# Milestone 1 – Outputs from Module 1 - 3

Table of Contents

[Milestone 1 – Outputs from Module 1 - 3 1](#_Toc160479674)

[Module 1 2](#_Toc160479675)

[Exercise 1: Characterizing a software project 2](#_Toc160479676)

[Exercise 2: Stakeholder analysis 3](#_Toc160479677)

[Exercise 3: Project Management Areas 5](#_Toc160479678)

[Exercise 4: SWOT analysis 5](#_Toc160479679)

[Module 2 7](#_Toc160479680)

[Exercise 2: Project Layout 7](#_Toc160479681)

[Exercise 3: Project success criteria 8](#_Toc160479682)

[Exercise 4: Requirement Gathering and Analysis 9](#_Toc160479683)

[Exercise 5: Work Breakdown Structure (WBS) 10](#_Toc160479684)

[Exercise 6: Scope validation 11](#_Toc160479685)

[Module 3 12](#_Toc160479686)

[Exercise 1: Network Diagram and Critcal Path Analysis 12](#_Toc160479687)

[Exercise 2: Gantt Chart 15](#_Toc160479688)

[Exercise 3: Time control 16](#_Toc160479689)

[Milestone 2 – Output of modules 4-6 16](#_Toc160479690)

[Module 4 16](#_Toc160479691)

[**Exercise 1** 16](#_Toc160479692)

[**Exercise 2** 17](#_Toc160479693)

[Module 5 18](#_Toc160479694)

[Module 6 18](#_Toc160479695)

[Exercise 1 18](#_Toc160479696)

[Exercise **2** 19](#_Toc160479697)

## Module 1

### Exercise 1: Characterizing a software project

**Project Overview:**

* USNStart is a new co-working facility being developed at the Bø Campus of the University og South-Eastern Norway.
* It aims to create a colaborative and dynamic environment for student entrepreneurs, professionals, and individuals from larger companies.
* The project involves designing and developing a website to attract potential members, showcase the space and its offering, and facilitat desk bookings.

**Target Audience:**

* Student entrepreneurs
* Professionals seeking a co-workig space
* Individuals from larger companies who live or want to move to the region
* Existing teanants like Revisorteam, YourCompanion, GreenEnergy, and VismaAI

**Website Features:**

* Responsive design for desktop, tablet, and mobile devices
* Informative ontent about the co-working space, membership plans, and existing tenants
* Engaging visuals sowcasing the interior and amenities
* Desk booking functionality
* Integration of privacy and security measures.

**Project aim:**

* Design and development of the website
* Content creation
* Integration of visuals and videos
* Privacy and security implementation
* Stakeholder feedback and review

**Deliverables:**

* A functional and visually appealing website for USNStart Coworking space.

### Exercise 2: Stakeholder analysis

**University of South-Eastern Norway (USN)**

**Students**

**Professionals:** Including entrepreneurs and employees from local enterprises.

**Project Team:** Developers, designers, project managers responsible for executing the project.

**Existing Tenants:** Companies like Revisorteam, YourCompanion, GreenEnergy, VismaAI

**Regulatory Bodies:** Authorities responsible for ensuring compliance with safety and regulatory standards.

**USN**

Interest: High – USN started the project

Influence: High – As the project sponsor USN has very high influence over the project’s direction, budget and resources

Impact: High – Succeeding reflects very positively on USN’s reputation.

**Students**

Interest: High – Students are the primary users targeted by the coworking space initiative.

Influence: Moderate – The students’ needs shape the space’s design and functionality.

Impact: Moderate – The student’s satisfaction and utilization of the coworking space contribute to its success

**Professionals (Entrepreneurs, employees from local enterprises)**

Interest: Moderate – Professionals seeking a coworking space might be invested in its suitability for their work and collaboration.

Influence: Moderate – They may influence the project a bit through feedback and engagement.

Impact: Moderate – The presence of professionals contribute to the coworking space’s diversity and potential for networking.

**Project team (Developers, Project Managers, Designers)**

Interest: High – The project team is directly responsible for the implementation of the coworking space and highly interested in its outcome.

Influence: High – The team’s decisions and actions affect the projects’ progress and quality

Impact: The project team’s competence and performance directly impact the coworking space’s design, functionality and user experience

**Existing tenants (Revisorteam, YourCompanion, GreenEnergy, VismaAI**

Interest: Moderate – Existing tenants wants continued suitability for their work I the new coworking space

Influence: Moderate – They may provide valuable insight into the project based on their experiences but usually do not have significant decision-making power.

Impact: Moderate – The satisfaction of existing tenants contributes to the coworking space’s stability and sense of community.

**Regulatory Bodies (Government)**

Interest: Moderate – Regulatory bodies want the project to keep in compliance with safety, zoning and operational standards.

