School of Computing

SRM IST, Kattankulathur – 603 203

Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	5
Title of Experiment	Prepare Work breakdown structure, Timeline chart, Risk identification table
Name of the candidate	**Kumari Harshita**
Team Members	**BHANUPRAKASH,KUMARIHARSHITA, NANDAVARDHAN R, MAHESH REDDY**
Register Number	**RA2111028010060**
Date of Experiment	**28-02-2023**

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

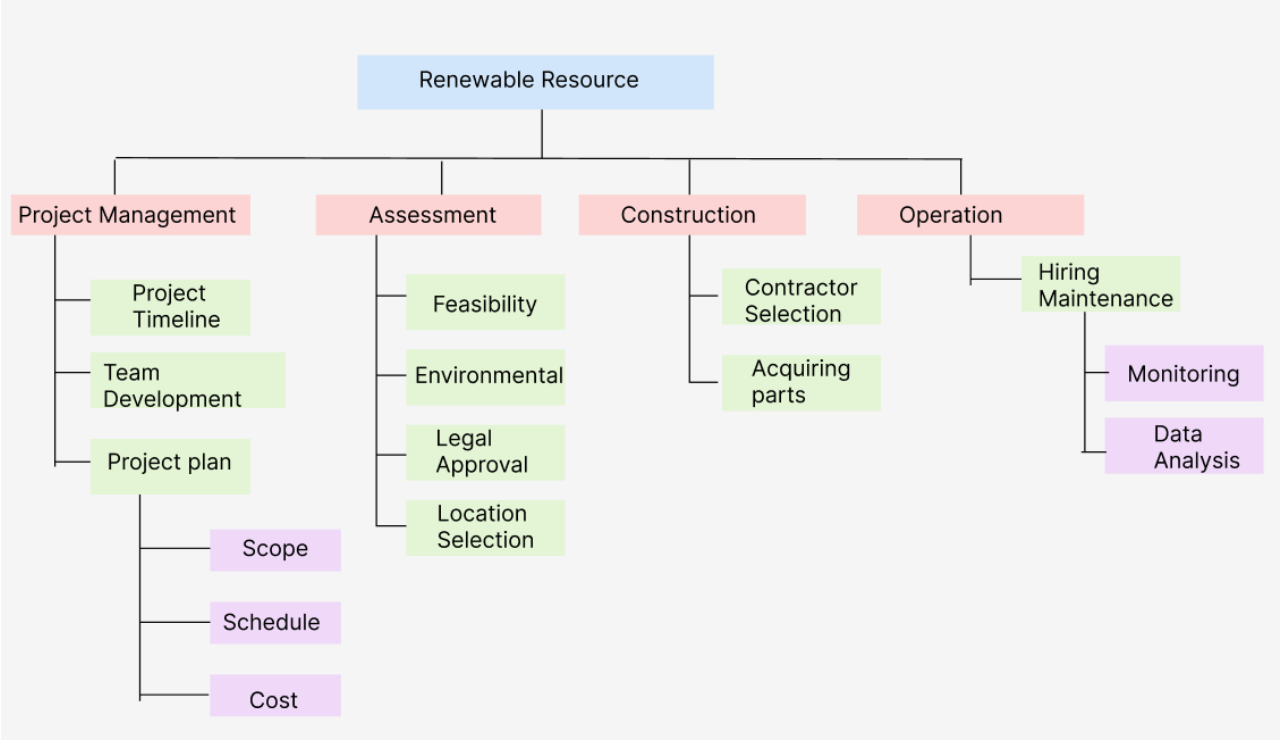
Aim

To Prepare Work breakdown structure, Timeline chart and Risk identification table

Team Members:

Sl No	Register No	Name	Role
1	RA2111028010043	NANDAVARDHAN R	Rep
2	RA2111028010056	MAHESH REDDY	Member
3	RA2111028010060	KUMARI HARSHITA	Member
4	RA2111028010041	BHANU PRAKASH	Member

Work Breakdown Structure(WBC)



1. Project Management
   1.1 project Timeline
   1.2 Team Development
   1.3 Project Plan
      1.3.1 Scope
      1.3.2 Schedule
      1.3.3 Cost
2. Assessment
   2.1 Feasibility

2.2 Environmental
2.3 Legal Approval
2.4 Location Selection

3. Construction
   3.1 Constructor
   3.2 Acquiring Parts

4. Operation
   4.1 Hiring Maintenance
      4.1.1 Monitoring
      4.1.2 Data Analysis

RISK ANALYSIS

Strengths

- Low maintenance requirements
- No additional costs for fuel nor delivery logistics
- Environmental impact low compared with conventional energy sources
- Mature,well developed, technology in developed countries

Weaknesses

- Requires a suitable site
- High capital/initial investment costs can impede development
- Potential market needs to be large enough to support expertise/equipment required for implementation
- Transport access problems for installation of large system in remote areas

