

**ProjectDesignPhase-II**  
**SolutionRequirements(Functional&Non-**  
**functional)**

|              |  |
|--------------|--|
| Date         | 14October2022  |
| TeamID       | PNT2022TMID17177                                       |
| ProjectName  | Project-Smartfarmer-IOTenabledsmartfarming application |
| MaximumMarks | 4Marks   |

**FunctionalRequirements:**

Followingarethefunctionalrequirementsoftheproposedsolution.

| FRNo. | FunctionalRequirement(Epic) | SubRequirement(Story/Sub-Task)  |
|-------|-----------------------------|---|
| FR-1  | UserRegistration            | Registration through<br>FormRegistrationthroug<br>hGmail<br>RegistrationthroughLinkedIn |
| FR-2  | UserConfirmation            | ConfirmationviaOTP  |
| FR-3  | UserProfile                 | Login<br>AccesstheProfile   |
| FR-4  | Analyse                     | Datafromsmartsensorscanbeanalyzedforpredictive analysisandautomateddecision-making.     |
| FR-5  | Recommend                   | Basedonthefarmingthesoftwarerecommendsthe automatedirrigationpractices.                 |

**Non-functionalRequirements:**

Followingarethenon-functionalrequirementsoftheproposedsolution.

| FRNo. | Non-FunctionalRequirement | Description   |
|-------|---------------------------|---|
| NFR-1 | <b>Usability</b>          | End users can monitor and control their connectedfarmusingIOTapplicationsontheirsmart phonesor tablets.   |
| NFR-2 | <b>Security</b>           | Thesoftwarekeepstheuser'sinformationmore securely.  |
| NFR-3 | <b>Reliability</b>        | Thesmartfarm,embeddedwithIOTsystems,couldbe called a connected farm, which can support awiderangeofdevicesfromdiverseagricultural devicemanufactures. |
| NFR-4 | <b>Performance</b>        | Itisuser-friendlysoftwareandhavehigh performance.   |
| NFR-5 | <b>Availability</b>       | Availableforeveryuser,visibleforallusersand farmer.   |
| NFR-6 | <b>Scalability</b>        | Theproposedprecisionfarmingstructureallowsthe implementationofaflexiblemethodologythatcan beadoptedtodifferenttypesofcrops.                           |