

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	5th september 2023
Team id	Team-593094
Project name	Image caption generation
Maximum marks	4 marks

Technical Architecture Diagram:

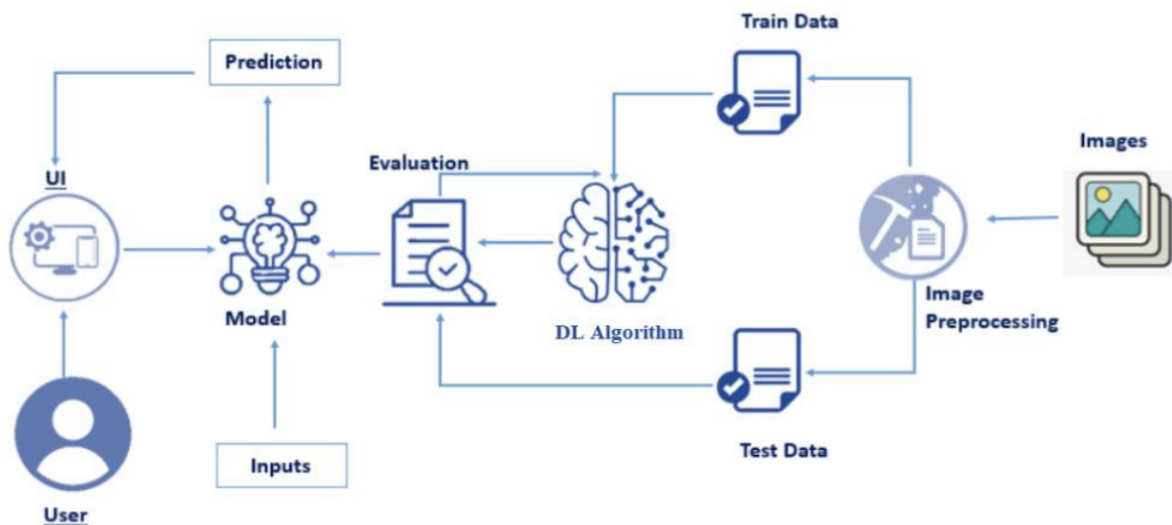


Table-1: Components & Technologies:

S.NO.	Component Description	Technology
1	User interface	HTML, CSS, JavaScript / Angular JS / React JS

2	Application logic-1	Java /python
3	Application logic-2	IBM Watson Speech to Text (STT) Service
4	Application logic-3	IBM Watson Assistant
5	Database	MySQL, NoSQL
6	Cloud database	IBM DB2, IBM Cloudant
7	File storage	IBM Block Storage or Other Storage Service or Local Filesystem
8	External api-1	IBM Weather API
9	External api-2	Aadhar API
10	Machine learning model	Object Recognition Model
11	Infrastructure	Local Server Configuration: Cloud Server Configuration: Local, Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.NO	Characteristics description	technology
1.	Open-Source Frameworks	Technology of Open,Source framework
2.	Security Implementations	SHA-256, Encryptions, IAM Controls, OWASP
3.	Scalable Architecture	Micro-services Architecture
4.	Availability	Load balancers, Distributed servers
5.	Performance	Cache, CDNs, Requests per second

References:

- 1.C4 Model
- 2.IBM Cloud Architecture
- 3.AWS Architecture
- 4.Medium - How to Draw Useful Technical Architecture Diagrams
- 5.IBM Patterns: Online Order Processing System during Pandemic
- 6.IBM Patterns: AI-Powered Backend System for Order Processing during Pandemics