

PROJECT PLANNING PHASE

(PROJECT MILESTONE)

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| Date | 22 October 2022 |
| Team ID | PNT2022TMID34125 |
| Project Name | Smart Farmer-IoT Enabled Smart Farming application |
| Maximum Marks | 8 |

| MILESTONE | ACTIVITY TITLE | ACTIVITY DESCRIPTION | DURATION |
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| Pre requisites | 1) IBM Cloud Services 2) MIT App Inventor 3) Software 4) Create an account in Fast2sms Dashboard | 1)You Need to have basic knowledge of the following cloud services: <ul style="list-style-type: none">• IBM Watson IoT platform• Node-Red service• Cloudant DB 2)Sign in for MIT App inventor using Gmail Id 3) Instal the python IDE 4) Create an account in Fast2sms.com | 1 week |

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| Create And Configure IBM Cloud Services | 1)Create The IBM Watson IoT platform and a device 2)Create Node-RED Services | 1) Create The IBM Watson IoT platform 2) Create a Web Application to create a Node-RED service | 1 week |
| Develop a Python Script To Publish And Subscribe to IBM IoT Platform | 1)Develop The Python Code | 1) Develop The Python code to publish and subscribe to the commands from the IBM Cloud | 3 weeks |
| Build a Web Application using Node-RED Service | 1) Build a web Application using Node-RED | 1)Configure the nodeRED and create API for communicating with mobile application | 1 week |

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| Develop a Mobile Application | 1) Develop a Mobile Application | 1)Develop the mobile Application using MIT App inventor which should display all thew sensor parameters and have the buttons to control the motors | 5 weeks |
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| Ideation Phase | 1)Literature Survey on the selected project and Information Gathering 2) Prepare Empathy Map 3) Ideation | 1) You are expected to collect the relevant information on project usecase , refer the existing solutions, technical papers, research publications, etc 2)You are expected to prepare the empathy map canvas to capture the user pains and gains , prepare list of problem statements 3)You are expected to list the ideas by organising the brainstorming session | 1 week |
| Project Design Phase I | 1)Proposed Solutions 2)Problem Solution Fit 3) Solution Architecture | 1) To prepare the proposed solution document which includes the novelty, feasibility of idea , business model, social impact, scalability of solution, etc 2) To prepare problem solution fit document and submit for review 3) To prepare solution architecture document and submit for review | 1 week |

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| Project Design Phase II | 1)Customer Journey 2)Functional Requirement 3) Data Flow Diagrams 4) Technology Architecture | 1) Customer journey maps to understand the user interactions 2) To prepare the functional requirement document 3) To Prepare the dataflow diagrams and submit for review 4) To draw the technology architecture diagram | 2 week |
| Project Planning Phase | 1)Prepare Milestone & Activity list 2)Sprint Delivery plan | 1) To prepare the milestones and activity list of the project 2) To prepare the sprint delivery plan | 1 week |
| Project Development Phase | 1)Project Development-Delivery of sprint 1 2)Project Development – Delivery of sprint 2 3)Project Development-Delivery of sprint 3 4)Project Development-Delivery of sprint 4 | 1) To develop & Submit the developed code by testing it. | 1 week |