**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	Kumari Harshita
Team Members	NANDAVARDHAN ,BHANU PRAKASH, HARSHITHA, MAHESH REDDY
Register Number	RA2111028010060
Date of Experiment	20-02-2023

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	RA2111028010043	NANDAVARDHAN	**Lead**
2	RA2111028010056	MAHESH REDDY	**Member**
3	RA2111028010060	HARSHITHA	**Member**
4	RA2111028010041	BHANU PRAKASH	**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, Analysing, Engaging Stakeholders
Communication Management	Determine communication requirements, roles and responsibilities, tools and techniques. [Type of Communication, Schedule, Mechanism Recipient]
Risk Management	Identifying, analysing, and prioritising project risks
Procurement Management	Adhering to organisation 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)	Confirm the user requirements (acceptance criteria)	3	1500
	E1R1A1T2	Distribution of design work to team	2	1000
	E1R1A1T3	Designing the User interface	8	4000
Identify Data Source for displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	8	4000
		Documentation	4	2000

Effort (hr)	Cost (INR)
1	500

2.2.　Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

Infrastructure Requirement	Qty	Cost per qty	Cost per item
Smart electric metres	number of electric sources	1500*number of electric sources	1500

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

3.2. Responsibility Assignment Matrix

RACI Matrix	Team Members			
Activity	Bhanu (BA)	Harshita, Mahesh Reddy (Developer)	Nandavardhan R (Project Manager)	Key Business User
User Requirement Documentation	A	C/I	I	R
Development	C	A	C/I	C

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