**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

|  |  |
| --- | --- |
| Date | 17 October 2022 |
| Team ID | PNT2022TMID31901 |
| Project Name | Project - Estimate the crop yield using data analytics |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through WhatsApp  Registration through Agriculture & Farmers Welfare |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP  Confirmation via Letter |
| FR-3 | User Profile | User Details  Farm Details |
| FR-4 | Required Data | The past crop yield data the Farmer (user) data to analyse. |
| FR-5 | Analysis | Data should be cleaned and analysed according to the set of past data of the multiple user. |
| FR-6 | Estimation | Creating the perfect solution data module, visuals using IBM Cognos Analytics to increase the estimation of the crop yield. |

**Non-functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Based on the past crop yield data, data report is created. By these recommendation the sowing of crops will be advised or consulted. |
| NFR-2 | **Security** | IBM Cognos have a secure user information (Data Visuals). |
| NFR-3 | **Reliability** | The interactive data visuals such as dashboard can make easily understand about the data report. |
| NFR-4 | **Performance** | Interaction makes better performance between all user and more impressive by the visual advise. |
| NFR-5 | **Availability** | The dashboard could be easily viewed and available in every Smart Phones, Laptops, Systems, etc. |
| NFR-6 | **Scalability** | The flexibility of the methodology to implement the proposed solution is very easy that can make increase in the production of crop yield in the different farms of different user. |