PROJECT PLAN

Document Date: 11/11/2023

Project Title: SeatSale

Team Members:
Meryem Durdu - Team Leader & Full Stack Developer
Betül Abdülkadir - Project Sponsor & Full Stack Developer
Mehmet Fatih Yıldız - Project Initiator & Backend Developer
Mesk Wadhah Abdulqader Abdulqader - Full Stack Developer
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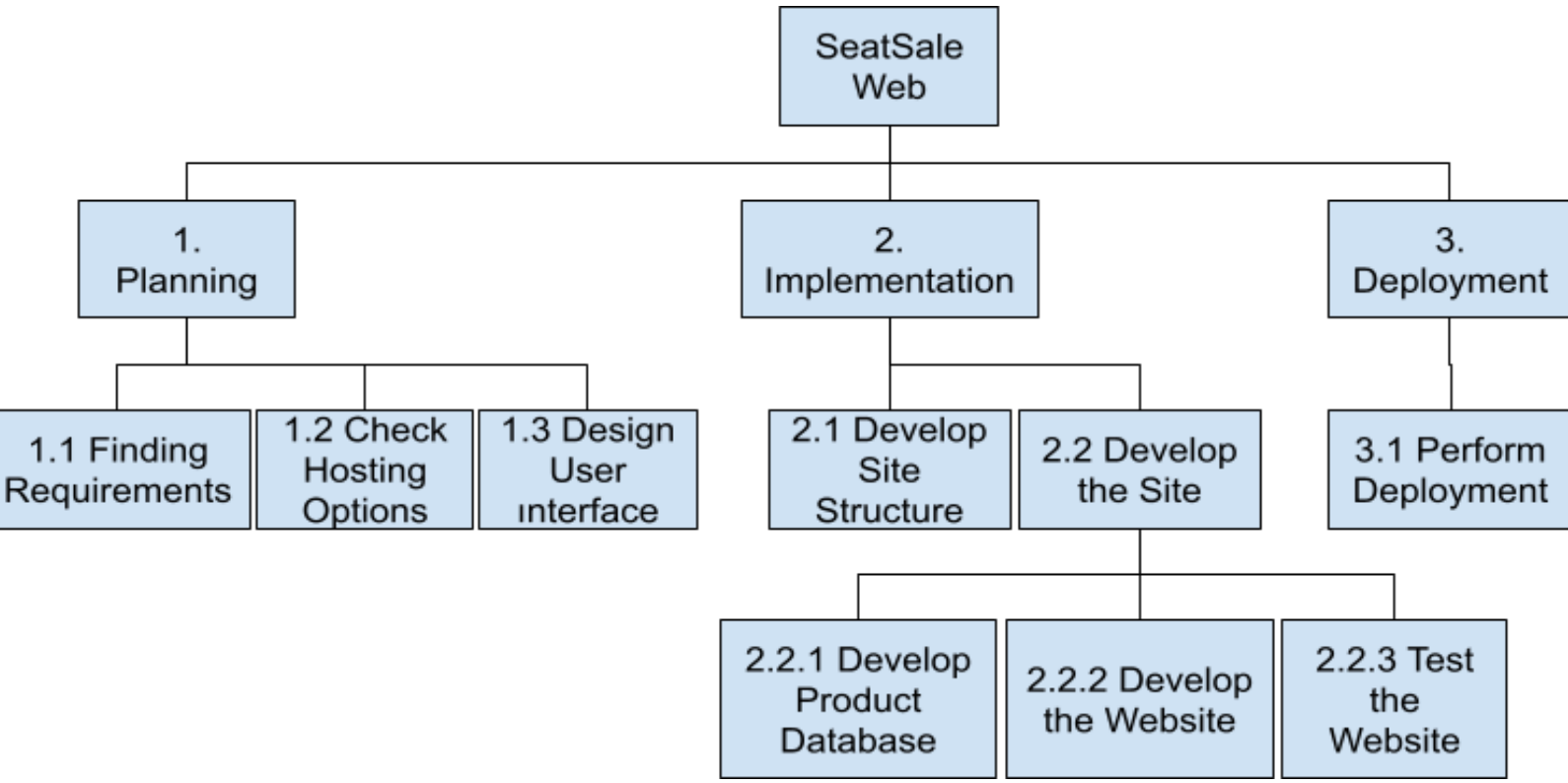
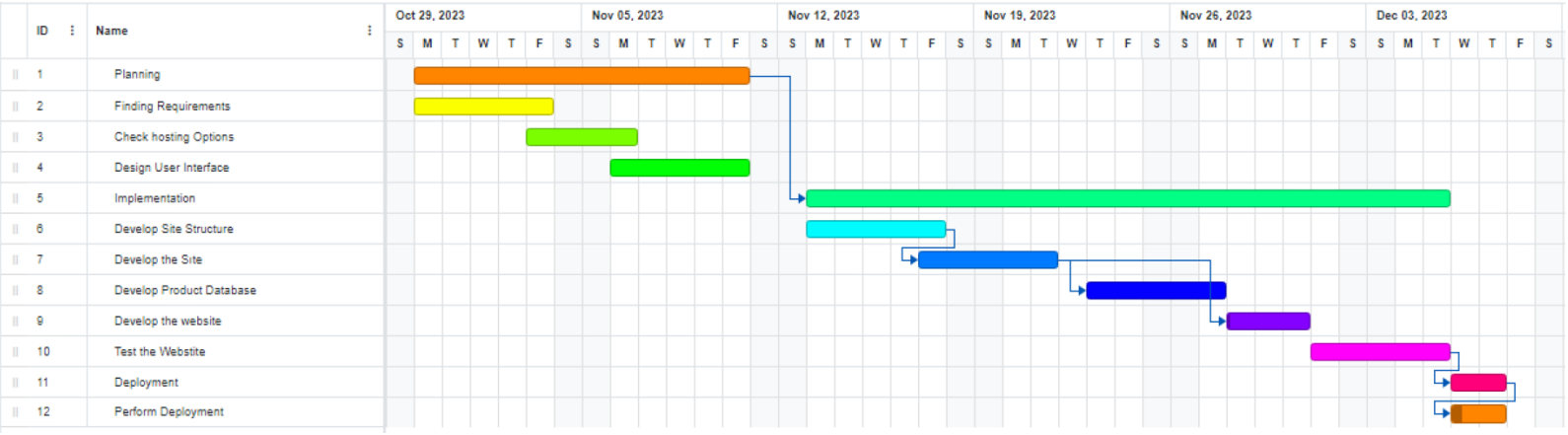
Software Development Methodology: Waterfall Model

