# **SUMMATIVE ASSIGNMENT**

# Final Project

The purpose of this assessment is to have you apply the concepts and ideas learned in this course, specifically focusing on the ethical, legal, and societal impacts of technology.

# Objectives;

- I. Identify and define key ethical concepts.
- II. Analyze ethical concerns throughout the software development lifecycle.
- III. Use ethical frameworks and decision-making processes.
- IV. Articulate ethical concerns clearly and persuasively.
- V. Analyze the ethical, legal, and societal impacts of software products.
- VI. Critically assess the ethical implications of emerging technologies.

Description: This summative project is in two parts, with the following hot deadlines;

Part One: Submit by end of week 6

Part two: Submit by end of week 12

### **Assessment Directions:**

# **Part One**

#### ETHICAL APPROVAL FOR YOUR RESEARCH PROPOSAL

The question of ethical approval must be properly addressed throughout the duration of your research project and demonstrated as necessary. The University and the Mission Capstone department expect that all those conducting research conform to the <u>ALU's Framework for Research Ethics</u>.

Please tick if you agree to the following statement:

I confirm that I have considered the ethical considerations my research proposal gives rise to and will obtain ethical clearance from my university as soon as possible after submitting my proposal and before data collection begins

□ confirm

#### Task One: [Complete by week five (5)]

Please state the ethical considerations raised by your research proposal and how you plan to address them (minimum of 250 words)

Your work should highlight (but not be limited to) the;

- a) Data management and storage
- b) A possibility of discovering anomalies in existing systems
- c) High possibility of using already existing algorithms or code snippets
- d) Ethical approval from the University and/or the source where data will be acquired
- e) Consideration for elders and Juveniles (individuals who are under an age fixed by law)
- f) Research that may lead to 'labelling' either by the researcher (e.g. categorisation) or by the participant (e.g. 'I am stupid', 'I am not normal')
- g) Research that may have an adverse impact on employment or social standing
- h) Research involves access to records of personal or confidential information
- i) Research involves a significant element of deception
- j) Research involves sensitive topics (such as legal or political behaviour; experience of violence or harm; their gender or ethnic status)

**Note**: Task one responses will be added to the **chapter one** section of your proposal (after the scope section. **Title**: Ethical considerations). A copy of this extract must be submitted to Ethics in Software Engineering for grading.

### Task Two: [Complete by week six(6)]

In this part, you will highlight how you will integrate ethical morals and professional conduct into your capstone project proposal. Dedicate a section describing the;

- I. Project plan, (including the timeline/Gantt chart visualizing project milestones, with components and their deliverables in each case)
- II. Stakeholder impact
- III. Relevant ethical frameworks (local or international) that will guide your research. Do not just outline them

**Submission Name:** Summative assessment: Part One

File type: DOCX or PDF

Deadline: End of week six (6)

#### Part Two

## **Task one:** [Complete by week nine(9)]

- a) Create a project journal/project logbook
- b) Design & Development;
  - i) Maintain an ongoing reflection of your design choices and implementation decisions, together with their ethical implications.
  - ii) Document this reflection in a project journal/project logbook.
- c) Demo & Feedback:
  - i) Briefly highlight any ethical considerations addressed or challenges encountered during development.
  - ii) Seek feedback on the ethical implications of your project's current state.

Document (in the project journal/project logbook) your insights/glows and areas of improvement from the demo. In addition, ensure your document highlights (but not be limited to) sections about;

- Features of the system/code and guided system access/execution steps
- Culturally relevant values the solution addresses or integrates
- Elements of Ubuntu (interconnectedness, community, and shared humanity)
- Respect for vulnerable groups and traditional leadership structures
- Incorporation of opportunities for consensus-building transparency, accountability and inclusive decision-making
- Possibility of leveraging oral traditions and storytelling to promote ethical values and transmit cultural knowledge within your system
- How does the system encourage sustainable and environmentally responsible business practices?
- Does your system address issues of social inequality and promote equitable access to opportunities and resources?
- How does your system encourage ethical and responsible use of technology, addressing challenges like data privacy and digital divides?

**Deadline:** End of week nine(9)

# Task Two: [Complete by week twelve(12)]

Video: Note that we must see your face as you present from the start to the end. At the same time, we want to see you navigate through your solution/system as you discuss it. Do not edit or combine clips of your video recording.

Create a 7 - to 15-minute video discussing;

- The historical development of your capstone technology and the design choices that shaped it.
- Its current uses and the user & User Impact (including inclusivity/exclusion) e.g. groups it may invite or exclude
- The ethical concerns associated with the technology.
- Potential alternative design choices that could lead to a more inclusive or ethical outcome.
- A vision for the future development of the technology, considering ethical implications.
- A walkthrough of the key sections of your written End-User License/Copyright/Privacy policy agreement.

**Submission Name**: Summative assessment: Part Two

**File type**: DOCX/PDF with a link to the recorded video

**Deadline**: End of week twelve (12)