

**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 21CSC303J**

**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** | Ponnuri Aniruddha |
| **Team Members** | Vamshi Gadde (RA2112704010017)  Y Shabanya Kishore (RA2112704010018) |
| **Register Number** | RA2112704010015 |
| **Date of Experiment** | 12/02/2024 |

**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** | **RA2112704010015** | Ponnuri Aniruddha | **Lead** |
| **2** | **RA2112704010018** | Y Shabanya Kishore | **Member** |
| **3** | **RA2112704010017** | Vamshi Gadde | **Member** |

Requirements

<Incorporate the Project plan template>

# 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

# 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) | Designing the User  Login page | 5 | 10,000 |
| E1R1A1T2 | Designing the Home  Page | 7 | 14,000 |
| E1R1A1T4 | Designing the student dashboard | 8 | 10,000 |
| E1R1A1T4 | Designing the teacher dashboard | 8 | 10,000 |
| E1R1A1T3 | Designing the Back End | 10 | 24,000 |
| Identify Data Source for displaying units of Energy Consumption |  | Go through Interface contract (Application Data Exchange) documents | 5 | 10,000 |
|  | Document | 3 | 6,0000 |
|  |  | Software testing | 8 | 16,000 |

|  |  |
| --- | --- |
| **Effort (hr)** | **Cost (INR)** |
| 1 | 5,000 |

# Infrastructure/Resource Cost [CapEx]

|  |  |  |  |
| --- | --- | --- | --- |
| **Infrastructure Requirement** | **Qty** | **Cost per qty** | **Cost per item** |
| IR1 | PC’s | 4 | 70,000 |
| IR2 | Wi-Fi | 1 | 4,000 |
|  | Hosting Server | 1 | 6,000 |
|  | Backup Server | 1 | 6,000 |
|  | Tie-Up with all Department | NA | NA |

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# 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 | 60,00,000 |
| License | Operating System  Database  Middleware  IDE | 10 | 10000 | 1,00,000 |
| Infrastructures | Server, Storage and Network | 20 | 20000 | 4,00,000 |

# Project Team Formation

# Identification Team members

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

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# Responsibility Assignment Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RACI Matrix** | **Team Members** | | | |
|  | Activity Tharun  (Designer) | Praveen  (Developer) | Chidvilas  (Project Manager & BA) | Chidvilas -  Key Business User |
| User Requirement  Documentation | - | C/I | A | R |
| Advertisement | C | C | R |  |
| Development | C | R | I |  |
| Website Design | R | A | I |  |
| Testing /  Deployment | - | A | C |  |
| Bug Fixes | A | R | I |  |
| Update & Upgrade | - | C | A |  |

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

Result:

Thus, the Project Plan was documented successfully.