WBS

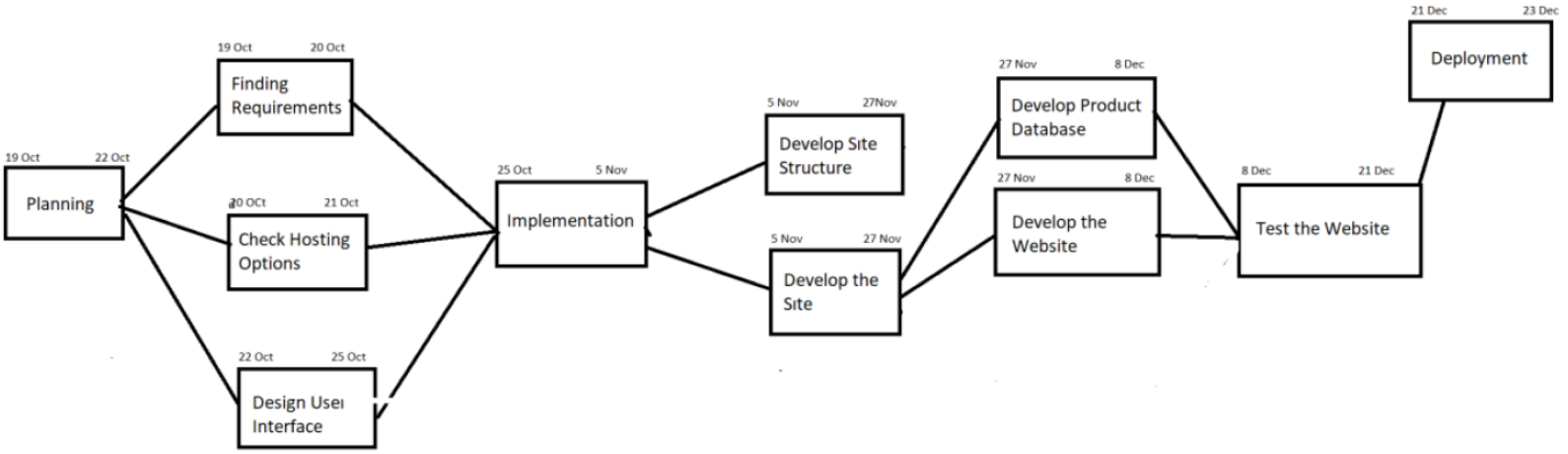

SeatSale Web
1. Planning
2. Implementation
3. Deployment
1.1 Finding Requirements
1.2 Check Hosting Options
1.3 Design User ınterface
2.1 Develop Site Structure
2.2 Develop the Site
3.1 Perform Deployment
2.2.1 Develop Product Database
2.2.2 Develop the Website
2.2.3 Test the Website

ID	WBS element	Description
1.	PLANNİNG	Consider all budget issues and coordination activities, including total timing.
1.1	Finding Requirements	Functional and non-functional requirements of the system.
1.2	Check Hosting Options	Researching for the best website hosting providers for the website to deploy.
1.3	Design User Interface	Design of the system.
2.	IMPLEMENTATİON	Code and executable.
2.1	Develop Site Structure	Usability and user experience which makes web structuring an important step in the web design process.
2.2	Develop the Site	The coding or programming that enables website functionality, per the owner's requirements.
2.2.1	Develop Product Database	Create a structure that will allow for the efficient storage and retrieval of data.
2.2.2	Develop the Website	Ensures a systematic approach to website development by breaking down the project into manageable tasks.
2.2.3	Test the Website	System test plans and reports.
3.	DEPLOYMENT	The act or movement of deploying or the state of being deployed.
3.1	Perform Deployment	Deployment of the final version of the website.

