School of Computing
SRMIST, Kattankulathur - 603203

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	Abdul Ahad
Team Members	Disha Yadav, Shitij Chauhan
Register Number	RA2111028010094
Date of Experiment	14-02-2023

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	RA2111028010094	Abdul Ahad	Lead
2	RA2111028010080	Disha Yadav	Member
3	RA2111028010088	Shitij Chauhan	Member

Requirements

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

- ## 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)	Design the elevator authentication control portal	6	10000
	E1R1A1T2	Designing the securing system	5	8000
	E1R1A1T3	Designing and plotting the function keys	8	14000
	E1R1A1T4	Designing the admin host page to keep a track on every individual	10	20000
	E1R1A1T5	Making and integrating all the different system in the home page	100	240000

Identify Data Source for displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	5	10000
		Software testing	8	16000
		Document	4	6000

Effort (hr)	Cost (INR)
1	2000

• Infrastructure/Resource Cost [CapEx]

Infrastructure Requirement	Qty	Cost per qty	Cost per item
IR1	PC's	4	80000
IR2	Hosting Server	1	5000
IR3	Wi-Fi	1	4000

• 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

2. Project Team Formation
• Identification Team members

Name	Role	Responsibilities
Abdul Ahad	Key Business User (Product Owner)	Provide clear business and user requirements

Disha Yadav	Project Manager	Manage the project
Abdul Ahad	Business Analyst	Discuss and Document Requirements
Disha Yadav	Technical Lead	Design the end-to-end architecture
Shitij Chauhan	UX Designer	Design the user experience
Disha Yadav, Shitij Chauhan	Frontend Developer	Develop user interface
Abdul Ahad, Disha Yadav	Backend Developer	Design, Develop and Unit Test Services/API/DB
Disha Yadav, Abdul Ahad	Cloud Architect	Design the cost effective, highly available and scalable architecture
Abdul Ahad	Cloud Operations	Provision required Services
Shitij Chauhan	Tester	Define Test Cases and Perform Testing

• **Responsibility Assignment Matrix**

RACI Matrix	Team Members			
Activity	Abdul Ahad (Designer)	Disha Yadav (Developer)	Disha Yadav (Project Manager & BA)	Shitij Chauhan - Key Business User
User Requirement Documentation	-	C/I	I	R
Advertisement	C	C	R	A
Development	C	R	I	-
Website Design	R	A	I	-
Testing / Deployment	C	A	C	R
Bug Fixes	A	R	I	-
Update & Upgrade	C	C	A	-

A	Accountable
R	Responsible
C	Consult
I	Inform

Result: Thus, The project plan was documented successfully.