Influence: Moderate – They have authority over compliance requirements and may interject if needed

Impact: Moderate – Non-compliance with regulations could hinder the project and result in fines and delays.

Potential conflicts and resolutions between stakeholder groups:

**Budget Allocation**

Conflict: The budget constraints might cause conflict.

Resolution: Conduct a thorough cost-benefit analyses and prioritizing essential features. Transparent communication about budget limitations is essential.

**Design Preferences**

Conflict: Students, professionals and existing tenants might have different preferences regarding space layout, structure and atmosphere.

Resolution: Seeking common ground and compromise to accommodate various needs.

**Resource Allocation**

Conflict: The project team may prioritize resources towards technical infrastructure while existing tenants prioritize amenities or other community-building initiatives.

Resolution: Balance resource allocation based on stakeholder priorities and project requirements. Establish clear criteria for resource allocation and decision-making processes to ensure fairness and transparency.

**Competition for Space and Resources**

Conflict: Students, professionals and existing tenants may compete for limited space.

Resolution: Implement reservation systems or shared schedules to manage space and resource utilization effectiviely.

### Exercise 3: Project Management Areas

* Establish clear project goals, scope, and deliverables to ensure everyone is aligned and expectations are managed.
* Create realistic timeline with milestones for website development, content creation, testing, and launch.
* Assign clear roles and responsibilities to team members involved in development, content creation, marketing, and project management.
* Establish a communication plan to keep stakeholders informed about project progress and address any concerns.
* Conduct thorough testing of the website functionality, user interface, and responsiveness before launch.

### Exercise 4: SWOT analysis

Swot analysis of USNStart coworking facility:

Strengths:

* Location: Being a part of the main university building offers easy access to students, faculty, and staff.
* Modern and spacious: Open workspaces, private offices, meeting rooms, lounge areas and recreational spaces for various needs.
* Attractive membership options: Different plans that suits different needs and budgets, including day passes, monthly payments, and annually reserved desks etc.
* Additional needs: Like printers/scanners, game room and available parking spots.
* Targeted marketing: Focuses on attracting students, others from enterprises and individuals seeking a space to work in.

Weaknesses:

* New concept: Its success depends on attracting members and creating a vibrant community.
* Competition: Students and people from enterprises may have other workspaces on campus and other already. This may compete with the making of a new workspace.
* Limited private office spaces: Only 6 private offices might not meet the demand as this is a school campus with couple thousand students plus enterprise people.
* Student affordability: The student pass, while discounted, may still be too steep for the students to pay.

Opportunities:

* Partnerships: Collaborations with local businesses, organizations or investors that could provide financial support and advertisement.
* Events and programs: Hosting talks, mentorship programs that can attract members and promote entrepreneurship.
* Technology integration: Implementing technologies like booking systems and communication platforms that can result in streamlining operations and enhance member experiences.
* Community building: Creating opportunities for interaction and collaboration among members that can strengthen coworking communities and boost engagement.

Threats:

* Economy: Weak economy (lately) could impact the willingness of individuals and businesses to invest in coworking spaces.
* Changes in work preferences: Remote work trends like Zoom, Teams and discord could reduce demand for physical workspaces.
* Management: Ineffective management could lead to challenges and prevent success in the facility.
* Competition: Already well-established coworking-spaces and locations could be a challenge to compete with.
* Unexpected circumstances: Unexpected events like pandemics or crazy weather could impact member usage of the facility.

## Module 2

### Exercise 2: Project Layout

**Business Objectives:**

* Increase awareness of USNStart Coworking Space among students, entrepreneurs, and business in the region.
* Attract new members to the coworking space.
* Simplify booking of desks, meeting rooms, and events.
* Establish a digital platform to promote USNStart and its services.

**Project Deliverables:**

* A responsive website for USNStart Coworking Space.
* Website content including information about the space, membership plans, amenities, events, and contact details.
* User-friendly booking functionality for reserving desks, meeting rooms, and events.
* Integration with social media and other relevant platforms.

**Project exclusions:**

* Development of a mobile app for USNStart.
* Implementation of an online payment system
* Marketing campaigns for USNStart.

**Constraints:**

* Budget 100,000 NOK
* Timeline: 6 months
* Resoirces: internal team of web designers and developers

**Assumptions:**

* USNSTart has approved the design and content for the website.
* All Necessary information and images are readily available.
* Enough users have internet access.

### Exercise 3: Project success criteria

* The project should deliver on the prioritized features and requirements defined in collaboration with stakeholders.
* The project should fulfill the academic requirements of the program and contribute to the students learning outcomes.
* The final product should be functional, reliable, and meet the agreed-upon quality standards.
* The project should have positive impact on the target community or industry.

