IT2162 UX Design Methods & Techniques

Assignment 3 – 70 marks (35%)
Submission Due: Week 17, 9 Feb 2025 (Sun), 2359

In this assignment, you will work with your team to develop a high-fidelity prototype based on the wireframes that you have developed for Assignment 2. You will use **Figma** to design the high-fidelity wireframes. The high-fidelity interactive prototype will be used for usability testing, in the later part of assignment.

This assignment consists of 3 (three) parts.

Part 1: High-Fidelity Interactive Prototype

Add colours, images, branding theme and interactions to enhance the look and feel of your webpages while referring to the following:

I.   Apply UX Design Principles to prototype such as:
- Visual Hierarchy
- Gestalt Principles
- Gutenberg Diagram
- Psychology of Interaction Design

II.   Design with the consideration of human cognitive limitations and capabilities on interaction design to achieve great user experience.

Get your Tutor to review your interactive prototype during Week 14 Practical.

Part 2: Usability Test Plan

The objective of Part 2 and 3 of the assignment is to assess your understanding on usability test and develop your skill to solve usability problems with UX design principles. It is not the time to prove you have a perfect website/software. Thus, marks are awarded based on usability findings andappropriate recommendations.

The usability test plan should be prepared and reviewed by your tutors by Week 14. You may refer to the sample test plan document for more details. The test plan should include the following:

- Goals of the test
- Schedule
- Participant Requirements
- Computer Set-up
- Methodology
- Usability Test Tasks
- Questionnaire
- Quantitative Measurements

Part 3: Moderated Usability Test and Evaluation

Refer to the lectures notes on Moderated Usability Test Guidelines to conduct the usability test and prepare the evaluation report.

What to include in the usability evaluation report:

✓ Description of usability test

  o Who were the facilitator, observer and participant?

  o When was the test conducted

  o Where was the test

  o Usability metrics and goals

  o Questions from questionnaire

✓ Results/Findings & Recommendations (use template provided below)

✓ Summary of results from the subjective satisfaction questionnaire.

Template for Results/Findings & Recommendation

Task	Problem[1]	Violate heuristic[2]	Cause[3]	Recommendation[4]	Usability Metrics
1	Cannot find the search function.	1	The search icon is too small.	Make the search icon bigger and more obvious to the user	**Success Rate**: 90%
1	Blank screen returned.	1	No record meets the criterion due to typo error.	Return the message "No record found."	**Completion Time:** 10s to 30s.
2	Invalid date was accepted by the system	5	No validation of input date	Validate input date	

Note:

1. Observe and note down **Problem** encountered by the users during the testing. If no problem identified, just state 'Nil'.
2. Reference Nielsen's 10 Usability Heuristics
3. State possible **Causes** of the problem.
4. Make a **Recommendation** to the design problem after understanding the cause.

RECOMMENDED TASK SCHEDULE

Part	Description	Deadline
1	High-Fidelity Interactive Prototype	Week 12: Complete 1st iteration of individual interactive prototype
		Week 13: Complete 1st iteration of integrated interactive prototype
		Week 14 (Practical): Review by Tutor
		Week 18 (Practical & Tutorial): Individual

		Review of Final Prototype and Usability Findings by Tutor
2	Usability Test Plan	**Week 14 (Tutorial): Complete & Review by Tutor**
3	Usability Evaluation Report	Week 15-16: Conduct Usability Test

BRIGHTSPACE SUBMISSION

One submission per team
- Naming of submission: Assign2_ModuleGroupNo_TeamLeaderName. Example: Assign2_IT2161-01_RandyTan.pdf

Consolidation of all the below deliverables into a zipped folder.

