**Faculty of Engineering, Environment and Computing**

##### 6012CEM User Experience Design

**Assignment Brief 2024/25**

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| Module Title  **User Experience Design** | Ind/Group  **Group**  **and Individual** | Cohort  **Feb** | Module Code  **6012CEM** |
| Coursework Title  **UXD Report** | | | Hand out date:  **18/02/2025** |
| Lecturer  **Rex Tam** | | | Due date:  **24/02/2025 (Group member list)**  **11/03/2025 (Group report)**  **01/04/2025 (Prototype)**  **15/04/2025 (User evaluation)**  **13/05/2025 (Individual report and program)** |
| Estimated Time (hrs): **<= 40**  Word Limit\*:  **2000 (Group report)**  **3000 (Individual report)** | Coursework type:  **Group Report**  **Individual Report** | | % of Module Mark  **100%** |
| Submission arrangement online via Moodle: **Upload through assignment link**  File types and method of recording: **Word**  Mark and Feedback date: **1/04/2025 (Group); 03/06/2025 (Individual)**  Mark and Feedback method: **Rubric marks and comments** | | | |

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| **Module Learning Outcomes Assessed:**   1. Understand, design and implement effective user experiences, informed by research into the state of the art for given problem spaces 2. Develop and action rigorous user test designs, based on systematic knowledge of a range methods and the ability to argue for their selection 3. Follow a User Centred Design process, featuring conceptual prototypes 4. Implement a fully-coded, product level GUI 5. Demonstrate through sustained argument how user study data and analysis have been used to evaluate the effectiveness of the GUI in terms of the user experience 6. Show systematic understanding of the role of UX design within full-stack development 7. Understand and critically apply ethical and professional standards |
| **SUBMISSION**  You will submit your Assignment online via Moodle. The individual report will provide a link to a working implementation.  **The deadline:**  Refer to the Due date above. |
| **RESIT**  If you fail to submit or are awarded a grade of less than 40% you will be required to complete a resit assignment. This will be released after the Semester 1 exam period. Your mark will be capped at 40%. |

**ASSIGNMENT BRIEF**

**Summary**

This assignment requires you to evaluate, design and implement a user experience, in 4 stages:

Group

1. User evaluation of a current product.

Individual

1. UX prototype (a GUI) in a proper prototyping tool, e.g. Figma / Adobe XD.
2. User evaluation of the prototype.
3. Implementation of the product in a proper development tool, e.g. React.

Each group should choose and evaluate one product. Each member needs to revamp the same product individually after the evaluation. Below are some specific instructions.

**Detailed Instructions**

**Stage 1: User Evaluation (Group) (20%)**

Each group consists of 4 students (the deviation in group member number is subject to approval). All members within the same project group will receive the same mark in this part, unless there is any disagreement among the team. You may find the section of Group Project and let a representative from your group to provide the group members information (including student name and ID) on Moodle on or before 24 Feb 2025.

Each group should choose an existing mobile application or web-based service for evaluation. The nature of the product is a utility tool. You are required to do an evaluation and find results. In the evaluation, at least two techniques should be used, e.g. usability testing, survey, heuristic analysis, and experimental design.

**Stage 2-4: Product prototyping, Evaluation, and Implementation (Individual) (80%)**

The aim in stage 2-4 is to improve the user experience of the product which has been evaluated in stage 1.

1. UX design and prototyping (a GUI)

Based on the evaluation results in stage 1, define the goal and the scope of your work. Create an interactive UI by using a proper prototyping tool (e.g. Adobe XD, Figma). Show how the UI has been designed according to selected standards, design principles and patterns, which should be referenced. The prototype should be designed to clearly demonstrate the visual appearance, interactivity and functionality of the UI. Include full details and show a complete walkthrough in your report, done using screenshots. You could also share your prototype.

1. User evaluation of the prototype

Run a user evaluation of your prototype. A comparative usability testing approach should be considered whenever possible. Report the results, and make any necessary revisions to your design based on the evaluation.

1. Implementation of the prototype in a proper development framework, e.g. React

Implement the prototype GUI in a proper development framework (e.g. React). This is a complex process and will take up a large section of your report. Again, give a complete walkthrough of the final product. Show how the design has been mapped to the components in the development framework and any changes / compromises which had to happen as a result. A video demo should be provided to explain the design and the improvement of the product.

A template for a suggested report structure, with more detail and suggested headings, will be released during the module.

**2. Other instructions**

2.1 All user evaluation work must be carried out observing appropriate ethical guidelines.

2.2 All user evaluations must be evidenced by verifiable user data. It is fine to use other students for the purposes of the assignment, but it’s even better if you can find other users if they better represent your intended user group.