**How long will it take for a team of three to five people, including you?**

* Complex projects will require more time to complete.
* The more features the project includes, the longer it will take to develop.
* A more experienced team can complete the project in a shorter timeframe.
* The projects timeline will depend on the availability of resources sych as funding, equipment, and software.
* A timeframe of 3-6 months seems reasonable for a team of 3-5 people to complete the project. It can be provided a more accurate time after further analysis and refinement.

**Does this list reflect needs from all relevant stakeholders?**

The provided project description and wishlist offer a good starting point for identifying stakeholder needs. To ensure a understanding, its crucial to engage with all relevant stakeholders directly.

### Exercise 4: Requirement Gathering and Analysis

**Evaluation of wish-list:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Wishlist items** | **Clear** | **Consistent** | **Correct** | **Unambiguous** | **Measurable** | **Verifiable** |
| **Headline** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (clicks/conversations)** | **Yes (testing)** |
| **Visuals** | **Yes** | **Yes** | **Needs details (interior design)** | **Yes** | **Yes (impressions)** | **Yes (data tracking)** |
| **Membership plans and pricing** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (sign-ups/revenue)** | **Yes (data tracking)** |
| **Amenities and facilities** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (member surveys)** | **Yes (visual inspection)** |
| **Location information** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (website traffic)** | **Yes (review platform integration)** |
| **Testimonials and reviews** | **Yes** | **Yes** | **Needs details (source/format)** | **Yes** | **Yes (member surveys)** | **Yes (visual inspection)** |
| **Contact information** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (contact from submissions)** | **Yes (visual inspection)** |
| **About us section** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (member surveys)** | **Yes (visual inspection)** |
| **Responsive design** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes (device testing)** | **Yes (policy availability)** |
| **Privacy and security** | **Yes** | **Yes** | **Needs details (policy content)** | **Yes** | **Yes (compliance audits)** | **Yes (policy availability)** |
| **Floor plan and booking** | **Yes** | **Yes** | **Needs details (functionality)** | **Yes** | **Yes (booking usage)** | **Yes (system testing)** |

**Issues:**

* Too little information about interior design details
* Privacy and security content details needs to be provided.
* Floor plan and booking systems needs to be clarified for users.

### Exercise 5: Work Breakdown Structure (WBS)

**WBS for USNStart landing page project.**

1. **Project Kickoff and Planning (1 Week)**

* **Define project aim and objectives.**
* **Identify target audience and user personas.**
* **Define content rezquirements and website structure.**
* **Establish communication plan and stakeholder roles.**
* **Develop project timeline and budget.**

1. **Content Development (2 Weeks)**

* **Research and gather information about USNStart.**
* **Make a website copy (home page, about us, etc).**
* **Edit and make sure to proofread all content.**

1. **Design and Development (4 Weeks)**

* **Choose a website design or work with a designer.**
* **Develop responsive layout for desktop, iPad, Smartphone.**
* **Visuals (images videos, floorplan)**
* **Make booking functionality.**
* **Test and debug website functionality across devices.**

1. **Content management and launch (2 weeks)**

* **Transfer work over to chosen CMS platform.**
* **Educate team on CMS.**
* **Conduct final website testing and quality assurance.**
* **Launch website and promote across relevant channels.**
* **Website monitoring.**

1. **Maintenance (Ongoing)**

* **Fix website bugs and issues**
* **Update content regularly with news and events.**
* **Analyze website traffic on the website.**
* **Optimize website for better search engine ranking.**
* **Conduct A/B testing to improve user experience.**

### Exercise 6: Scope validation

1. **Define projects goals and deliverables:**

* **What is the aim of your project?**
* **What specific outputs will the project produce?**

1. **Identify features and requirements:**

* **Which features are essential for achieving your project goals?**
* **What criteria must the deliverables meet to be considered successful?**

1. **Estimate the effort required to implement each feature and requirement:**

* **How much time and resources will it take to realize each feature and requirement?**

1. **Compare effort with available recourses and timeline:**

* **do you have time and resources to implement each feature requirement?**

**Potential Scope Creeps during project execution**

1. **Unclear goals and deliverables:**

* **Lack of clear definition for these can lead the project astray, potentially incorporating unnecessary features and requirements.**

1. **Unprioritized features and requirements:**

* **If prioritization isn’t done, the project might focus on less important aspects, leaving no time or recourses for crucial ones.**

1. **Misestimating effort:**

* **Underestimating the effort needed for features and requirements is common. This can lead to delays and budget overruns.**

1. **Lack of project control:**

* **Maintaining good control over your project will happen. This can lead to scope creep if changes aren’t managed effectively.**

**How to avoid scope creep**

* **Define your project’s goals and deliverables.**
* **Prioritize features and requirements based on their impact.**
* **Have a clear project plan and track progress closely.**
* **Communicate regularly with stakeholders about project progress and any scope changes.**

