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

| Date | 01 November 2022 |
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| Team ID | PNT2022TMID17814 |
| Project Name | Project - Estimate the Crop Yield using Data Analytics |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Sub-Task) |
|--------|-------------------------------|---|
| 1 | User Registration | Registration through Whatsapp Registration through Gmail Registration through Mail Registration through Agri-Consultancy modes. |
| 2 | User Confirmation | Confirmation via Email Confirmation via OTP through SMS. Confirmation via physical Letter. |
| 3 | User Profile | User Details Farm Details |
| 4 | Required Data | The past crop yield data and data of the Farmer to analyze their yield. |
| 5 | Analysis | Clean , Analyze the data by means of set of past data of the multiple users which is farmers. |
| 6 | Estimation | Creating the perfect data module, visuals using IBM Cognos to increase the estimation of the crop yield |

Non-functional Requirements:

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| 1 | Usability | The data report is created according to the past data yield. By considering these recommendation the sowing of crops will be decided. |
| 2 | Security | IBM Cognos have a high-secure user information. |
| 3 | Reliability | The interactive data visuals of the dashboard can make easy to understand by the farmers. |

| 4 | Performance | Interaction makes better performance between all user and the visuals through visualization. |
|---|--------------|--|
| 5 | Availability | The dashboard could be easily viewed and available in every devices like smartphones, laptops, systems etc |
| 6 | Scalability | The flexibility to implement the proposed solution is very easy that results in increasing of the estimation of crop yield compared to farms for different user. |