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| **VERIFIABLE USER DATA**  User data needs to be verifiable - i.e. there is evidence of the users and user evaluations you carried out. Otherwise, anyone can object - whether or not it is true - that the whole thing has been made up (invented), and is false.  This can be done most simply by photographing / recording your users as you carry out your evaluation. Include this data showing activities and users in your report and explain what is going on in the data and who is pictured / recorded.  You must add consent forms that are signed by your users, with their real names and addresses as well as real email addresses.  The single most important thing in user evaluation work is engagement with other people - users. Good evidence of this is worth substantial marks. If there is no evidence, you are at risk of failing this report. |

**Notes:**

1. You are expected to use the [Coventry University APA](https://libguides.coventry.ac.uk/apa) style for referencing.
2. Please notify your registry course support team and module leader for disability support.
3. Any student requiring an extension or deferral should follow contact the SHAPE office.
4. The University cannot take responsibility for any coursework lost or corrupted on disks, laptops or personal computer. Students should therefore regularly back-up any work and are advised to save it on the University system.
5. If there are technical or performance issues that prevent students submitting coursework through the online coursework submission system on the day of a coursework deadline, an appropriate extension to the coursework submission deadline will be agreed. This extension will normally be 24 hours or the next working day if the deadline falls on a Friday or over the weekend period. This will be communicated via your Module Leader.
6. Collusion between students (where sections of your work are similar to the work submitted by other students in this or previous module cohorts) is taken extremely seriously and will be reported to the academic conduct panel. This applies to both coursework and exam answers.
7. A marked difference between your writing style, knowledge and skill level demonstrated in class discussion, any test conditions and that demonstrated in a coursework assignment may result in you having to undertake a Viva Voce in order to prove the coursework assignment is entirely your own work.
8. If you make use of the services of a proof reader in your work you must keep your original version and make it available as a demonstration of your written efforts.
9. You must not submit work for assessment that you have already submitted (partially or in full), either for your current course or for another qualification of this university, with the exception of resits, where for the coursework, you may be asked to rework and improve a previous attempt. This requirement will be specifically detailed in your assignment brief or specific course or module information. Where earlier work by you is citable, i.e. it has already been published/submitted, you must reference it clearly. Identical pieces of work submitted concurrently may also be considered to be self-plagiarism.

**Generic marks guide for your reference:**

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| 0-39 | 40-49 | 50-59 | 60-69 | 70+ | 80+ |
| Work mainly incomplete and /or weaknesses in most areas | Most elements completed; weaknesses outweigh strengths | Most elements are strong, minor weaknesses | Strengths in all elements | Most work exceeds the standard expected | All work substantially exceeds the standard expected |