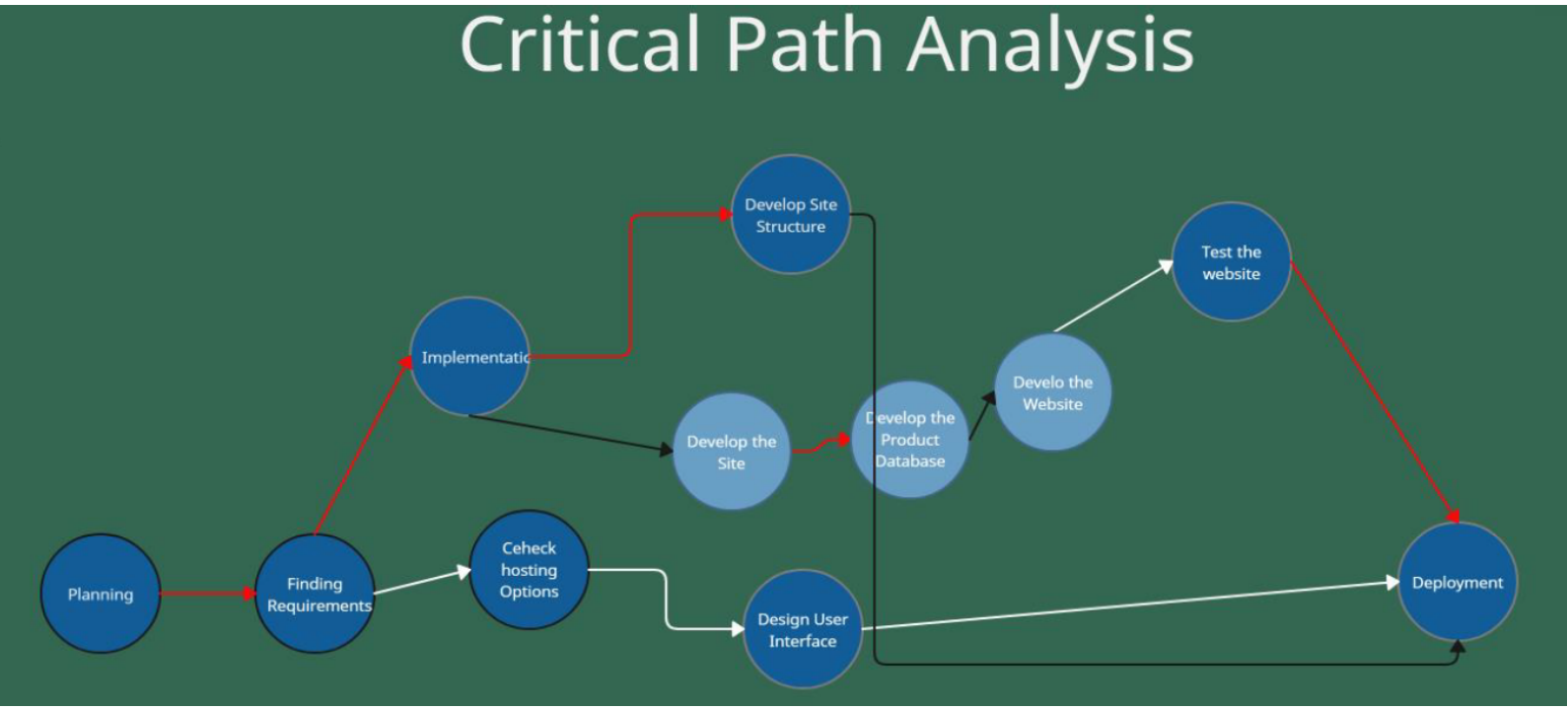
Gantt Chart



Network Activity Diagram



Critical Path Analysis



Cost Estimation

	#Units/Hrs	Cost/unit/Hr.	Subtotals	WBS Level 1 Total is	% Of Total
WBS Items					
1. Planning				$21	21%
1.1 Finding Requirements	4	1	4		
1.2 Check Hosting Options	5	1	5		
1.3 Design User Interface	12	1	12		
2. Implementation				$75	75%
2.1 Development Site Structure	3	1	3		
2.2 Develop the Site					
2.2.1 Develop Product Database	11	2	22		
2.2.2 Develop the Website	23	2	46		
2.2.3 Test the Website	4	1	4		
3. Deployment				$4	4%
3.1 Perform Deployment	2	2	4		
Total project Cost Estimate				$100	100%

ID	Activity	Responsible	Estimated effort (Person-Hours)
1	**Planning**		
1.1	Finding Requirements	Mesk	4
1.2	Check Hosting Options	Meryem	5
1.3	Design User Interface	Alper	12
2	**Implementation**		
2.1	**Develop Site Structure**		
2.1.1	Develop Site Structure	Mesk	3
2.2	**Develop the Site**		
2.2.1	Develop Product Database	Fatih	11
2.2.2	Develop the Website	Betül	23
2.2.3	Test the Website	Meryem	4
3.	**Deployment**		
3.1	Perform Deployment	Fatih	2

Item	Quantity (person-hours)	Unit cost	Total cost
Requirements analyst	9	$ 1,00	$ 9,00
Programmers	37	$ 2,00	$ 74,00
DBA/Designer	12	$ 1,00	$ 12,00
Tester/Installer	6	$ 1,00	$ 6,00
		Total	**$ 101,00**

Risk Factors

1. Technical Risks (Data Security): Ensuring that customer data is kept secure is paramount. Data breaches can result in legal issues, reputational damage, and financial loss.

