

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

Technical Architecture:

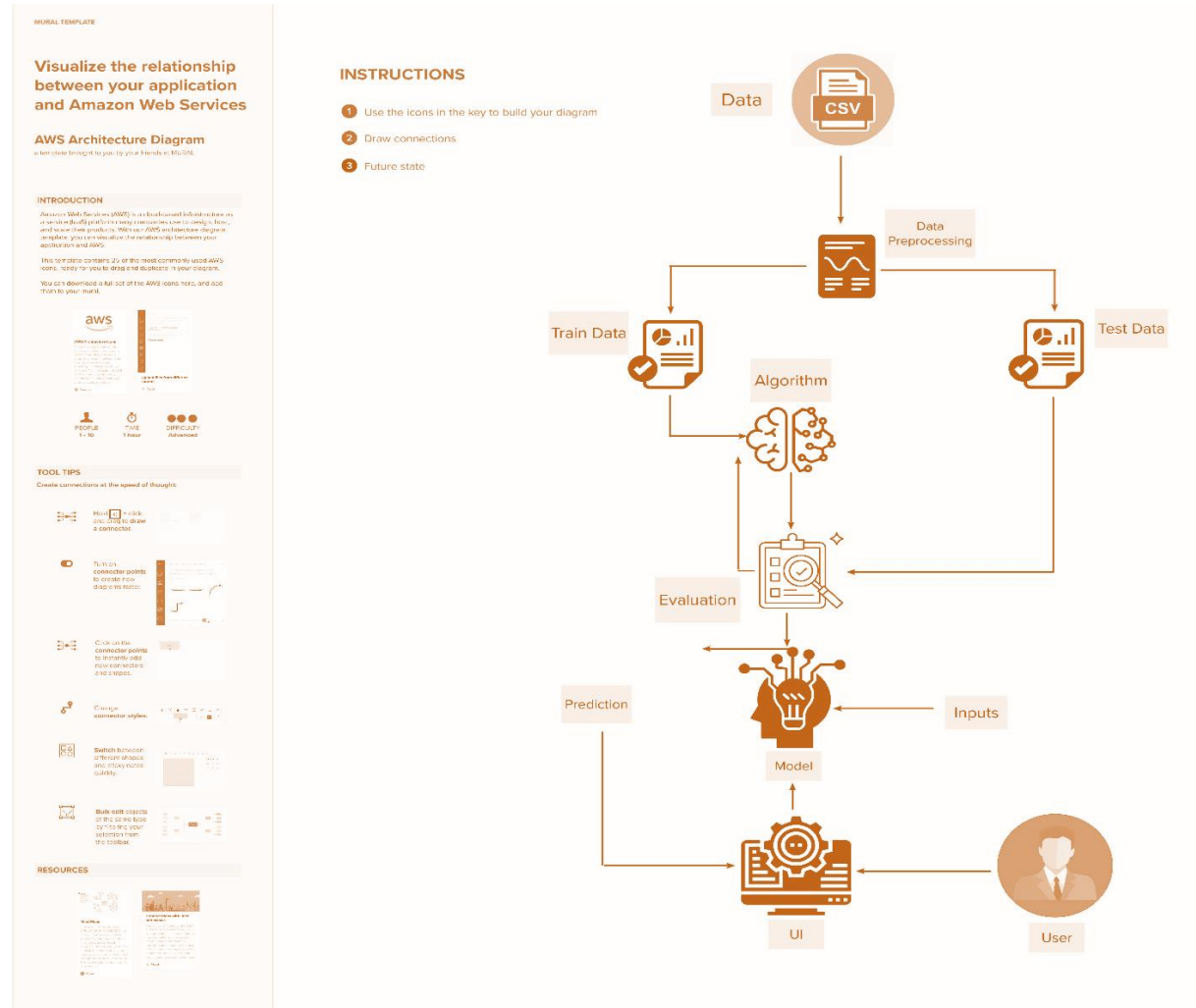


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application like Web UI, Mobile App etc.	HTML, CSS, JavaScript etc.
2.	Application Logic-1	You can train a model to recognize particular patterns so it can anticipate results by gathering and examining historical data.	Java / Python
3.	Application Logic-2	This system offers a chatbot-like dialogue interaction between users and the conversation system.	IBM Watson STT service
4.	Application Logic-3	To automate communications with your end customers, incorporate a natural language interface into your program.	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	Developers and other users can access web API with few restrictions.	Web API, etc.
9.	External API-2	Because access is restricted to clients with official permits, security procedures are frequently more stringent.	Partner API, etc.
10.	Machine Learning Model	Every prediction value in a regression model is based on independent variables. It is used to determine how two quantitative variables relate to one another.	Linear Regression Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: HTTP server Cloud Server Configuration: IaaS, SaaS, PaaS	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python is used to create web apps with Flask.	Technology of Opensource framework is cloud, Agile, and DevOps.
2.	Security Implementations	SSL (Secured Sockets Layers), TLS (TransportLayer Security) etc.	E.g. SHA-256, Encryptions, IAMControls, OWASP etc.
3.	Scalable Architecture	However, with the prevalence of open-source technology, analytics solutions are increasingly accessible and becoming more reasonably priced.	Technology used
4.	Availability	It is quick, effective, and dependable. Compared to the current system, there are fewer chances of error occurring.	Technology used
5.	Performance	Any amount of users can be supported by this system simultaneously. Over a 56 Kbps modem connection, the average amount of time it takes to see a webpage is 5 seconds.	Technology used