

**UFCFFF-30-3**

**Software Development Project**

**Project Title: SwapMe Web Application**

**Date**: 9th May 2024

**Written By:**

Khoo Yi Qing (22052438)

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# Chapter 1: Introduction (250 words)

* Problem statement
* use material from your proposal outline

SwapMe is a web application prototype that proposed to offer the UWE community an opportunity to view and swap their item with others. The purpose of the web application developed is to promote sustainability and reuse. It acts as a platform for UWE Students and UWE Staff to offer their pre-loved items a new home. The users of the web application can publish their unwanted items to swap for items that they desire.

# Chapter 2: Method (1000 words)

* identify suitable tools and software methodology (600 words)
* identify risks (200 words)
* version/document control strategy (100)

# Chapter 3: Research (1000 words)

* primary research - data you collected yourself
* technology selection where required - pugh matrix

# Chapter 4: Requirements (1000 words)

* UML diagrams – Use Case Diagram(100)
* Derive (suitably numbered e.g. FR1, FR2,...) functional requirements (prioritised).
* Use Quality assurance (ISO/IEC 9126 Software Engineering: Product quality) to develop Non-Functional Requirements

e.g. numbered NFRs (e.g. NFR1, NFR2, ...) organised by quality:

1. Usability

2. Functionality

3. Reliability

4. Portability

5. Efficiency

6. Maintainability

# Chapter 5: Design (750 words)

* Software architecture
* Relevant UML diagrams (e.g. database ERD diagram)
* Code snippets to highlight core algorithms, or pseudo-code.
* Wireframes for screen design
* UX design map

# Chapter 6: Results (1000 words)

* Screenshots to demonstrate your use-case scenarios
* Automated or Manual Testing, Requirements Traceability Matrix

# Chapter 7: Conclusion and Next Step (500 words)

* Include critical reflection on the project content and process - e.g. Gibbs'

# References

# Appendix

* questionnare consent form
* participant information sheet
* questionnare questions
* do not include personal data

## Ethical Checklist



Faculty of Environment & Technology

Faculty Research Ethics Committee (FREC)

**Ethical Review Checklist for Undergraduate and Postgraduate Modules**

Staff and PG research students must not use this form, but should instead, if appropriate, submit a full application for ethical approval to the Faculty Research Ethics Committee (FREC).

*Please provide project details and complete the checklist below.*

**Project Details:**

|  |  |
| --- | --- |
| **Module name** | **Software Development Project** |
| **Module code** | **UFCFFF-30-3** |
| **Module leader** | **Steve Battle** |
| **Project Supervisor** | **Prakash Chatterjee** |
| **Proposed project title** | **UWE Item Swapping Application: SwapMe** |

**Applicant Details:**

|  |  |
| --- | --- |
| **Name of Student** | Khoo Yi Qing |
| **Student Number** | 22052438 |
| **Student’s email address** | [Yi3.Khoo@live.uwe.ac.uk](mailto:Yi3.Khoo@live.uwe.ac.uk) |

| **CHECKLIST QUESTIONS** | | **Yes/No** | **Explanation** |
| --- | --- | --- | --- |
|  | Does the proposed project involve **human tissue,** **human participants, animals, environmental damage, or the NHS.** | Yes | The proposed project will involve human participants to complete the survey via Qualtrics. |
|  | Will participants be clearly asked to give consent to take part in the research and informed about how data collected in the research will be used? | Yes | Before taking the survey, participants will be requested to give consent to participate in the study and will be informed about how the data collected in the research will be used. |
|  | If they choose, can a participant withdraw at any time (prior to a point of “no return” in the use of their data)? Are they told this? | Yes | Participants may withdraw at any moment before submitting the survey. |
|  | Are measures in place to provide confidentiality for participants and ensure secure management and disposal of data collected from them? | Yes | To ensure participant confidentiality, I will guarantee that the data collected from the participants is exclusively utilized for this research endeavor and promptly erased upon the project's completion. The collected data will be securely stored in UWE OneDrive, ensuring utmost protection and confidentiality. |
|  | Does the study involve people who are particularly vulnerable or unable to give informed consent (eg, children or people with learning difficulties)? | No | The research will only include students and staff from UWE Bristol and will exclude people who are particularly vulnerable or unable to provide informed consent. |
|  | Could your research cause stress, physical or psychological harm to humans or animals, or environmental damage? | No | The research only asks simple questions that will not cause participants stress, physical or psychological harm, or environmental damage. |
|  | Could any aspects of the research lead to unethical behaviour by participants or researchers (eg, invasion of privacy, deceit, coercion, fraud, abuse)? | No | Participants will not engage in any unethical behavior due to the research. The research will not involve any violation of privacy, deceit, coercion, fraud, or abuse. |
|  | Does the research involve the NHS or collection or storage of human tissue (includes anything containing human cells, such as saliva and urine)? | No | We will not collect any human cells from participants in the research. |

