**PROJECT DESIGN PHASE - 1**

**SOLUTION REQUIREMENTS (FUNCTIONAL & NON FUNCTIONAL)**

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| DATE | 13 October 2022 |
| TEAM ID | PNT2022TMID07468 |
| PROJECT NAME | Estimate the Crop yield using Data Analytics |
| MAXIMUM MARK | 4 Marks |

# Functional requirement:

Following are the functional requirements of the proposed solution .

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| Fr.no | Functional requirement | Sub requirement (story/subtask) |
| Fr-1 | User registration | Registration through form Registration through Gmail |
| Fr-2 | User confirmation | Confirmation via OTP  Confirmation via Email |
| Fr-3 | Capturing image | Capture the image of the leaf  And check the parameter of the captured image . |
| Fr-4 | Image processing | Upload the image for the  prediction of the seasonal images for the crop yield. |
| Fr-5 | Leaf identification | Identify the seasonal images and estimate the crop yield . |
| Fr-6 | Image description | Suggesting the best seasonal images for the correct yield. |

# Non-functional requirement:

Following are the non-functional requirement of the proposed solution

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| NFr.no | Non-functional requirement | Description |
| Nfr-1 | Usability | Datasets of all the seasonal images of crops is used to detecting the estimation of that correct season for right  cropping. |
| Nfr-2 | Security | The information belongs to  the user and seasonal images are securedhighly. |
| Nfr-3 | Reliability | The leaf quality is important  for the predicting the crop yield. |
| Nfr-4 | Performance | The performance is based on  the quality of the leaf used for yield prediction |
| Nfr-5 | Availability | It is available for all user to  predict the yield in the plant |
| Nfr-6 | Scalability | Increasing the prediction of  the yield from the given seasonal pictures of those  crops. |