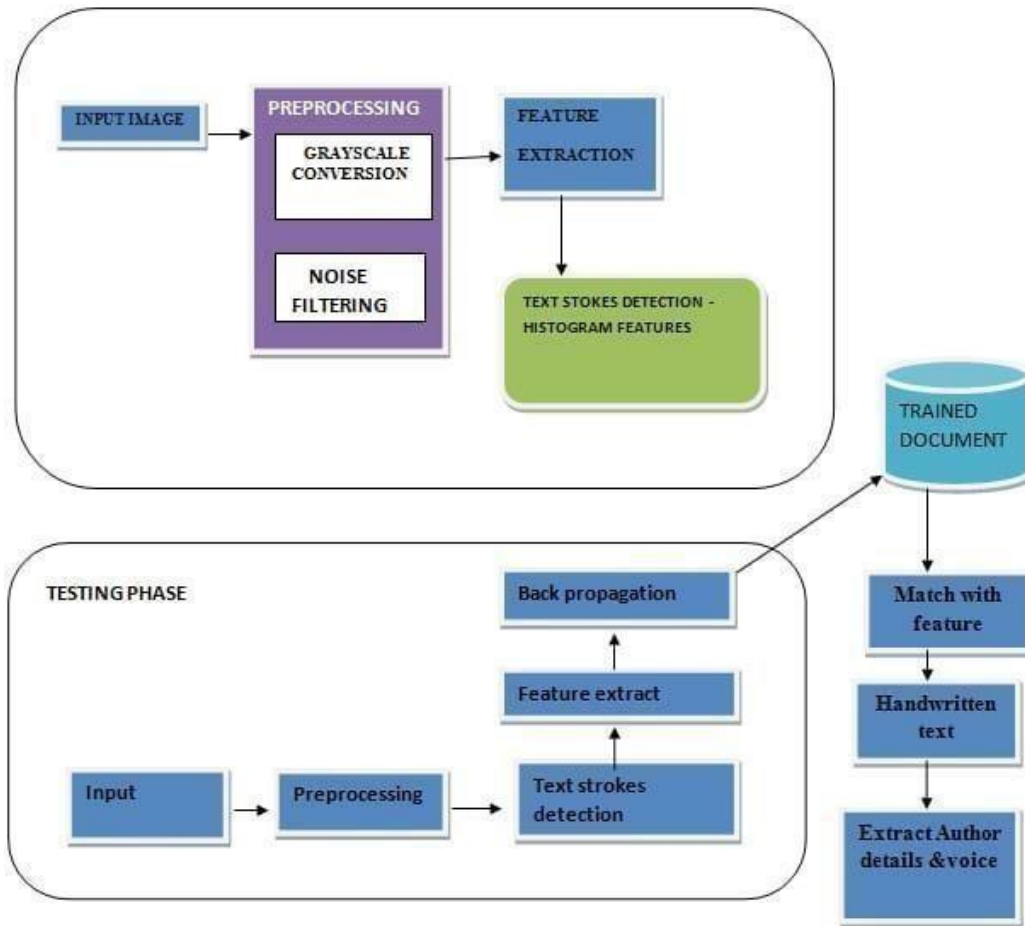


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with the application e.g. e.g., Mobile Application	HTML, CSS, JavaScript / Angular Js / React Js etc.

2.	Application Logic-1	Logic for a process in the application	Java / 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 etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	IBM AI Platform
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / AI Local Server Configuration: AI Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Deep learning frameworks can help you upload data and train a deep learning model that would lead to accurate and intuitive predictive analysis.	Tensorflow, PyTorch
2.	Security Implementations	The system should automatically be able to authenticate all users with their unique username and password.	N/A
3.	Scalable Architecture	The system should be able to handle 10000 users accessing the site at the same time	N/A

S.No	Characteristics	Description	Technology
4.	Availability	Information is restricted to each users and limited access	N/A
5.	Performance	Should reduce the delay in information when hundreds of requests are given	Google Co-Lab Pro/ Require high-end system.