



Sri Lanka Institute of Information Technology
BSc. (Hons) in Information Technology
Specializing in Software Engineering

SE3061 – User Experience Design

Continuous Assessment Guide

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Throughout the semester, students will undergo continuous assessments, which include 08 milestones. These continuous assessments will collectively account for 60% of the final grade. Additionally, the remaining 40% of the final grade will be determined by a comprehensive exam that covers the lecture materials taught throughout the semester.

1. Overview

In this assignment, you will embark on a creative journey to conceptualize, design, and develop a mobile solution for a compelling business idea. The goal is to create a user-friendly and innovative mobile application that addresses real-world challenges and provides significant value to its user experience (UX).

2. Outcomes

After completing the mobile application development assignment, students can anticipate a range of valuable outcomes. Firstly, students will have designed and developed an innovative mobile application that showcases their creativity and technical prowess, setting it apart from existing solutions in the market. This application will be user-focused, providing a seamless and intuitive experience by empathizing with the target users' needs and preferences. Moreover, students will address real-world challenges, offering genuine value to its intended audience. Through the development process, students will validate and refine their business concepts, gaining insights into the app's potential for success in the market. Additionally, technical proficiency in mobile app development will be enhanced, covering Android, iOS, or cross-platform technologies. If the assignment was completed as a team, students will have experienced collaboration and teamwork dynamics, learning effective communication and task delegation. Students will also sharpen their project management skills, mastering planning, milestone setting, and meeting deadlines. Presenting the app to others will improve their ability to articulate ideas convincingly. The finished mobile application can be a valuable addition to their portfolio, showcasing their capabilities to potential employers or clients. Lastly, engaging in such a comprehensive assignment will foster personal growth, as students overcome challenges, learn from mistakes, and gain confidence in their abilities as mobile application developers.

3. Teams

In your lab group, you will form teams of 4 students (maximum). Each team will be assigned a team number and collectively decide on a team name. Each team member will be assigned one or more specific UX roles, and they are free to collaborate on different aspects of the project. While not all roles may be constantly required, team members in idle roles should assist others as directed by the project manager. To fulfill their roles effectively, team members will need to research and understand the duties involved.

It is essential for all team members to contribute equally to the project, regardless of their specific roles. Collaboration and cooperation among team members are encouraged to ensure the success of the project.

4. Individual workload

Each team member must address a specific business process, ensuring an equal distribution of workload. The assessment will consider the individual's chosen business process, rewarding marks based on its level of interest and uniqueness. It is essential to discuss and obtain approval for your contribution from your supervisor. Notably, components like Login and Registration are not eligible as individual components for this purpose.

5. Topic selection

Selecting the right business idea is a crucial step in ensuring its success and impact. Here's a step-by-step guide to help you choose the best business idea for your assignment:

- **Identify Your Interests and Passions:** Start by considering your own interests and passions. A business idea that aligns with your interests is more likely to keep you motivated and engaged throughout the project.
- **Market Research:** Conduct thorough market research to identify current trends and gaps in the market. Look for problems or pain points that potential users are facing and explore whether there are existing mobile solutions that address these issues. This research will help you identify opportunities and areas where your mobile app could make a difference.
- **Solve a Real Problem:** Choose a business idea that addresses a genuine problem or fulfills a specific need. Solving real-world issues is one of the most effective ways to create a valuable and impactful mobile solution.
- **Evaluate Competitors:** Analyze the competition. If there are existing mobile apps addressing the same problem, consider how your idea could offer unique features or improvements that set it apart from the competition.
- **Scalability and Market Potential:** Consider the scalability of your business idea. Is it something that can grow over time and potentially reach a larger audience? Evaluate the market potential and demand for your mobile app in the long term.
- **Feasibility and Resources:** Assess the feasibility of implementing your business idea. Consider your available resources, such as time, skills, and budget. Choose an idea that you can realistically execute within the given constraints of the assignment.
- **Target Audience:** Clearly define your target audience. Understand their demographics, preferences, and pain points. A well-defined target audience will help you tailor your mobile solution to meet their specific needs.

