



**SE324 – Software Project Management &
Economics
- HW 2-**

Group 11:

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1. Project Topics

- 1) Project Name: VirtualNet
- 2) Group Number: 11
- 3) Responsibility list of group members:

Responsibility	Uğur Cihan İçöz	Sümeyye Ayşe Özdemir	Şevval Gül Şahin
Project Management	X	X	
Installation			X
Software Design	X	X	X
Testing			X
Support Service	X	X	

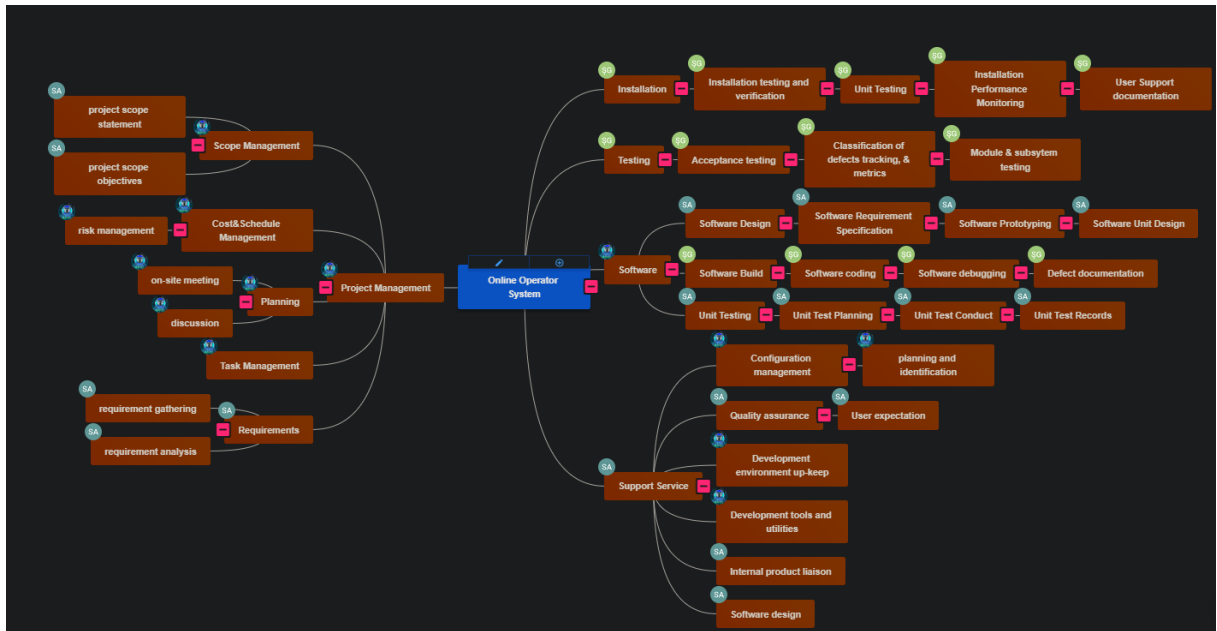
2. Risks of VirtualNet

	Risks	Analysis of risks	Risk Response
Technical Risks	Integration issues with existing systems or third-party services.	Integration complexities can arise due to differences in data formats, APIs, or system compatibility	Conduct thorough compatibility and integration testing during the development phase. Collaborate closely with third-party service providers and conduct regular communication to address any integration challenges.
	Performance bottlenecks and scalability issues under high user load.	The system may face challenges in handling a large number of concurrent users and maintaining optimal performance.	Perform load testing and capacity planning to identify performance bottlenecks and optimize system resources. Consider implementing caching mechanisms, horizontal scaling, and resource monitoring to ensure scalability.
Security Risks	Data breaches and unauthorized access to customer information.	The system will handle sensitive customer data, making it a potential target for malicious attacks or data breaches.	Implement robust security measures such as encryption, secure authentication protocols, and regular security audits. Adhere to industry best practices and compliance standards to protect customer data.
	Vulnerabilities in the system leading to exploitation by hackers.	Malicious actors may attempt to exploit weaknesses in the system, leading to unauthorized access or service disruptions.	Conduct regular security testing and vulnerability assessments to identify and patch any security vulnerabilities. Stay up to date with security patches and updates for the system's underlying infrastructure and software components.
Project Management Risks	Inadequate resource allocation and skill gaps	Insufficient resources or lack of expertise in certain areas can lead to delays or	Conduct a comprehensive resource and skill assessment early in the project to identify any gaps. Allocate resources