2. Operational Risks (Infrastructure Failures): If the website releases on servers, network connections, or other infrastructure, any downtime or disruptions can impact ticket sales.

Operational Risks (Payment Processing Issues): Problems with payment gateways can prevent customers from purchasing tickets.

3. Market Risks (Competitive Pressure): New entrants or existing competitors can affect the project's success. Understanding the competitive landscape is essential.

Market Risks (Market Demand Fluctuations): Seasonal variations or unforeseen events (e.g., a pandemic) can affect ticket demand.

4. Financial Risks (Budget Overruns): Poor financial management can lead to cost overruns, potentially causing the project to stall or fail.

Financial Risks (Revenue Projections): Overestimating ticket sales could lead to financial shortfalls.

5. Vendor and Supplier Risks (Vendor Lock-In): Relying on a single vendor for critical services may result in limited flexibility and increased costs.

6. User Adoption and Experience Risks (User Acceptance): If the website's user interface and user experience aren't well-received , it can impact adoption rates.

User Adoption and Experience Risks (Accessibility and Usability): Ignoring accessibility requirements can lead to legal issues and exclude potential customers

7. Cybersecurity Risks (Cyberattacks): The project can be vulnerable to hacking, DDoS attacks, and other cyber threats, potentially resulting in data breaches and service disruption.

8. Resource Risks (Staffing Issues): Key team members leaving, skill shortages, or inadequate training can hinder the project's progress.