**6012CEM UXD Marking Rubric**

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| **GRADE** |  | **User EVALUATION (Group) (/20)** |  | **REPORT QUALITY (Individual) (/5)** |  | **PROTOTYPE WORK (Individual) (/20)** |  | **USER EVALUATION (Individual) (/20)** |  | **IMPLEMENTATION (Individual) (/35)** |
| **First**  **≥70** |  | Complete, comprehensive, triangulated. That means there are different sources of verifiable user data, which could be some mix of consent forms, video of user evaluations if any, completed questionnaires, photographs of user evaluations and so on. The user evaluations will be run with clear problems to be addressed. The collection and interpretation of data have been done in ways which are clear and well explained, with clear conclusions. There is a clear discussion of how user evaluation has informed prototyping revision. The report will be on word limit, well organised, clear and readable. |  | The report will be on word limit, well organised, clear and readable. It must show how each stage of the project has been done in an exemplary way and make clear links, for example showing how the design components were implemented in selected technology, and how the user evaluation was used to make necessary revisions to the prototype. Will make use of appropriate references and show awareness of the state of the art in the design tool. |  | The design work should be clean, effective and impressive at the prototype level with clearly scoped design problems and a prototype that make sense to users. The prototype must implement known standards, design principles and patterns. At the upper end the prototype will appear professional in terms of appearance, interactivity and functionality. Will include a clear walkthrough with screenshots. |  | Complete, comprehensive, triangulated. That means there are different sources of verifiable user data, which could be some mix of consent forms, video of user evaluations if any, completed questionnaires, photographs of user evaluations and so on. The user evaluations will be run with clear problems to be addressed. The collection and interpretation of data have been done in ways which are clear and well explained, with clear conclusions. There is a clear discussion of how user evaluation has informed prototyping revision. |  | Complete, comprehensive, fully implemented and working. The work will be technically advanced, showing great skill with the development language/framework. Software design and implementation will be fully explained with screenshots and a walkthrough. The code is commented and there is good detail on how it works. A clear and professional video demo is provided to explain the product, but this must not replace a full explanation in the report. |
| **Upper Second**  **60-69** |  | May not be so much evidence as for the top grade, but will still establish the reality of the user evaluation work. The user evaluations will be run with clear problems to be addressed. The collection and interpretation of data may not be as rigorous as for the top grade, and the conclusions may be less nuanced. There is some discussion of how user evaluation has informed prototyping revision. Approximately on word limit, well organised. |  | Approximately on word limit, well organised. May not show such clear links between project phases, but good insight into why they are necessary. May be less convincing on handover issues, i.e. the mapping between the design components and the selected design tool. Will have some references. Will be clear and readable. |  | The design work should be effective, and must be at near professional standard for at least two of appearance, interactivity and functionality. Will include a walkthrough with screenshots. May be less convincing in terms of clear scoping. |  | May not be so much evidence as for the top grade, but will still establish the reality of the user evaluation work. The user evaluations will be run with clear problems to be addressed. The collection and interpretation of data may not be as rigorous as for the top grade, and the conclusions may be less nuanced. There is some discussion of how user evaluation has informed prototyping revision. |  | Substantially complete, showing real skill with the development framework, but may be bugs or incomplete features. Software design and implementation will be explained through self-contained walkthrough. A clear video demo is provided to explain the product, and this may be used to reduce the writeup, which is less complete as a result. |
| **Lower Second**  **50-59** |  | May be less in the way of verifiable user data, but must include consent forms as a minimum. The user evaluations will be run with less definition of specific goals. The collection and interpretation of data have been done in ways which are less well explained. There is some discussion of how user evaluation has informed prototyping revision, but this may be trivial without saying how specific improvements were driven by particular user data. May be noticeably over or under the word limit. |  | May be noticeably over or under the word limit. Writing may be less well referenced and with less insight into how the different phases of work fit together. The organisation of the work will be less clear and logical, and will be mainly descriptive with less analysis of why particular approaches were taken or decisions made. |  | Design work may be more basic and may approach professional standard on only one of appearance, interactivity and functionality. Will include a walkthrough with screenshots, but may be unclear and have omissions. May not explain how scope decisions were made. |  | May be less in the way of verifiable user data, but must include consent forms as a minimum. The user evaluations will be run with less definition of specific goals. The collection and interpretation of data have been done in ways which are less well explained. There is some discussion of how user evaluation has informed prototyping revision, but this may be trivial without saying how specific improvements were driven by particular user data. |  | Not complete; features omitted and evidence may not clearly show the product. But has to include a substantial codebase. Writeup may be incomplete and with omissions and may require marker to go to an external link and make their own sense of what is there. A satisfactory video demo is provided to explain the product. |
| **Third**  **40-49** |  | May be consent forms only, and perhaps only a few. May be less data, and it could be very basic e.g. just completion times, and the interpretation may be descriptive and without conclusions e.g. just pie charts with no further explanation. May be little on how the evaluation informed any revision or this could be very vague. The report is hasty, may not be on word limit, may have errors. |  | The report is hasty, may not be on word limit, may have errors, shows little engagement beyond basics. Has to cover all that was asked for but may do so in trivial and superficial ways. Not much referencing, writing not at a high standard, omissions. May be good work worth a higher grade in principle but may be rushed and minimal. Little sense of why things were done in the way they were, little insight into how phases of work fit together. Little referencing. |  | Prototype may be basic and may not make complete sense to users. May not approach a professional standard on any of appearance, interactivity and functionality. May be only an impressionistic writeup with only a splash screen. May be a link to external site and the reader expected to go and make his / her own sense of things. |  | May be consent forms only, and perhaps only a few. May be less data, and it could be very basic e.g. just completion times, and the interpretation may be descriptive and without conclusions e.g. just pie charts with no further explanation. May be little on how the evaluation informed any revision or this could be very vague. |  | There needs to be some codes that work to some extent, and there should be a writeup, but this could be relatively minimal and might show confusion. There may be links to unsorted resources with no explanation of how these should be explored, but a basic product exists.  A fair video demo is provided to explain the product. |
| **Fail**  **<40** |  | Substantially incomplete; mostly or entirely omitted – maybe one or two photos that look posed but very few if any consent forms. The report is incomplete or irrelevant. |  | The report is incomplete or irrelevant. May deal with some of what was asked for. Shows very limited engagement with the module, if any (may look like a last minute rush based on little if any prior work). May show pass potential. |  | Very basic attempt likely to be incomplete, may show little if any awareness of the features and functionality of the design framework. |  | Substantially incomplete; mostly or entirely omitted – maybe one or two photos that look posed but very few if any consent forms. |  | Some codes but may be little more than the teaching code bolted together. Will show little skill, and writeup will show low knowledge of the development framework or UI implementation. An unclear or no video demo is provided to explain the product. |
| **Late submission** |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |

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