- **Innovation and Uniqueness:** Look for opportunities to innovate and be unique. Your mobile app should offer something different or better than existing solutions to attract users and stand out in the market.
- **Passion and Commitment:** Ensure that you are genuinely passionate about the business idea you choose. Your enthusiasm for the project will reflect in your work, and it will motivate you to overcome challenges and create a better mobile solution.
- **Feedback and Validation:** If possible, seek feedback from peers, mentors, or potential users about your business idea. Validation from others can provide valuable insights and help you refine your concept.
- **Legal and Ethical Considerations:** Consider any legal and ethical aspects related to your business idea. Ensure that your mobile app complies with relevant laws and regulations.
- **Monetization Potential:** Finally, think about the monetization potential of your mobile solution. Consider various monetization models and choose one that aligns with your target audience and the value your app provides.

By following these steps and carefully considering each aspect, you can select a business idea that is well-suited for your mobile project and has the potential to make a meaningful impact. Remember that creativity and innovation are essential, so don't be afraid to think outside the box and explore new possibilities.

- No topic changes are allowed.

6. Weekly status updates

Every week, the lectures and labs will introduce new concepts. The labs will be structured in a way that supports the development of your solution design. To ensure you stay on track, a weekly 'status update' will be required. The submissions will be marked each week, providing opportunities for continuous improvement. Feedback on your work will be given during the labs.

It is highly recommended to schedule weekly group meetings to stay organized and collaborate effectively. Additionally, remember to update your GitLab repository weekly to keep your project materials current and accessible.

7. Deliverables

Ensure you submit the following parts for the continuous assessments.

Continuous assessments	Deliverables	Marks
Milestone 1: Identify user groups	Written report	10 marks
Milestone 2: Plan and conduct user research	Written report + Video Evidence	10 marks
Milestone 3: Verify the key-user flow(s)	Written report	10 marks
Milestone 4: Sketching & Wireframes	Written report	10 marks
Milestone 5: Prototype	Written report + Figma Prototype	15 marks
Milestone 6: User Feedback for your Prototype	Written report + Video Evidence	10 marks
Milestone 7: Implementation	Written report + Mobile App	20 marks
Milestone 8: Business Pitching for Investors	Business Pitching for Investors	15 marks

Written report

You are required to utilize the "**UEE Template.docx**" and include all weekly submissions (Milestone 1 - 7) in it. Make sure to provide clear screenshots and links to both the low-fidelity and high-fidelity prototypes. The report must be submitted electronically to GitLab every week and will be evaluated accordingly. Keep in mind that late submissions will not be marked.

Prototype

As part of the Assignment requirements, your task is to create a prototype using Figma, a collaborative design tool. The prototype should reflect the proposed solution for the project. Once the prototype is ready, you will need to submit it to GitLab, the version control and collaboration platform.

In your report, include detailed screenshots of the prototype, capturing different screens and interactions. Alongside each screenshot, provide a brief description explaining the functionality and purpose of the corresponding section of the prototype.

To ensure the evaluators can access and review your work, include the source links to the Figma prototype in your report. This will allow them to interact with the prototype and gain a better understanding of its features and user flow.

Remember that the prototype serves as a visual representation of your design ideas, and it should align with the user requirements and project scope. Updating the prototype based on feedback and new concepts will contribute to the continuous improvement of your solution. Hence, timely submission of the prototype and the report are crucial to staying on track and meeting project milestones.

Mobile App

Your group's task is to design and implement a mobile solution. Once the development is completed, the solution should be thoroughly tested with users to gather feedback and identify areas for improvement. After ensuring that the mobile solution meets the required standards and user expectations, it must be uploaded to GitLab.

The design and implementation process should align with the project requirements and follow best practices in mobile app development. User testing is essential to validate the usability and effectiveness of the solution, and any necessary adjustments should be made based on the feedback received.

Finally, uploading the solution to GitLab will not only make it accessible for review but also allow for version tracking and collaboration among team members and other stakeholders. This will contribute to the successful completion of the project and facilitate future updates and enhancements.