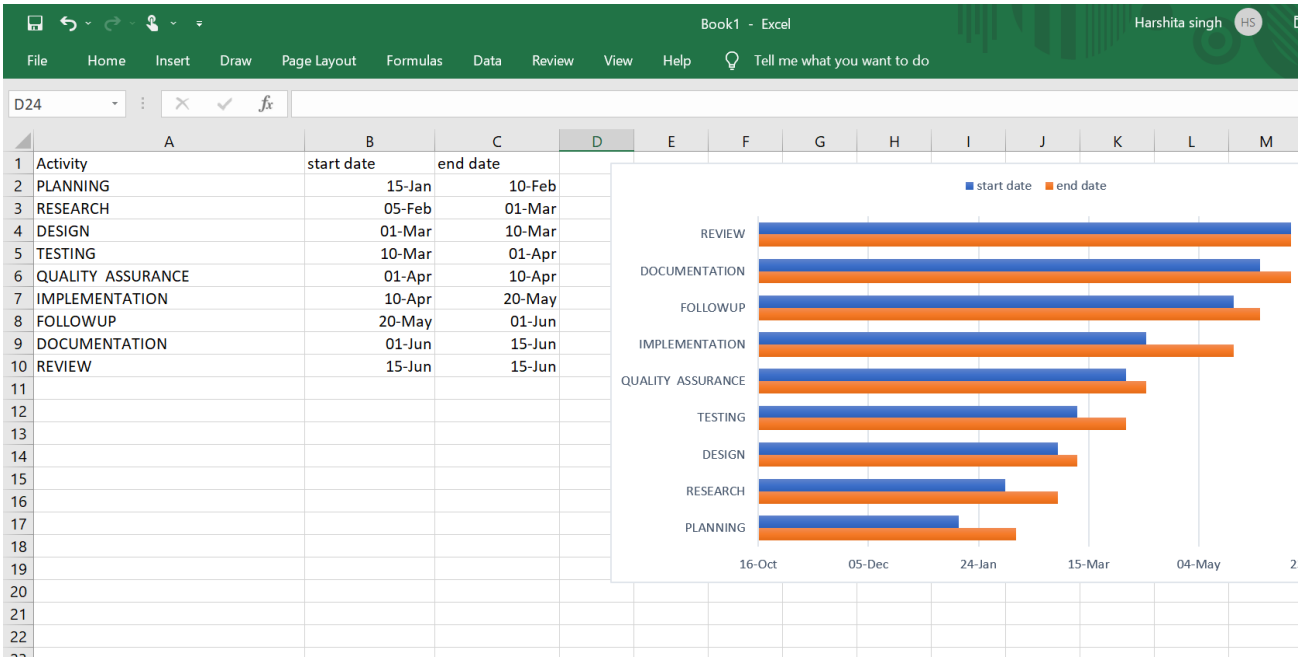
Opportunities

- Regional cooperation of stakeholder
- Increased energy efficiency
- Use of new technologies
- Higher prestige

Threats

- Lack of domestic policy organization
- Increased urbanization
- Not efficient of export/import of goods
- Lack of government synchronization

TIMELINE-GANTT CHART



Activity	start date	end date
PLANNING	15-Jan	10-Feb
RESEARCH	05-Feb	01-Mar
DESIGN	01-Mar	10-Mar
TESTING	10-Mar	01-Apr
QUALITY ASSURANCE	01-Apr	10-Apr
IMPLEMENTATION	10-Apr	20-May
FOLLOWUP	20-May	01-Jun
DOCUMENTATION	01-Jun	15-Jun
REVIEW	15-Jun	15-Jun

RISK MANAGEMENT FRAMEWORK-RISKS AND MITIGATION

Response	Strategy	Example
Avoid	Avoiding the risk by eliminating or avoiding the cause of the risk	If the risk is related to a particular component of the renewable energy system, the component can be replaced or redesigned to avoid the risk.
Transfer	Transferring the risk to another party, such as an insurance company or a third-party contractor.	Insurance can be purchased to cover potential losses from natural disasters or equipment failures.
Mitigation	Mitigating the risk by reducing the severity of the potential impact. This may involve implementing contingency plans to minimize the impact of potential disruptions or failures.	If a renewable energy system is being constructed in an area known for high winds, measure can be taken to increase the stability of the wind turbines, and reduce the risk of them toppling over

Accept	Accepting the risk and preparing for the consequences. This may involve developing a plan to manage the risk and mitigate, while acknowledging that this cannot be completely eliminated.	If there is a risk of damage to renewable energy system from a natural disaster, the system owner may accept the risk and allocate resources to repair the system it necessary

RMMM PLAN

Risk	Monitoring	Mitigation
Unpredictable weather patterns	The renewable energy system should be equipped with weather monitoring sensor to track the weather condition	By utilizing multiple renewable energy sources, such as wind turbines and solar panels, the impact of unpredictable weather patterns on energy generation can be minimized.
Technical failure and breakdown	Regular inspections and maintenance of the renewable energy system should be conducted to identify the potential technical issues early on.	Using remote monitoring systems and data analytics to monitor the performance of the renewable energy system in real time, allowing for the promotion of identification and resolution of any technical issues.
Wildlife interference	Implementing wildlife monitoring system to track the activity of wildlife near the renewable energy system	Developing the strategies to reduce the impact of the renewable energy system on the local wildlife, such as modifying the design of the system or adjusting the location of the system.
Cost overruns	Regular tracking of expenses related to the construction and operation of the system	Conducting a thorough cost-benefit analysis before the project begins, establishing a budget, and tracking expenses closely throughout the project to identify the potential cost overruns early on.

Result:

Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.