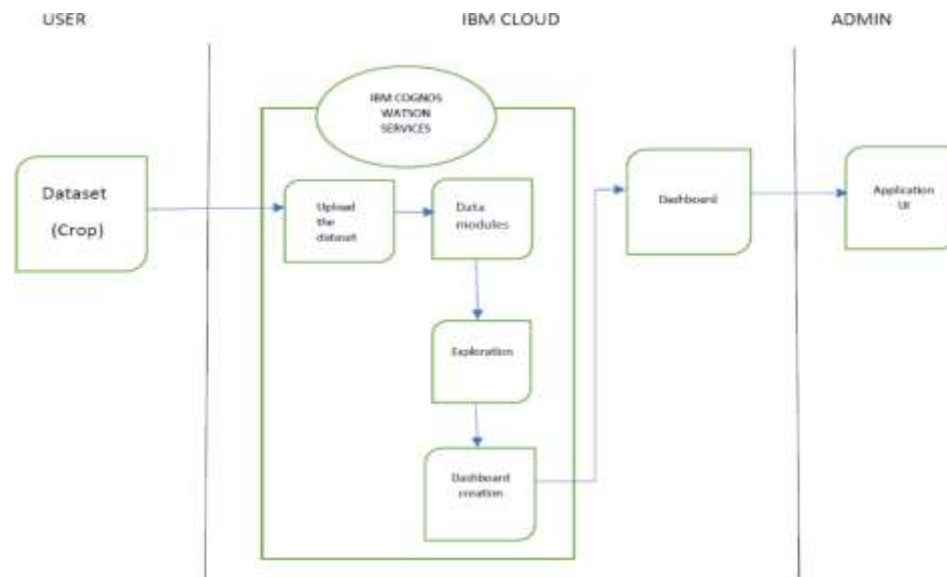


Project Design Phase-II Technology Stack (Architecture & Stack)

| | |
|---------------|--|
| Date | 13 October 2022 |
| Team ID | PNT2022TMID37320 |
| Project Name | Estimate The Crop Yield Using Data Analytics |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------|---|--|
| 1. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript / Angular Js / React 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. | Application Logic-3 | Logic for a process in the application | IBM Cognos Watson |
| 5. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 6. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|--|---|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Technology of Opensource framework : Django |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Technology used : 3-tier |
| S.No | Characteristics | Description | Technology |
| 4. | Availability | Justify the availability of application | Technology used : Distributed servers |
| 5. | Performance | Design consideration for the performance of the application | Technology used : IBM Cognos Watson |