Individual peer review of team members

This is a group assignment. Students will receive a group mark but adjustments may be made based on the peer review. The individual mark based on their individual contributions and Peer reviews are also to be submitted by individual students by the Assignment due date.

Business Pitching for Investors

Prepare a slide deck and get ready for your Business Pitching for Investors

Slide 1: Introduction

- Introduce yourself and your role in the company.
- Express gratitude for the opportunity to present your business idea.

Slide 2: Problem Statement

- Clearly state the problem your business aims to solve in the industry/sector.
- Describe the impact of this problem on businesses or individuals.

Slide 3: Our Solution

- Present your unique and innovative product/service that addresses the problem.
- Highlight the key features that make your solution stand out.

Slide 4: Market Opportunity

- Provide market data and research showing the potential for growth in the industry/sector.
- State the estimated market size for your solution by a certain year.

Slide 5: Competitive Analysis

- Briefly describe the existing competition in the market.
- Explain how your product/service differentiates from competitors and why it's better.

Slide 6: Business Model

- Explain your revenue generation strategy (e.g., subscription-based, freemium, etc.).
- Mention projected financials to show potential profitability.

Slide 7: Traction and Milestones

- Highlight key milestones achieved by your company so far.
- Mention any partnerships, early customers, or awards received.

Slide 8: Marketing and Sales Strategy

- Describe your marketing channels, sales approach, and target customer segments.

- Explain how you plan to ensure rapid and widespread adoption.

Slide 9: Team

- Introduce key members of your team and their expertise.
- Showcase the team's dedication and commitment to the company's mission.

Slide 10: Investment Ask

- Clearly state the amount of funding you are seeking from investors.
- Explain how you plan to use the funds (e.g., product development, marketing, hiring).

Slide 11: Conclusion

- Summarize the key points of your business pitch.
- Express enthusiasm for potential investors joining your journey.
- Invite questions and further discussions.

Record keeping

Demonstrating the quality and quantity of each team member's work is crucial. Utilize toggle or comparable project management software to monitor the time invested in the project. Save all project-related documents on GitLab classroom for easy access and reference. Gather any additional evidence that clearly highlights individual contributions within the team. Remember to incorporate thorough record-keeping details into the final report to provide a comprehensive overview of each team member's involvement.

8. Work with Design-Thinking:

Stage 1: Empathize—Research Your Users' Needs

- You should gain an empathetic understanding of the problem you're trying to solve, typically through user research.
- It is crucial to a human-centered design process such as design thinking because it allows you to forget your assumptions about the world and gain real insight into users and their needs.
- Milestone 1: Identify user groups
- Milestone 2: Plan and conduct user research

Stage 2: Define—State Your Users' Needs and Problems

- Collect the information gathered during the Empathize stage, analyze your observations and synthesize them to define the core problems (problem statements) you and your team have identified.
- You can create personas to help keep your efforts human-centered before proceeding to ideation.
- Milestone 3: Verify the key-user flow(s)

Stage 3: Ideate—Challenge Assumptions and Create Ideas

- Be ready to generate ideas.
- A solid background of knowledge from the first two phases means you can start to “think outside the box”, look for alternative ways to view the problem and identify innovative solutions to the problem statement you've created.
- Free to use any ideation technique(s)
- Milestone 4: Sketching

Stage 4: Prototype—Start to Create Solutions

- This is an experimental phase.
- The aim is to identify the best possible solution for each problem found.
- Your team should produce some inexpensive, scaled-down versions of the product (or specific features found within the product) to investigate the ideas you've generated.
- This could involve simple Figma prototyping.
- Milestone 5: Wireframes, Prototype

Stage 5: Test—Try Your Solutions Out

- Evaluators rigorously test the prototypes. Although this is the final phase, design thinking is iterative: Teams often use the results to redefine one or more further problems. So, you can return to previous stages to make further iterations, alterations, and refinements – to find or rule out alternative solutions.
- Milestone 6: User Feedback for your Prototype

9. Duration of the assignment:

The assignment will be a semester-long project.