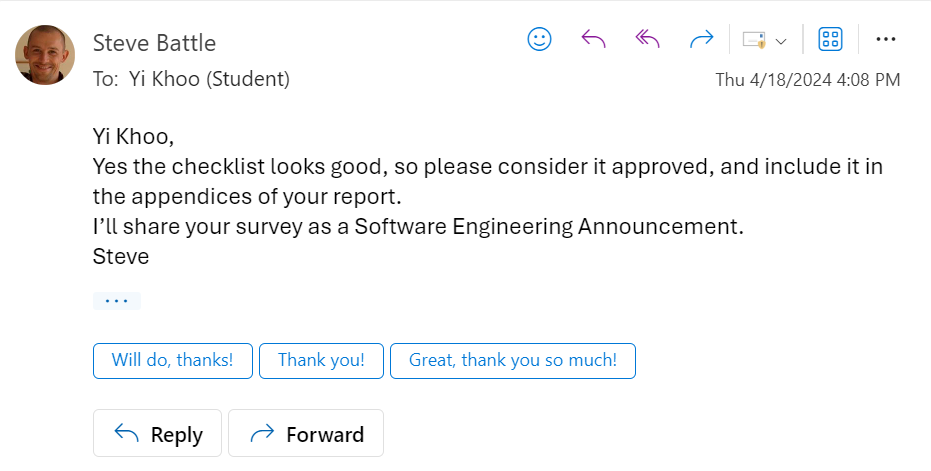
Your explanations should indicate briefly for Qs 2-4 how these requirements will be met, and for Qs 5-8 what the pertinent concerns are.

* **Minimal Risk:** If **Q 1 is answered ‘No’**, then no ethics approval is needed.
* **Low Risk:** If **Qs 2-4 are answered ‘Yes’ and** **Qs 5-8 are answered ‘No’**, then no approval is needed from the *Faculty Research Ethics Committee* (FREC). However, your supervisor must approve (a) your information and consent forms (Qs 2 & 3) and (b) your measures for participant confidentiality and secure data management (Q4).
* **High Risk:** If **any of Qs 5-8 are answered ‘Yes’**, then you must submit an application for full ethics approval *before* the project can start.This can take up to 6 weeks. Consult your supervisor about how to apply for full ethics approval.

**Risk Assessment:** Separate guidance on risk assessment can be found on UWE’s Health and Safety forms webpage at <https://go.uwe.ac.uk/RiskAssessment>. If needed, you must complete a Risk Assessment form. This must also be attached to your application for full ethics approval if your project is **High Risk**.

|  |
| --- |
| **Your supervisor must check your responses above before you submit this form.** |
| **Submit this completed form via the *Assignments* area in Blackboard (or elsewhere if so directed by the module leader or your supervisor)***.* |
| After you have uploaded this form, your supervisor will confirm it has been correctly completed by “marking” it as *Passed*/100% via the *My Grades* link on the Blackboard*.* |

Further research ethics guidance is available at <http://www1.uwe.ac.uk/research/researchethics>



*Evidence of ethical checklist approved*