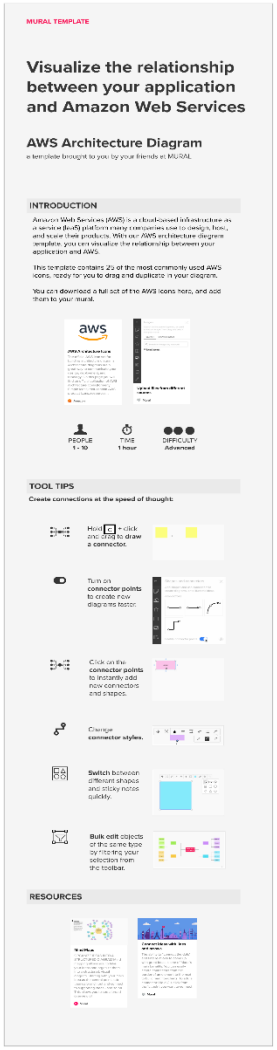
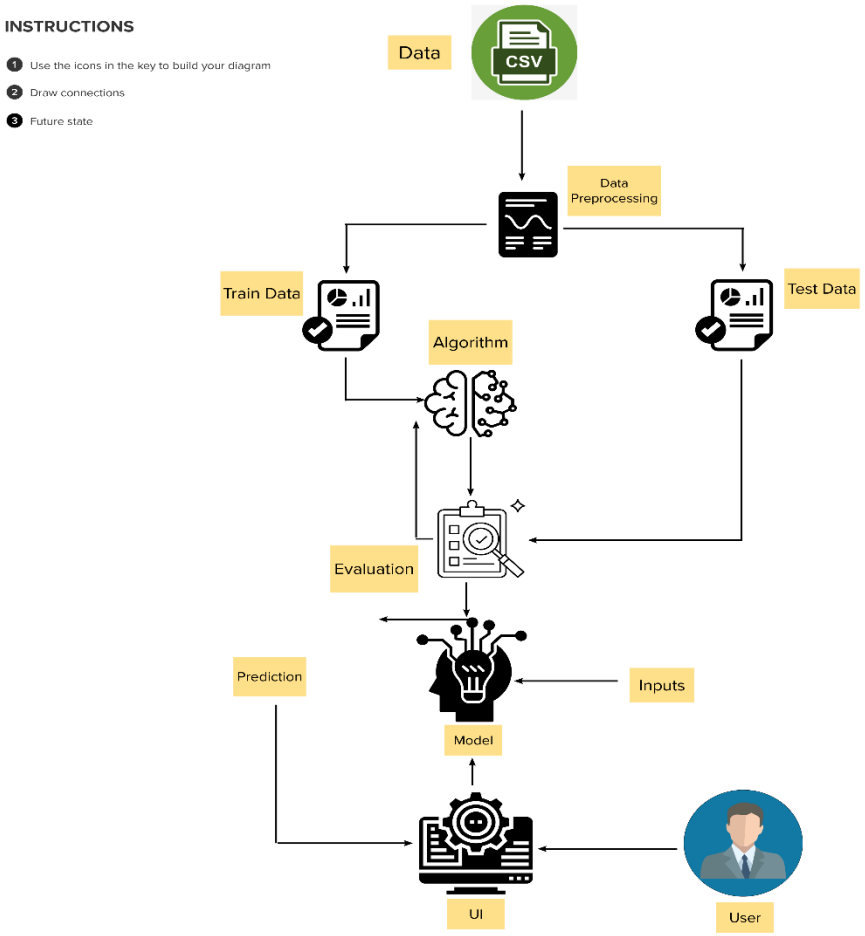
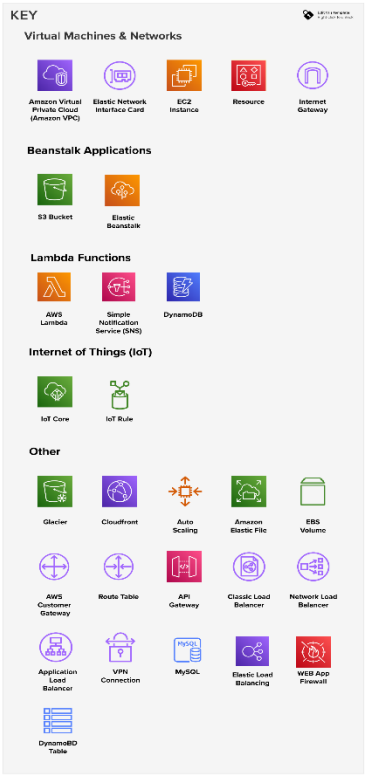
# Project Design Phase-II
# Technology Stack (Architecture & Stack)

## Technical Architecture:




Share your feedback

**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 | By collecting and analyzing past data, you train a model that detects specific patterns so that it can predict outcomes. | Java / Python |
| 3. | Application Logic-2 | This system provides a dialog interaction between the conversation system and users like chatbot. | IBM Watson STT service |
| 4. | Application Logic-3 | Add a natural language interface to your application to automate interactions with your end users. | 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 | Web API are available to developers and other users with minimal restrictions. | Web API, etc. |
| 9. | External API-2 | Access is limited to authorized clients with official licenses, and thus security measures tend to be stronger. | Partner API, etc. |
| 10. | Machine Learning Model | Regression models always target a prediction value which is based on independent variables. It is used to calculate the relationship between two quantitative variables | Linear Regression Model, etc. |
| 11. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud<br>Local Server Configuration: HTTP server<br>Cloud Server Configuration: IaaS, SaaS, PaaS | Local, Cloud Foundry, Kubernetes, etc. |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | Flask is used for developing web applications using python. | Technology of Opensource framework are cloud, Agile, and DevOps. |
| 2. | Security Implementations | SSL(Secured Sockets Layers), TLS(Transport Layer Security) etc. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | However with open source technology widely available, analytics tools are easier to access and are getting more affordable. | Technology used |
| 4. | Availability | It is fast, efficient and reliable.<br>Chances of occurrence of error is less when compared to existing system. | Technology used |
| 5. | Performance | This system can support any number of users at a time. The mean time to view a webpage over a 56 Kbps modem connection shall not exceed 5 seconds. | Technology used |