

**Department of Networking and Communications**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

|  |  |
| --- | --- |
| **Experiment No** | 4 |
| **Title of Experiment** | Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities |
| **Name of the Team head** | Soham Ghosh |
| **Team Members** | Abhishri Joshi, Ayush Abhigyan |
| **Register Number** | RA2011003010504, RA2011003010475, RA2011003010493 |
| **Date of Experiment** | 07/04/2022 |

**Mark Split Up**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Description** | **Maximum Mark** | **Mark Obtained** |
| 1 | Exercise | 5 |  |
| 2 | Viva | 5 |  |
| **Total** | | **10** |  |

**Staff Signature with date**

**Aim**

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

**Team Members:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No** | **Register No** | **Name** | **Role** |
| **1** | **RA2011003010504** | **SOHAM GHOSH** | **Lead** |
| **2** | **RA2011003010493** | **AYUSH ABHIGYAN** | **Member** |
| **3** | **RA2011003010475** | **ABHISHRI JOSHI** | **Member** |

Requirements

The Project plan has been attached below.

Result:

Thus, the Project Plan was documented successfully.

# Project Management Plan

Describe the key issues driving the project. **[Min 3 Focus Areas]**

|  |  |
| --- | --- |
| **Focus Area** | **Details** |
| Scope Management | Scope Statement  Requirement Management (Gathering, Control, Assumption, Constraint Stakeholder)  Define Deliverable  Requirement Change Control  Activities and Sub-Tasks |
| Schedule Management | Define Milestones  Schedule Control |
| Cost Management | Estimate Effort  Assign Team  Budget Control |
| Quality Management | Quality Assurance: Quality assurance will be managed including governance, roles and responsibilities, tools and techniques and reporting  Quality Control: Specify the mechanisms to be used to measure and control the quality of the work products |
| Resource Management | Estimate and Manage the need  People: People & Skills Required  Finance: Budget Required  Physical: Facilities, IT Infrastructure |
| Stakeholder | Identifying, Analyzing, Engaging Stakeholders |
| Risk Management | Identifying, analysing, and prioritizing project risks |

# Estimation

# Effort and Cost Estimation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity Description** | **Sub-Task** | **Sub-Task Description** | **Effort (in hours)** | **Cost in INR** |
| Design the user screen | E1R1A1T1 (Effort-Requirement-Activity-Task) | Confirm the user requirements (acceptance criteria) | 3 | 1500 |
| E1R1A1T2 | Creating a good User interface | 3 | 1500 |
| E1R1A1T3 | Implementing and deploying the user interface | 3 | 1500 |
| Identify Data Source for displaying units of Energy Consumption |  | Go through Interface contract (Application Data Exchange) documents | 5 | 2500 |
|  | Document | 1 | 500 |

|  |  |
| --- | --- |
| **Effort (hr)** | **Cost (INR)** |
| 1 | 500 |

# Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

|  |  |  |  |
| --- | --- | --- | --- |
| **Infrastructure Requirement** | **Qty** | **Cost per qty** | **Cost per item** |
| Network and system | 1 | 1,00,000 | 1,00,000 |
| Server and database | 3 | 80,000 | 2,40,000 |
| Testing device and hardware | 5 | 30,000 | 1,50,000 |

# Maintenance and Support Cost [OpEx]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Details** | **Qty** | **Cost per qty per annum** | **Cost per item** |
| People | Network, System, Middleware and DB admin  Developer , Support Consultant | 3 | 2,000,000 | 6,000,000 |
| License | Operating System  Database  Middleware  IDE | 10 | 10000 | 100,000 |
| Infrastructures | Server, Storage and Network | 20 | 20000 | 400,000 |

# Project Team Formation

# Identification Team members

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibilities** |
| Soham Ghosh | Project Manager | Manage the project |
| Ayush Abhigyan | Business Analyst | Discuss and Document Requirements |
| Abhishri Joshi | Technical Lead | Design the end-to-end architecture |
| Ayush Abhigyan | UX Designer | Design the user experience |
| Soham Ghosh | Frontend Developer | Develop user interface |
| Abhishri Joshi | Backend Developer | Design, Develop and Unit Test Services/API/DB |
| Ayush Abhigyan | Tester | Define Test Cases and Perform Testing |

# Responsibility Assignment Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **RACI Matrix** | **Team Members** | | |
| **Activity** | **SOHAM GHOSH** | **AYUSH ABHIGYAN** | **ABHISHRI JOSHI** |
| User Requirement Documentation | A | R | C/I |
| User Interface Design | C/I | A | R |
| Front End Development | A | C/I | R |
| Back End  Development | C/I | I | A/R |
| Database Management | R | C/I | C/I |
| Testing and Deployment | C/I | A/R | I |

|  |  |
| --- | --- |
| A | Accountable |
| R | Responsible |
| C | Consult |
| I | Inform |