* marks will be deducted for any unorganized submission and/or document without proper titles and labels. (<10% of total marks)

Part	Deliverables	Deadline
1	Final Version of Interactive Prototype (Figma link)	**9 Feb 2025 (Sunday), 2359**
2	Usability Test Plan	
3	Usability Evaluation Report	

MARKS ALLOCATION

Part	Deliverables	Group	Individual
1	High-Fidelity Interactive Prototype	5	30
2	Usability Test Plan	5	5
3	Usability Evaluation Report	10	15
* marks will be deducted for any unorganized submission and/or document without proper titles and labels. (<10% of total marks)			
	Total	**20**	**50**

IT2162 UX Design Methods & Techniques

Assignment 3: Rubrics – 70 marks (35%)

High Fidelity Interactive Prototype (35 marks)

Individual Interactive Prototype (20 marks - Ind)	Does not address the problem statement or user needs. Missing key screens.	Addresses problem statement/user needs partially. Prototype is not interactive.	Addresses problem statement/user needs partially. Prototype is partially interactive (>50%). Some missing hyperlinks to other pages.	Addresses problem statement/user needs fully. Prototype is mostly interactive, with some missing visual feedbacks and/or error messages. Minimal missing hyperlinks to other pages.	Addresses problem statement/user needs fully with effective workflow, with no missing screens. Prototype is fully interactive, with visual feedbacks and appropriate error messages. No missing hyperlinks to other pages.
	(0 – 6)	(>6 - 10)	(>10 – 14)	(>14 – 16)	(>16 - 20)
Application of UX Design Principles and Psychology of Interaction Design (10 marks - Ind)	Could not explain and applied < 3 design principles correctly.	Demonstrated poor understanding of the design principles and psychology of interaction design on the submitted design solution. Able to clearly identify, explain and apply < 5 and >= 3 design principles effectively.	Demonstrated reasonable understanding of the design principles and psychology of interaction design on the submitted design solution. Able to clearly identify, explain and apply < 10 and >= 5 design principles effectively.	Demonstrated good understanding of all the design principles and psychology of interaction design on the submitted design solution. Able to clearly identify, explain and apply < 15 and >=10 design principles effectively.	Demonstrated comprehensive understanding of all the design principles and psychology of interaction design on the submitted design solution. Able to clearly identify, explain and apply >= 15 design principles effectively.
	(0 – 3)	(>3 - 5)	(>5 – 7)	(>7 – 8)	(>8 - 10)

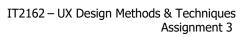| Overall Interactive Prototype (5 marks - Grp)	All the following elements are inconsistent across the webpages: Information architecture, colour, fonts, labels, and grid	More than 2 of the following elements are inconsistent across the webpages: Information architecture, colour, fonts, labels, and grid	2 of the following elements are inconsistent across the webpages: Information architecture, colour, fonts, labels, and grid	1 of the following elements is inconsistent across the webpages: Information architecture, colour, fonts, labels, and grid	All the following elements are consistent across all the webpages: Information architecture, colour, fonts, labels, and grid.
	$(0-1)$	$(>1-2)$	$(>2-3)$	$(>3-4)$	$(>4-5)$

Usability Test Plan (10 marks)

Overall completeness of test plan and questionnaires (5 marks - Grp)	The goals of the test are vague. Some elements of the test plan are missing.	The goals of the test are clear but do not have sufficient depth to test the system. The requirements of the participants <u>do not match</u> the characteristic of the personas. It has <u>less than 3</u> questions from the questionnaire to evaluate the performance of each task.	The goals of the test are clear and with sufficient depth to test the system. The requirements of the participants <u>somehow match</u> the characteristic of the persona. It has <u>more than 3</u> questions from the questionnaire to evaluate the performance of each task.	The goals of the test are clear and with sufficient depth to test the system. The requirements of the participants <u>match</u> the characteristic of the persona. It has <u>3</u> questions from the questionnaire and shared in an organised format <u>using online survey software</u>.	The goals of the test are well defined and comprehensive. The requirements of the participants match the characteristic of the persona. It has <u>more than 3</u> questions from the questionnaire and shared in an organised format <u>using online survey software</u>.
	(0 – 1)	(>1 – 2)	(>2 – 3)	(>3 – 4)	(>4 – 5)
Individual Test Task (5 marks - Ind)	The test task is vague, non-directive nor descriptive. It does not match the goals of the study. It didn't include the necessary details to complete the task.	The test task is somewhat clear but <u>does not match the goals</u> of the study. It includes <u>some level of details</u> to complete the task.	The test task is clear and <u>somewhat matches the goal</u> of the study. It includes <u>some level of details</u> to complete the task.	The test task is clear and <u>somewhat matches the goal</u> of the study. It includes <u>all necessary details</u> to complete the task.	The test task is very <u>clear and matches the goal</u> of the study. It includes <u>all necessary details</u> to complete the task.
	(0 – 1)	(>1 – 2)	(>2 – 3)	(>3 – 4)	(>4 – 5)