10. Milestones

- Milestone 1: Identify user groups
- Milestone 2: Plan and conduct user research
- Milestone 3: Verify the key-user flow(s)
- Milestone 4: Sketching & Wireframes
- Milestone 5: Prototype
- Milestone 6: User Feedback for your Prototype
- Milestone 7: Implementation
- Milestone 8: Business Pitching for Investors

Milestone 1: Identify user groups

- Your group has selected a business idea and investigated it. Now you are going to identify different user groups/stakeholders for the selected business idea.
- You must identify the target users by referring to the available resources and find out more about the area of concern
- Draw the following models to get a clear understanding of user groups and their needs
 - Persona(s) – 04 personas from a group
 - Empathy map(s) – 04 Empathy maps from a group
 - User stories – 04 User stories from a group
 - User flow(s) – 04 User flows from a group
 - Service Blueprint(s) – 01 Service Blueprint from a group
- Present your user models to your supervisor and get feedback during the lab session
- Update your group report including Milestone 01.

Milestone 2: Plan and conduct user research

- Plan and conduct user research (04 users) and understand their experiences and motivations
- You must research target users for each of your functionalities
- Interview users, conduct Questionaries, or choose any user method of choice to deliver your user research and record data.
- Analyze collected data and find use needs
- Present your user research plan to your supervisor and get feedback during the lab session
- Update your group report including Milestone 02.

Milestone 3: Verify the key-user flow(s)

- Compare your findings in Milestone 2 and Milestone 1. Define core problems as a problem statement in a human-centered manner.
- Present your problem statement to your supervisor and get feedback during the lab session.
- Update your group report including Milestone 03.

Milestone 4: Sketching & Wireframes

- Your team members can start to "think outside the box" to identify new solutions to the problem statement you've defined in Milestone 3.
- You can start to look for alternative ways of viewing the problem.
- There are hundreds of Ideation techniques available, and few techniques were discussed during the lecture. Refer to other materials available.
- Present your sketches to your supervisor and get feedback during the lab session.
- Update your group report including Milestone 04.

Milestone 5: Prototype

- This is an experimental phase and Aim is to identify the best possible solution for each of the problems identified.
- Produce several inexpensive, scaled-down versions of the proposed solution(s)
- By the end of this stage, the design team will have a better idea of the constraints inherent to the product and the problems that present a clearer view of how real users would behave, think, and feel when interacting with the end product.
- Present your prototype(s) to your supervisor and get feedback during the lab session.
- Update your group report including Milestone 05.

Milestone 6: User Feedback for your Prototype

- Designers/evaluators rigorously test the complete product using the best solutions identified during the prototyping phase.
- The results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users.
- Present the collected **User Feedback** to your supervisor and discuss it during the lab session.
- Update your group report including Milestone 06.

Milestone 7: Implementation

- Implement your application in collaboration on GitHub (this pertains to your personal GitHub accounts, not the GitLab classroom accounts which is used to maintain the document) during the allocated time.
- Present your development progress weekly and get feedback during the lab session.
- Update your group report including Milestone 07.

Milestone 8: Business Pitching for Investors

- Prepare your pitching slide deck.
- Present your slide deck to your supervisor and get feedback during the lab session.
- Update your group report including Milestone 08.

Note:

You are highly advised to discuss your assignment-related issues with the lecturer during the lecture/tute slot and obtain feedback for your deliverables during the Labs.

