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

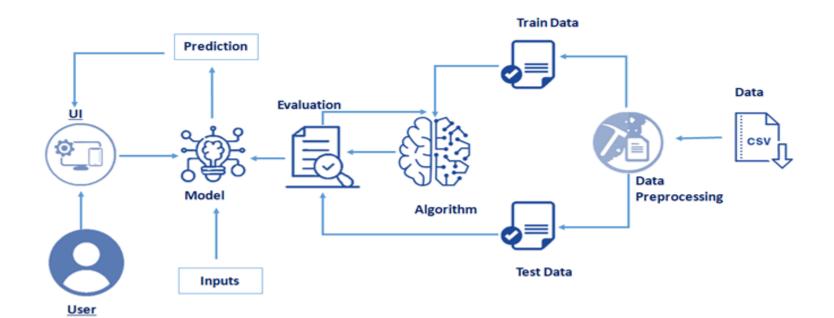| Date | 14 October 2022 |
|---|---|
| Team ID | PNT2022TMID44190 |
| Project Name | EXPLORATORY ANALYSIS OF RAIN FALL DATA IN INDIA FOR AGRICULTURE |
| Maximum Marks | 4 Marks |

**Technical Architecture**

**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|------|-----------|-------------|------------|
| 1. | User Interface | By using mobile app user can communicate with application | HTML, CSS, JavaScript |
| 2. | Application Logic-1 | By entering the weather details | Python |
| 3. | Application Logic-2 | Upload the dataset then this dataset is processed using ML technique | IBM Watson STT service |
| 4. | Application Logic-3 | After the progression of the data set it will show analysis result | IBM Watson Assistant |
| 5. | Database | Integers and strings | 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. | Machine Learning Model | Purpose of Machine Learning Model | Object Recognition Model, etc. |
| 9. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes, etc. |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | Conventional neural network | Machine Learning |
| 2. | Security Implementations | The barrier network that sits between a private internal network and the public internet. | e.g. SHA-256, Encryptions, IAM Controls, OWASP, proxy etc. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | CNNS |
| 4. | Availability | It is available for all users at any time | User can give their data for processing |
| 5. | Performance | Checks for speed , stability and reliability of the software ,hardware or even the network of the system under test. | Hardware and support system ,software applications |