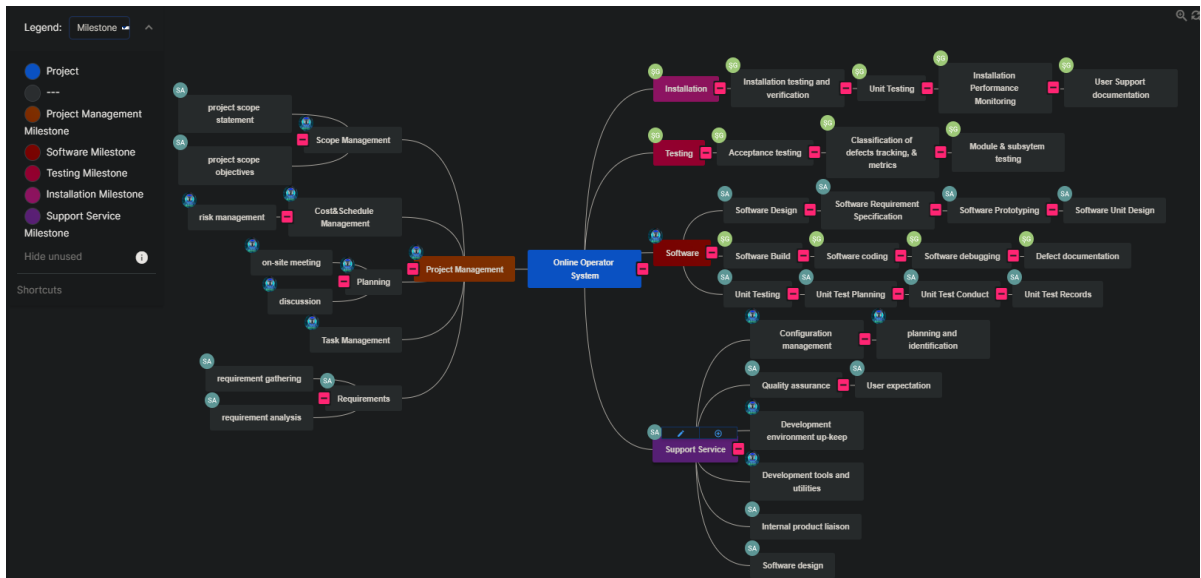
		quality issues in project deliverables.	effectively and provide necessary training or acquire external expertise if needed.
	Scope creep and changing requirements.	The project may face scope creep or evolving requirements that can impact project timelines and budgets.	Establish a robust change management process to evaluate and prioritize changes. Clearly define project scope and engage stakeholders in regular communication to manage expectations.
Environmental Risks	Power outage	Such as a hurricane or a major thunderstorm. This can cause disruptions in the system's operations and lead to downtime, resulting in financial losses and reputational damage. Additionally, environmental factors such as extreme temperatures or humidity can affect the performance of servers and other equipment, potentially leading to hardware failures and data loss.	<p>Backup Power: Implementing backup power systems, such as generators or battery backups, can help ensure that critical systems and data remain online during power outages.</p> <p>Redundant Systems: Implementing redundant systems and infrastructure can help ensure that if one system or component fails, there is a backup in place to take over and avoid downtime.</p> <p>Cloud Computing: Migrating critical systems and data to the cloud can provide greater resilience against power outages, as cloud providers often have multiple data centers in different regions that can maintain uptime.</p> <p>Regular Maintenance: Regularly maintaining and upgrading the system's infrastructure and equipment can help prevent power outages caused by hardware failures or other technical issues.</p> <p>Disaster Recovery Plan: Implementing a comprehensive disaster recovery plan can help minimize the impact of power outages by outlining steps to restore critical systems and data as quickly as possible.</p>

3.WBS

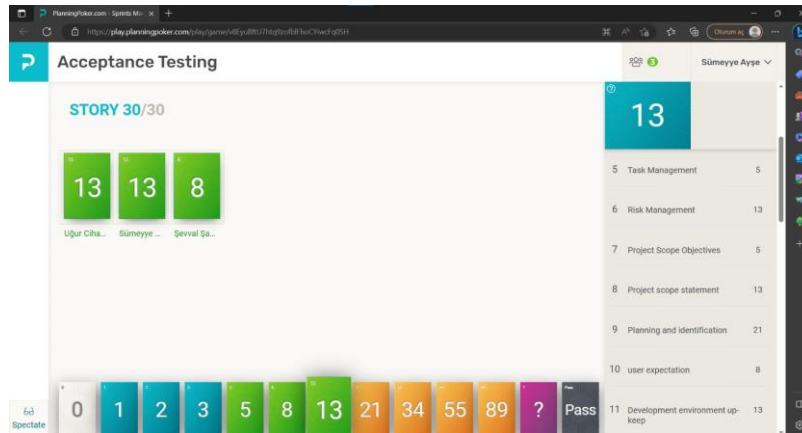
1) WBS with Deliverables:



2) WBS with Milestone:



4.Planning Poker



As requested in our homework, we have determined the times of each work package in Planning Poker. To us, it was feasible and fun. Because each individual in the group chooses how long each work package time will take according to himself, and the time is determined according to the resulting average. Our result was also formed in the form of the screenshot you see below.

Your Planning Poker® Game Summary

Se324 Online Operatoring System

This a demo for OOS. Aim is defining time for milestones.

Story	Story Title	Score
1	Requirement Analysis	13
2	Requirement Gathering	8
3	Discussion	5
4	On-site Meeting	3
5	Task Management	5
6	Risk Management	13
7	Project Scope Objectives	5
8	Project scope statement	13
9	Planning and identification	21
10	user expectation	8
11	Development environment up-keep	13
12	Software Design	21
13	Internal product liaison	5
14	Development Tools and Utilities	13
15	Software Unit Design	13
16	Software Prototyping	8
17	Software Requirement Specification	5
18	Defect Documentation	8
19	Software Debugging	13
20	Software Coding	34
21	Unit Test Planning	5
22	Unit Test Conduct	13
23	Unit Test Records	21
24	User Support Documentation	5
25	Installation Performance Monitoring	8
26	Unit Testing	21
27	Installation Testing and Verification	21
28	Module & Subsystem testing	13
29	Classification of defects tracking & metrics	13
30	Acceptance Testing	13

5.Gantt Chart