Marking Guides for each Milestones

Milestone	Excellent	Very Good	Good	poor
Milestone 1 (10 %)				
1.1 Personas (20 marks)	Personas are created based on the research conducted and support the audience visualization (15-20 marks)	Personas created support the audience visualization but not factula based (10-14 marks)	Personas created reflects few facts related to target audience (5-9 marks)	Personas are poorly constructed and lacks realistic facts to support the target audience (0-4 marks)
1.2 Empathy maps (20 marks)	Created empathy maps reflect what a user thinks, feels say and does clearly (15-20 marks)	Created empathy somewhat reflects what a user thinks, feels, say and does (10 - 14 marks)	Created empathy barely reflects what a user thinks, feels, say and does (5 - 9 marks)	Created empathydoes not reflect what a user thinks, feels, say and does (0 - 4 marks)
1.3 User Stories (20 marks)	User story provides informal, general explanation of a software feature written from the perspective of the end user. It clearly articulate how a software feature will provide value to the customer. (15-20 marks)	User story provides somewhat satisfactory explanation of a software feature written from the perspective of the end user. It articulate how a software feature will provide value to the customer. (10-14 marks)	User story provides explanation of a software feature written from the perspective of the end user. It somewhat articulate how a software feature will provide value to the customer. (5-9 marks)	User story doesn't provide any explanation of a software feature written from the perspective of the end user. It does not articulate how a software feature will provide value to the customer. (0--4 marks)
1.4 User flow(s) (20 marks)	Display the complete path a user takes when using a product. The user flow lays out the user's movement through the product, mapping out each and every step the user takes—from entry point right through to the final interaction. (15-20 marks)	Display the path a user takes when using a product. The user flow lays out the user's movement through the product, mapping out some steps the user takes—from entry point right through to the final interaction. (10-14 marks)	Display the path a user takes when using a product. The user flow lays out the user's movement through the product, mapping out few steps the user takes. (5-9 marks)	Doesn't display the path a user takes when using a product. The user flow lacks user's movement through the product. (5-9 marks)
1.5 Service Blueprints (20 marks)	service blueprint visualizes the relationships between different service components - people, props (physical or digital evidence), and processes that are directly tied to touchpoints in a specific customer journey. (15-20 marks)	service blueprint somewhat visualizes the relationships between different service components - people, props (physical or digital evidence), and processes that are directly tied to touchpoints in a specific customer journey. (10-14 marks)	service blueprint barely visualizes the relationships between different service components - people, props (physical or digital evidence), and processes that are directly tied to touchpoints in a specific customer journey. (5-9 marks)	service blueprint doesnt visualize the relationships between different service components - people, props (physical or digital evidence), and processes that are directly tied to touchpoints in a specific customer journey. (0-4 marks)

Milestone 2 (10 %)				
2.1 Goal - (20 marks)	Goal of the user research is clearly mentioned and discussed with results gathered (15-20 marks)	Goal of the user research is somewhat mentioned and discussed with results gathered (10-14 marks)	Goal of the user research is barely mentioned and discussed with results gathered (5-9 marks)	Goal of the user research is not mentioned and discussed with results gathered (0-4 marks)
2.2 Research Questions - (20 marks)	research question is relevant and accompanies with the goal clearly mentioned and discussed with results gathered (15-20 marks)	research question is relevant and somewhat accompanies with the goal mentioned and discussed with results gathered (10-14 marks)	research question is somewhat relevant and barely accompanies with the goal mentioned and discussed with results gathered (5-9 marks)	research question is irrelevant and doesn't accompany with the goal mentioned and discussed with results gathered (0-4 marks)
2.3 Method - (20 marks)	method chosen are relevant and accompanies with the goal clearly mentioned and discussed with results gathered (15-20 marks)	method chosen are relevant and somewhat accompanies with the goal mentioned and discussed with results gathered (10-14 marks)	method chosen are somewhat relevant and barely accompanies with the goal mentioned and discussed with results gathered (5-9 marks)	method chosen are irrelevant and doesn't accompany with the goal mentioned and discussed with results gathered (0-4 marks)
2.4 Participants - (20 mark)	participants are relevant and corporates well with the goal clearly mentioned and discussed with results gathered (15-20 marks)	participants are relevant and somewhat corporates well with the goal mentioned and discussed with results gathered (10-14 marks)	participants are somewhat relevant and barely corporates with the goal mentioned and discussed with results gathered (5-9 marks)	participants are irrelevant and doesn't not corporate well with the goal mentioned and discussed with results gathered (0-4 marks)
2.5 Protocol - (20 marks)	protocols are clearly mentioned and followed (15-20 marks)	protocols are mentioned and followed (10-14 marks)	protocols are barely mentioned and struggles to be followed (5-9 marks)	protocols are not mentioned and are not followed (0-4 marks)
Milestone 3 (10 %)				
3.1 Identification of fail points - (50 marks)	Identification of 10-12 fail points (50-40 marks)	Identification of 6-8 fail points (39-20 marks)	Identification of 4-5 fail points (19-10 marks)	Identification of 1-2 fail points (10-1 marks)
3.2 User Key Flow(s) - (50 marks)	Identification of 10-12 user key flows (50-40 marks)	Identification of 6-8 user key flows (39-20 marks)	Identification of 4-5 user key flows (19-10 marks)	Identification of 1-2 user key flows (10-1 marks)
Milestone 4 (10 %)				
4.1 sketches (50 marks)	12-10 sketches communicating the idea well (25-20 marks)	10-8 sketches communicating the idea well (19-15 marks)	8-6 sketches communicating the idea well (14-10 marks)	5-4 sketches communicating the idea well (9-0 marks)
4.2 Wireframes - (50 marks)	12-10 wireframes communicating the idea well (25-20 marks)	10-8 wireframes communicating the idea well (19-15 marks)	8-6 wireframes communicating the idea well (14-10 marks)	5-4 wireframes communicating the idea well (9-0 marks)
Milestone 5 (15 %)				
4.3 Prototype - (100 marks)	Clear and complete prototype with features represented well (25-20 marks)	Somewhat complete prototype with features represented well (19-15 marks)	Barely complete prototype with few features represented (14-10 marks)	incomplete prototype with features not represented (9-0 marks)

