TECHNOLOGY ARCHITECTURE

Project Title : A novel method for handwritten digit recognition system.

Phase : Project Design Phase 2 (Technology Stack (Architecture & Stack))

Team Id : PNT2022TMID09375

Team members :

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2) Team member 1 : Srinithy
3) Team member 2 : Saranya P
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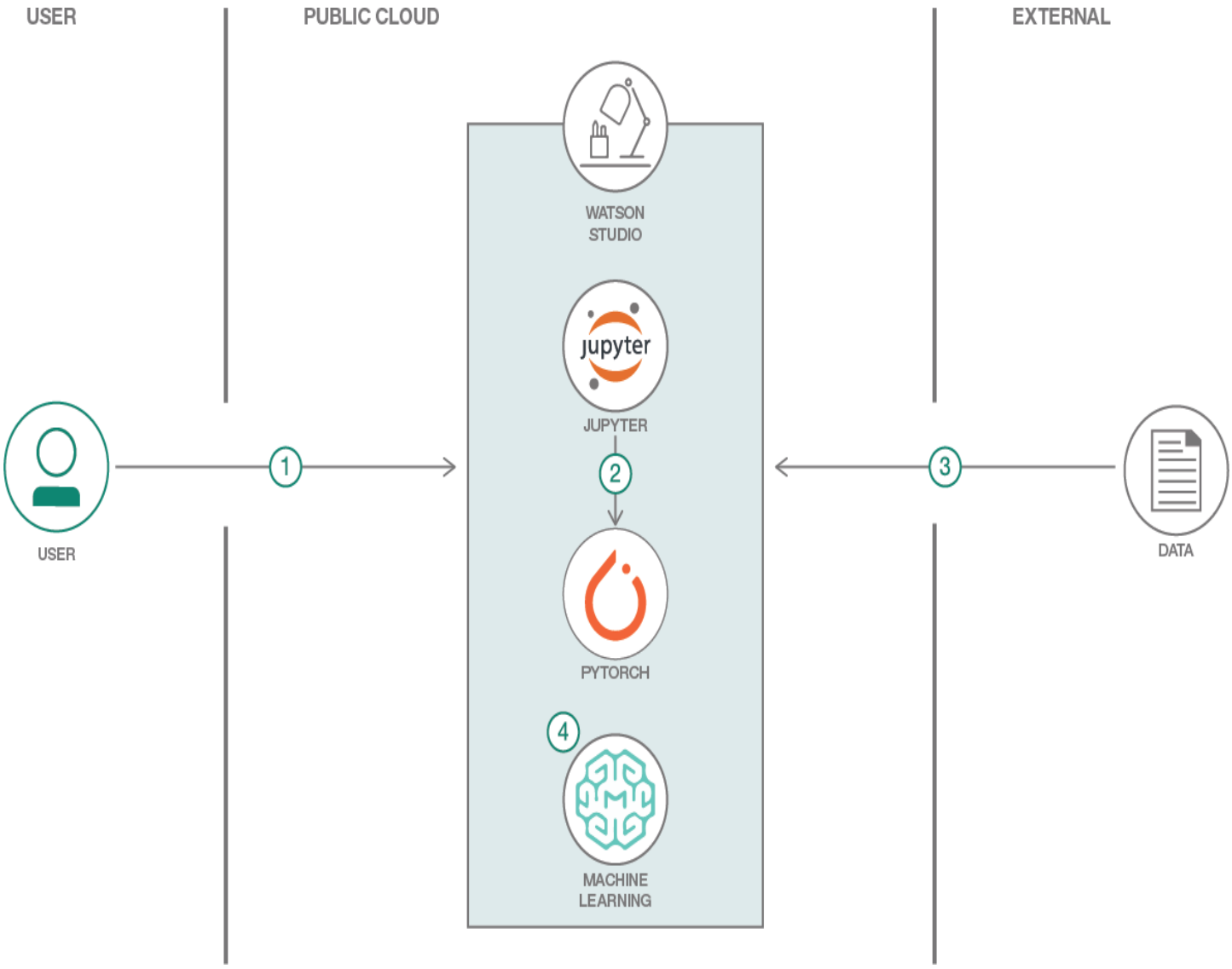
Technical Architecture for Handwritten Digit Recognition System:



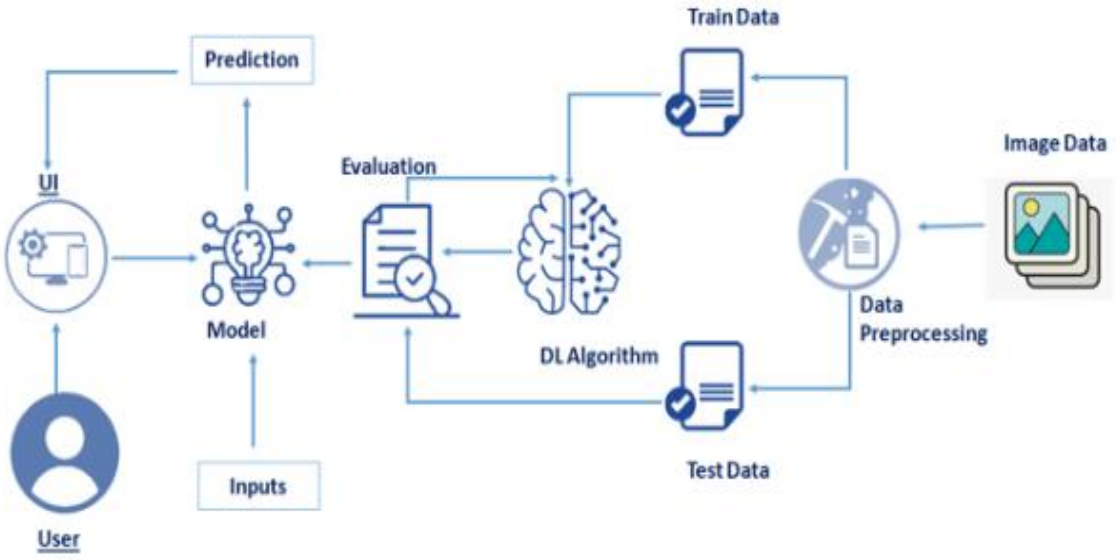


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application	HTML, CSS, JavaScript / Angular 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.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
5.	Cloud Database	Database Service	IBM DB2 etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other StorageService or Local Filesystem
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
8.	Infrastructure (Server)	Application Deployment on Local System (AI)	Local, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Framework from python	Flask, Pytorch.
2.	Security Implementations	Cloud access and Authentication.	IBM Security, SSL Certificate.
3.	Scalable Architecture	Open source container orchestration engine for automating deployment scaling and managing.	Kubernetes.
4.	Availability	To customize and configure using HTML andJSON.	HTML, JSON.
5.	Performance	Caching Helps to improve the performance and Throughput of the app.	Browser Cache