## Module 3

### Exercise 1: Network Diagram and Critcal Path Analysis

**Task 1:**

A diagram of a diagram

Description automatically generated with medium confidence

**Task 2:**

Market Research (A): ES:1 EF:10 LS:1 LF:10

Requirement Analysis (B): ES:11 EF:15 LS:11 LF:15

UI/UX Design (C): ES:16 EF:30 LS:16 LF:30

Backend Development (D): ES:11 EF:30 LS:11 LF:30

Database Setup (E): ES:16 EF:25 LS:21 LF:30

API Integration (F): ES:31 EF:40 LS:31 LF:40

Frontend Development (G): ES:31 EF:55 LS:31 LF:55

Testing Phase 1 (H): ES:55 EF:60 LS:55 LF:60

User Acceptance Testing (I): ES:61 EF:70 LS:61 LF:70

Final Revision (J): ES:71 EF:75 LS:71 LF:75

Launch Preparation (K): ES:76 EF:80 LS:76 LF:80

App Launch (L): ES:81 EF:81 LS:81 LF:81

**Task 3:** Identify all paths through the network diagram.

1. A – B – C – G – H – I – J – K – L
2. A – D – F – H – I – J – K – L
3. A – D – E – F – H – I – J – K – L
4. A – D – F – G – H – I – J – K – L
5. A – D – E – F – G – H – I – J – K – L

**Task 4:** Determine the critical path and its duration

The critical path is Path 1 with a duration of 81 days.

1. A – B – C – G – H – I – J – K – L

**Task 5:** Highlight any float/slack time available for non-critical activities

B has 0 days float time available

C has 14 days float

E has 5 days float

F has 9 days float

G has 24 days float

H has 4 days float

I has 9 days float

J has 4 days float

K has 4 days float

### Exercise 2: Gantt Chart



**Time of critical path to make this project: 95-100 days.**

## Exercise 3: Time control

Et bilde som inneholder tekst, skjermbilde, Font, kvittering

Automatisk generert beskrivelse

# Milestone 2 – Output of modules 4-6

## Module 4

### **Exercise 1**

Gestalt laws:

**Gestalt law of proximity:** Objects closer to eachother tend to be looked at as grouped objects.

**Gestalt law of similarity:** Similarity as well as proximity tends to be looked at as grouped objects.

**First drawing/Low-fidelity prototype**

UX laws:

* **Fitts’ law:** That objects is easy to see and reacable. In the prototype, the navigation bar has big buttons, making it easy to manage.
* **Law of common region:** Objects being closed by boxes or borders, becoming groups as well.

### Et bilde som inneholder skjermbilde, tekst, Multimedieprogramvare, Grafikkprogramvare Automatisk generert beskrivelse**Exercise 2**

## Module 5

|  |  |  |  |
| --- | --- | --- | --- |
| Sprint ID | Description | Est. time (Hours) | Customer value (High, Medium, Low) |
| S1 | (Module 1, 2, 3) Making a plan for how to work with the planning for extra community building for better working environments. | 5 | High |
| S2 | Making figma prototype for a small  Cafè business | 2 | Low |
| S3 | Plan how to communicate and document our work | 5 | Medium |
| S4 | Test if we have included everything from the customers wishlist/user-stories. | 4 | High |
| S5 |  |  |  |
| S6 |  |  |  |

## Module 6

### Exercise 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Num. | Description | Probability | Severity | Risk Score |
| Risk 1 | Members no longer being available | 5 | 2 | 10 |
| Risk 2 | Integration issues | 2 | 2 | 4 |
| Risk 3 | Underestimating workload | 4 | 5 | 20 |
| Risk 4 | Miscommunication or conflicts within the student team | 2 | 3 | 6 |
| Risk 5 | Insufficient knowledge and/or skills for website development | 3 | 4 | 12 |
| Risk 6 | Sickness or personal issues | 2 | 4 | 8 |
| Risk 7 | Uneven distribution of workloads | 4 | 2 | 8 |
| Risk 8 | Misunderstanding project requirements | 5 | 5 | 25 |
| Risk 9 | Balancing project work with other courses | 4 | 4 | 16 |
| Risk 10 | Member being occupied by other work/activities | 3 | 3 | 9 |

**Risk Resolution**

Communication with fellow students and setting up a work plan will help mitigate the vast majority of risks. Having regular check-ins with other team members will help to ensure everyone is on the same page. If conflicts arise they should be addressed immediately.

### Exercise **2**

**Communication plan**

Audience: All team members

Instruments: Messages, Email, Discord

Frequency: Weekly

Approach: Oral/written summary of the projects progress, upcoming tasks and any issues that have arisen