Usability Evaluation Report - Group (10 marks)

Overall Completeness of Evaluation (10 marks - Grp)	The satisfaction of the users has not been reported nor anaylsed. The usability metrics to measure effectiveness and efficiency of the website for the given set of test tasks are not presented.	The satisfaction of the users has not been reported nor anaylsed. All the measurements are in placed to assess the effectiveness, efficiency, and satisfaction of the website by the users to achieve the specified goals without analysis.	The satisfaction of the users has been somewhat reported but without analysis. The usability metrics to measure effectiveness and efficiency of the website for the given set of test tasks are presented without analysis.	The satisfaction of the users has been clearly reported and analysed. The usability metrics to measure effectiveness and efficiency of the website for the given set of test tasks are presented without analysis.	The satisfaction of the users is professionally presented with detailed analysis. The usability metrics to measure effectiveness and efficiency of the website for the given set of test tasks are collected and with detailed analysis.
	(0 – 3)	(>3 - 5)	(>5 – 7)	(>7 – 8)	(>8 - 10)

Usability Evaluation Report - Individual (15 marks)

Usability Findings (5 marks)	Unable to correctly identify any heuristic violations associated with the usability problems observed.	Correctly identified less than 2 heuristic violations associated with the usability problems observed.	Correctly identified more than 4 heuristic violations associated with the usability problems observed.	Correctly identified more than 6 heuristic violations associated with the usability problems observed.	Correctly identified all the heuristic violation associated with the usability problems observed.
	(0 – 1)	(>1 – 2)	(>2 – 3)	(>3 – 4)	(>4 – 5)

Usability Recommendations (5 marks)	Unable to recommend UX design principles to solve all the usability problems. None of the problems are solved effectively.	Recommended very minimum UX design principles to solve all the usability problems. Only less than 3 problems are solved effectively and without providing visual examples.	Recommended a few appropriate UX design principles to solve a few usability problems. More than 3 problems are solved effectively and/or with minimum visual examples.	Recommended somewhat appropriate UX design principles to solve most of the usability problems. Most of the problems are solved effectively with minimum visual examples.	Recommended appropriate UX design principles to solve all the usability problems effectively with visual examples.
	$(0 - 1)$	$(>1 - 2)$	$(>2 - 3)$	$(>3 - 4)$	$(>4 - 5)$
Task Ratings Analysis (5 marks)	Demonstrated little understanding of data from task questions without elaboration of user sentiment for the task.	Demonstrated basic understanding of data from task questions with minimum elaboration of user sentiment for the task.	Demonstrated good understanding of data from task questions to gain decent insight of user sentiment for the task.	Effectively used a combination of different data to gain meaningful insight of user sentiment for the task. Presented basic analysis without chart.	Effectively used a combination of different data to gain meaningful insight of user sentiment for the task. Presented with charts and in-depth analysis.
	$(0 - 1)$	$(>1 - 2)$	$(>2 - 3)$	$(>3 - 4)$	$(>4 - 5)$