Milestone 6 (10 %)				
4.4 User Feedback - (100 marks)	qualitative and quantitative data from customers on their likes, dislikes, impressions, and requests about a product (25-20 marks)	satisfactory qualitative and quantitative data from customers on their likes, dislikes, impressions, and requests about a product (19-15 marks)	few qualitative and quantitative data from customers on their likes, dislikes, impressions, and requests about a product (14-10 marks)	poor qualitative and quantitative data from customers on their likes, dislikes, impressions, and requests about a product (9-0 marks)
Milestone 7 (20 %)				
6.1 Github implementation - (25 marks)	All group members have contributed in implementation and are pushed in Github (25- 20 marks)	most group members have contributed in implementation and are pushed in Github (19-15 marks)	few group members have contributed in implementation and somewhat completed with the implementation (14-10 marks)	few group members have contributed in implementation and incomplete implementation (9-0 marks)
6.2 Prototype Version 2- (25 marks)	Complete (25- 20 marks)	somewhat complete (19-15 marks)	Barely complete (14-10 marks)	Incomplete (9-0 marks)
6.3 Test Plan - (25 marks)	Fool proof test plan proposed and executed (25- 20 marks)	Satisfactory test plan proposed and executed (19-15 marks)	Moderate test plan proposed and barely executed (14-10 marks)	incomplete test plan and not executed (9-0 marks)
6.4 Overall implementation and prototype feedback - (25 marks)	Excellent (25- 20 marks)	Good (19-15 marks)	Satisfactory (14-10 marks)	Incomplete (9-0 marks)
Milestone 8 (15 %)				
7.1 Business Pitch - (35 marks)	Excellent (25- 20 marks)	Good (19-15 marks)	Satisfactory (14-10 marks)	Incomplete (9-0 marks)
7.2 Team Work - (15 marks)	All group members have contributed equally (15- 12 marks)	Some group members have contributed equally (11-08 marks)	few group members have contributed equally (7-5 marks)	Unsatisfactory team work (4-0 marks)
7.3 Report - (25 marks)	Complete (25- 20 marks)	somewhat complete (19-15 marks)	Barely complete (14-10 marks)	Incomplete (9-0 marks)
7.4 Overall product - (25 marks)	Complete (25- 20 marks)	somewhat complete (19-15 marks)	Barely complete (14-10 marks)	Incomplete (9-0 marks)

** End of Assignment **