**Project Design Phase-II**
**Solution Requirements (Functional & Non-functional)**

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| Date | 03 October 2022 |
| Team ID | PNT2022TMIN19454 |
| Project Name | Project – Estimate crop yield using data analytics |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|---|---|---|
| FR-1 | User Registration | Registration through Form<br>Registration through Gmail<br>Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email<br>Confirmation via OTP |
| FR-3 | User Profile Update | Updating personal details<br>Updating educational details |
| FR-4 | User Login | Login with username and password |
| FR-5 | User Dashboard | Performing required operations |
| FR-6 | Project Upload | Uploading the project according to the problem statement provided |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | **Usability** | Crop production in India is one of the most important sources of income and India is one of the top countries to produce crops. As per this project we will be analyzing some important visualization ,creating a dashboard and by going through these we will get most of the insights of crop production in India. |
| NFR-2 | **Security** | Data analytics has a positive and significant relationship with a firms ability to manage data security and a positive impact on service supply chain innovation capabilities and service supply chain performance. |
| NFR-3 | **Reliability** | Farmers are now empowered with insights that can help them predict the market conditions, consumer behaviour towards the finished goods, factors in inflation and other variables that helps them. |

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| NFR-4 | **Performance** | Data analytics helps in executing the existing algorithms faster with large data sets. One of the most important features of data analytics is data processing. Data processing involves raw data collections and organization to derive inferences. |
| NFR-5 | **Availability** | For products are services, completeness can suggest vital attributes that helps customer compare and choose. With data analytics crop yield predictions can be done earlier even before sowing seeds which results more productivity. |
| NFR-6 | **Scalability** | Automate data science and data engineering tasks. Train, test and deploy models seamlessly across multiple enterprise applications. Extend common data science capabilities across hybrid, multi-cloud environments. |