# 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** | 09.02.23 |

**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:**

| S No | Register No | Name | Role |
|------|-------------|------|------|
| 1 | RA2111032010006 | Shaurya Singh Srinet | Rep/Member |
| 2 | RA2111032010026 | Shounak Chandra | Member |
| 3 | RA2111032010029 | Parth Galhotra | Member |

**Requirements:**

1. **Project Management Plan:**

| Focus Area | Details |
|------------|---------|
| Integration Management | Governance Framework, Project Team Structure, Roles &amp; Responsibilities of Team, Change Management, (Change Control, Issue Management), Project Closure |
| Scope Management | Scope Statement, Requirement Management (Gathering, Control, Assumption, Constraint Stakeholder), Define Deliverables, Requirement Change Control, Activities and Sub-Tasks |
| 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<br>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<br>People: People & Skills Required<br>Finance: Budget Required<br>Physical: Facilities, IT Infrastructure |
| Stakeholder | Identifying, Analyzing, Engaging Stakeholders |
| Risk Management | Identifying, analyzing, and prioritizing project risks |

## 2. Estimation:

### 2.1. Effort and Cost Estimation:

| Activity Description | Sub-Task | Sub-Task Description | Effort (in hrs) | Cost in INR |
|---|---|---|---|---|
| Web Application Development | E1R1A1T1 | To create desktop level Web Application using Python, Flask and SQL | 6-8 | SQL dev-100K Frontend-43K Backend-100K |
| Research and Development | E2R2A2T2 | Evaluation of software technology trends and incorporating them with updates and patches | 4 | For Research - 20K For rolling out patches/updates – 50K |
| Data Analytics | E3R3A3T3 | Administrator of Data, Database Management, Evaluating trends in data | 10 with shifts | Data Analyst-100K Data Scientist-90K Database Manager 56K |
| Help & Support | E4R4A4T4 | Customer care | 24 with shifts | Customer Care-70K to 80K |
| Licensing/ Trademarks/ Copyrighting | E5R5A5T5 | Database, IDE, Server, Terms, Trademarking, Copyrighting | All time | 25K (one time) |
| Marketing | E6R6A6T6 | Advertisements, Public Relations | 8-10 On requirement | Manager– 68K Coordinator–50K Assistant–25K |
| Testers | E7R7A7T7 | To test the functionality of the software in expected and unexpected conditions | 4 | 240K (one time) |

### 2.2. Infrastructure/Resource Cost [CapEx]:

| Infrastructure Requirement | Qty | Cost per qty | Cost per item |
|---|---|---|---|
| Laptops | 3 | 60,000 | 1,80,000 |
| Telephones | 15 | 1,500 | 22,500 |
| PCs | 15 | 80,000 | 12,00,000 |
| Printers | 2 | 5,000 | 10,000 |
| Office Rooms (Rent) | 5 | 25,000 per month | 1,25,000 |

### 2.3. Maintenance and Support Cost [OpEx]:

| Category | Details | Qty | Cost per qty per annum | Cost per item |
|---|---|---|---|---|
| People | Network, DB Admin, Customer support, Developers | 4 | 10,00,000 | 40,00,000 |
| License | Database, server, Middleware, Government License | 3 | 10,000 | 30,000 |
| Infrastructures | Server Storage and Network | 1 | 10,000 | 20,000 |

### 3. Project Team Formation:

#### 3.1. Identification Team Members:

| Name | Role | Responsibilities |
|------|------|------------------|
| Shaurya Srinet | Project Lead | Design end-to-end architecture, provide training and support, team management, monitoring and controlling |
| Parth Galhotra | UX Designer | Design overall visual user experience |
| Parth Galhotra | Frontend Developer | Develop user interface |
| Shounak Chandra | Backend Developer | Coding and Debugging, UI testing to optimize performance, maintaining database |
| Shaurya Srinet | Quality Assurance Lead | Come up with questionnaires and surveys, random quality checks |
| Shounak Chandra | Tester | Perform testing for various test cases, identifying flaws |

#### 3.2. Responsibility Assignment Matrix:

| RACI Matrix | Team Members | | | |
|-------------|--------------|---|---|---|
| Activity | Name (BA) | Name (Developer) | Name (Project Manager) | Key Business User |
| User Requirement Documentation | A | C | I | R |
| Web Application Development | I | R | A | C |
| Data Analytics | C | R | A | I |
| Research and Development | I | R | A | C |
| Testing | I | R | A | C |
| Marketing | C | I | A | R |

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

### Result:

Thus, the Project Plan was documented successfully.