**Project Design Phase-II**

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

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID00319 |
| Project Name | Project -Estimate the Crop Yield using Data Analytics |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through Linkedin |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | User Profile | User Details Farm Details |
| FR-4 | Required Data | The previous year crop yield data set  Farm yield methodology  User data of the farmer  Details of the Seasons and the Regions |
| FR-5 | Analysis | Cleaning and analysis of the past year crop yields Visualizing the datasets using IBM Cognos |
| FR-6 | Estimation | Creating the perfect data module through attractive stories, dashboard and reports to increase the understandability of data. |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | From the given datasets , analyzing is done and report is created.  Accordingly, sowing of crops are recommended. |
| NFR-2 | **Security** | Usage of IBM COGNOS, will provide secure user information(Data Visualization) |
| NFR-3 | **Reliability** | Using the interactive data visual dashboards , we can easily understand the data reports. |
| NFR-4 | **Performance** | Interaction makes better performance between all user and impressing by the data visuals advice. |
| NFR-5 | **Availability** | The dashboard is easily available and accessible in smartphones and PC’s. |
| NFR-6 | **Scalability** | Prediction of crop for the forthcoming year can be done .It gives you a variety of crops to choose from our region. Also to know the better profitability of crops. |