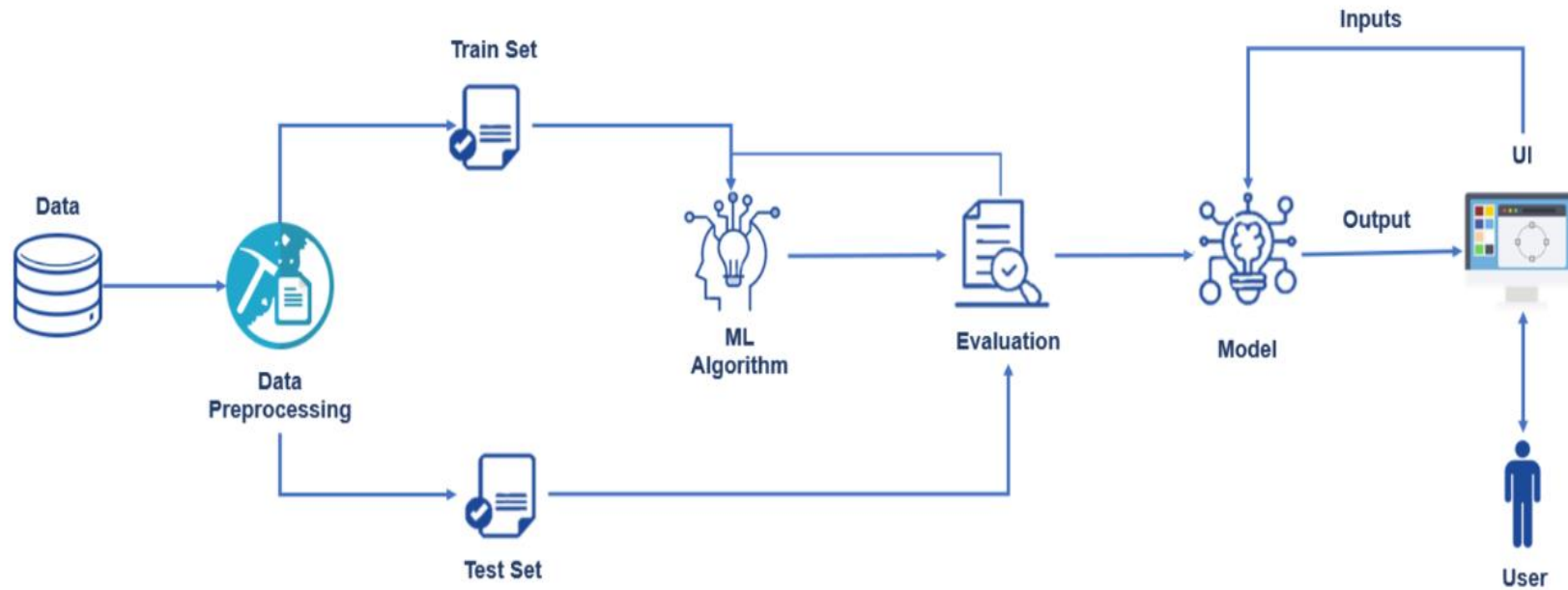


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	10 October 2022
Team ID	PNT2022TMID15811
Project Name	<b>Project - A Novel Method for Handwritten Digit Recognition System</b>
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 / Angular Js / React Js etc.
2.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
3.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
4.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	External API-1	Purpose of External API used in the application	-----
6.	Machine Learning Model	Purpose of Machine Learning Model	Text Recognition Model
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	Tensorflow, scikit-Learn, Keras, pandas etc	For Data Processing and building model.
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, OWASP etc.
3.	Scalable Architecture	Model is hosted in cloud server.	Watson machine learning.
4.	Availability	Since the application is available in cloud, cloud server will take care of load balancing	IBM cloud
5.	Performance	Once again, the cloud will take care of request and other backend services.	IBM cloud