

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 | |
| Team Members | |
| Register Number | |
| Date of Experiment | |

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 | | | Lead |
| 2 | | | Member |
| 3 | | | Member |

Requirements

<Incorporate the Project plan template>

Result:

Thus, the Project Plan was documented successfully.

1. 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 |

2. 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- Requirement- Activity-Task) E1R1A1T2 E1R1A1T3 | Confirm the user requirements (acceptance criteria) | 3 | |
| Identify Data Source for displaying units of Energy Consumption | | Go through Interface contract (Application Data Exchange) documents Document | 5 | |

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

2.2. Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

| Infrastructure Requirement | Qty | Cost per qty | Cost per item |
|-------------------------------|-----|--------------|---------------|
| IR1 | | | |
| IR2 | | | |
| | | | |

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 |

3. Project Team Formation

3.1. Identification Team members

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

3.2. Responsibility Assignment Matrix

| RACI Matrix | Team Members | | | |
|------------------|--------------|---|----------|------|
| Activity | Name (BA) | Name (BA) Name (Developer) Name (Project Key Business | | |
| | | | Manager) | User |
| User Requirement | Α | C/I | 1 | R |
| Documentation | | | | |
| | | | | |

| Α | Accountable | |
|---|-------------|--|
| R | Responsible | |
| С | Consult | |
| 1 | Inform | |

Reference

- 1. https://www.pmi.org/
- 2. https://www.projectmanagement.com/
- $\begin{array}{lll} \textbf{3.} & \underline{\text{https://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/ti-it/ervcpgpm-dsfvpmpt-eng.html} \end{array}$