

**School of Computing**

**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 candidate** | Alankriti Dadlani |
| **Team Members** | Aritra Karar, Sanjay |
| **Register Number** | RA2111028010010 |
| **Date of Experiment** | 06.03.23 |

**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** | RA2111028010012 | Aritra Karar | **Lead** |
| **2** | RA2111028010010 | Alankriti Dadlani | **Member** |
| **3** | RA2111028010012 | Sanjay.P | **Member** |

Requirements

<Incorporate the Project plan template>

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** |
| Integration Management | Governance Framework  Project Team Structure  Roles & Responsibilities of  Team Change Management  (Change Control, Issue  Management) Project Closure |
| 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 |
| Communication Management | Determine communication requirements, roles and responsibilities, tools and techniques. [Type of Communication, Schedule, Mechanism Recipient] |
| Risk Management | Identifying, analysing, and prioritizing project risks |
| Procurement Management | Adhering to organization procurement process |

Estimation

2.1. Effort and Cost Estimation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity Description** | | | **Sub-Task** | **Sub-Task Description** | **Effort (in hours)** | **Cost in**  **INR** |
| Design the user screen | | | E1R1A1T1  (Effort-  RequirementActivity-Task) | Confirm the user requirements  (acceptance criteria) | 3 | 1800 |
| E1R1A1T2 |  | 2 | 1200 |
| E1R1A1T3 |  | 3 | 1800 |
| Identify Data Source for displaying units of Energy Consumption | | |  | Go through  Interface contract  (Application Data  Exchange) documents | 5 | 3000 |
|  | Document | 2 | 1200 |
| **Effort (hr)** | **Cost (INR)** |
| 1 | 600 |

2.2. Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

|  |  |  |  |
| --- | --- | --- | --- |
| **Infrastructure**  **Requirement** | **Qty** | **Cost per qty** | **Cost per item** |
| IR1-Hardware | 12 | 40000 | 600000 |
| IR2- System | 2 | 35000 | 70000 |

2.3 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

3.1. Identification Team members

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibilities** |
| Sanjay | Key Business User (Product  Owner) | Provide clear business and user requirements |
| Aritra Karar | Project Manager | Manage the project |
| Alankriti Dadlani | Business Analyst | Discuss and Document Requirements |
| Aritra Karar | Technical Lead | Design the end-to-end architecture |
| Alankriti Dadlani | UX Designer | Design the user experience |
| Aritra Karar | Frontend Developer | Develop user interface |
| Aritra Karar | Backend Developer | Design, Develop and Unit Test Services/API/DB |
| Alankriti Dadlani | Cloud Architect | Design the cost effective, highly available and scalable architecture |
| Alankriti Dadlani | Cloud Operations | Provision required Services |
| Sanjay | Tester | Define Test Cases and Perform Testing |

3.2. Responsibility Assignment Matrix

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **RACI Matrix** | |  | | **Team Members** | |  |
| **Activity** | | **Alankriti(BA)** | | **Aritra (Developer)** | **Aritra (Project**  **Manager)** | **Sanjay Key**  **Business**  **User** |
| User Requirement Documentation | | A | | C/I | I | R |
| Development | | A/R | | C | C | C |
| Teesting | | C/I | | A/R | A/R | C/R |
| A | Accountable | |
| R | Responsible | |
| C | Consult | |
| I | Inform | |

Reference

1. https:// www.pmi.org/
2. https:// www.projectmanagement.com/
3. https:// www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/ti-it/ervcpgpm-dsfvpmpt- eng.html