9. Scope Creep : Expanding the project's scope beyond the initial plan can result in timeline delays and increased costs.

10. External Environmental Risks: Natural disasters, pandemics , or other unforeseen events can disrupt project activities and the transportation industry itself.

Mitigation Strategies

1. Technical Risks (Data Security):

- Implement strong encryption and access control measures
- Regularly update security protocols and software to stay ahead of potential threats
- Conduct security audits and penetration testing to identify vulnerabilities

2. Operational Risks (Infrastructure Failures):

- Use redundant servers and network connections to minimize downtime.
- Set up monitoring and alert systems to quickly identify and address infrastructure issues
- Consider cloud-based services that provide high availability and scalability

Operational Risks (Payment Processing Issues):

- Diversify payment gateways to reduce reliance on a single provider
- Regularly test payment processing systems to ensure they are functioning properly

3. Market Risks (Competitive Pressure):

- Continuously monitor the competitive landscape to adapt to changing market conditions
- Differentiate your ticketing service through unique features or services

Market Risks (Market Demand Fluctuations):

- Create flexible pricing and ticket refund policies to adapt to changing demand
- Diversify your event offerings to cater to different audiences

4. Financial Risks (Budget Overruns):

- Implement rigorous financial management and reporting processes
- Use project management tools to track and control project expenses

Financial Risks (Revenue Projections):

- Base revenue projections on realistic data and market analysis
- Have contingency plans in place in case revenue falls short of projections

5. Vendor and Supplier Risks (Vendor Lock-In):

- Build relationships with multiple vendors to maintain flexibility
- Use open standards and interfaces to avoid proprietary lock-in

6. User Adoption and Experience Risks (User Acceptance):

- Conduct user testing and gather feedback during the development process
- Continuously improve the user interface and experience based on user feedback

User Adoption and Experience Risks (Accessibility and Usability):

- Comply with accessibility standards and regulations
- Ensure that usability testing includes participants with a range of abilities

7. Cybersecurity Risks (Cyberattacks):

- Implement robust cybersecurity measures, including firewalls, intrusion detection systems, and regular security audits
- Train staff on security best practices and establish an incident response plan

8. Resource Risks (Staffing Issues):

- Cross-train team members to mitigate the impact of key personnel leaving
- Develop a recruiting and retention strategy to address skill shortages

9. Scope Creep:

- Clearly define the project scope and objectives from the outset
- Use change control procedures to evaluate and approve any scope changes

10. External Environmental Risks:

- Develop a business continuity plan that includes strategies for dealing with natural disasters and other external disruptions
- Diversify supply chains to mitigate the impact of unforeseen events

Likelihood of Risk Factors and Impacts of Risk Factors

1. Technical Risks (Data Security):

Probability: Moderate to High
Effects: Legal consequences, reputational damage, financial loss

2. Operational Risks (Infrastructure Failures):

Probability: Moderate
Effects: Downtime, impact on ticket sales

Operational Risks (Payment Processing Issues):
Probability: Moderate
Effects: Loss of revenue, customer dissatisfaction

3. Market Risks (Competitive Pressure):

Probability: High
Effects: Decreased market share, pricing pressures

Market Risks (Market Demand Fluctuations):
Probability: Moderate to High
Effects: Revenue fluctuations, unsold inventory

4. Financial Risks (Budget Overruns):

Probability: Moderate
Effects: Stalled or failed project, financial instability

Financial Risks (Revenue Projections):
Probability: Moderate to High
Effects: Financial shortfalls, inability to meet obligations

5. Vendor and Supplier Risks (Vendor Lock-In):

Probability: Moderate
Effects: Limited flexibility, increased costs

6. User Adoption and Experience Risks (User Acceptance):

Probability: Moderate
Effects: Low adoption rates, negative brand perception

User Adoption and Experience Risks (Accessibility and Usability):
Probability: Moderate
Effects: Legal issues, exclusion of potential customers

7. Cybersecurity Risks (Cyberattacks):

Probability: High
Effects: Data breaches, service disruption

8. Resource Risks (Staffing Issues):

Probability: Moderate
Effects: Hindered project progress, knowledge gaps

9. Scope Creep:

Probability: Moderate
Effects: Timeline delays, increased costs

10. External Environmental Risks:

Probability: Low to Moderate
Effects: Disruption of project activities , industry-wide impact