1

COMP501: Computing Technology in Society

Semester 2, 2025

Assignment 2: Implications of New Technology; presented as a website.

Research Project; Group Assignment

1. Assignment Overview

This assessment has the following parts. All parts must be attempted.

Parts	Tasks	Individual or Group	Due	Week	Marks
Part 1	Group Topic Proposal Presentation	**Group**	Presentation In labs Week 9 (29th September-1st October); Upload Slide by Friday 3rd October 5:00 p.m.	9	20
Part 2	Project Website Submission	**Group**	Friday 24th October, 5:00 p.m.	12	60
Part 3	Individual Ethical Reflection and Peer Evaluation uploaded	**Individual**	Friday 24th October , 5:00 p.m.	12	20
	Total Marks				**100**

Total Marks 100 (Contribution to the final mark: 60%)

Late penalty: Late submissions will be penalised at 5% of the actual assignment mark for every calendar day. E.g., assignments submitted 1 minute late are penalised as one day late. Late work of 5 or more days will not be marked.

2. Assignment Aim

The assignment is composed of progressive stages to meet the learning outcomes below for the paper:

1. It aims to have students demonstrate competence in understanding of the power of digital systems when placed in the hands of non-benign agencies.

2. It provides students with some foundations of Hypertext Markup Language (HTML); students will have a chance to learn about HTML elements and structure. Students will build some simple blocks of a website.

3. It prepares students to formulate personal ethical positions in relation to the development, manufacture, application, expansion, and disposal of digital systems. [*addressed through the Individual Components of the assignment*].

3. Assignment Requirements

Note: these instructions should be read together with the detailed explanations provided in the preliminary website, available on Canvas.

Part 1 – Topic Proposal You will work in a group to select a technology topic which the group will investigate. Your research will critically appraise past, present and future application of digital systems with particular emphasis on their impact on society in general, and on the individual, while incorporating current and potential impacts.

Some potential technology topics that may be investigated are listed in Section 5.0 of this document. You may propose any other relevant topic – discuss with your TA if you would like to investigate a topic not listed here.

You will be introduced to "Getting started with your topic & narrowing topic focus strategies" in week 7 lab. You can continue to work on your Topic Proposal in week 8 lab. In the week 9 lab, your group will present your proposal of the research you plan to do; See section 4.1.

Part 2 - Website You are required to build a website to present the information you have gained from your research, and your discussions as a group. A *preliminary website* is available for download on Canvas. Section 4.2 covers this part in detail.

Part 3 - Individual Finally, you will reflect on the ethical implications of the technology topic and individually submit a document outlining your considerations and recommendations. You will also submit a 'Peer Evaluation' form, evaluating your perception of *your own contribution and that of your group members*. For more on this, see section 4.3.

Group Formation

You will form a group of 2-3 members, preferably from your lab stream. If you have difficulty forming a group, email your lecturer or TA and you will be allocated to a group from your lab stream to work on the group project. You may view your group allocation on Canvas > People > Research

Project Groups. You may ask your TA in the lab to help you join/change groups if you need help with this.

Please meet with your group members in week 7 lab and begin to identify a topic that the group will investigate. As a starting point, try to briefly describe your topic, its relevance and importance, and the reason why you have chosen it.

Due: You will need to confirm your final group information to your TA by the end of Week 8 Lab.

4. Assignment Details

4.1 Part 1 – Group Topic Proposal Presentation [20 Marks]

Your group is to present, during the week 9 lab, using one PowerPoint slide [max], summarising your project topic and the focus/objectives/direction of your project.

Note: All members of the group need to be present, and take part in presentation, in order to be awarded marks for this part. [18 marks]

- This is the first stage of your group project, where you propose the chosen technology topic that you will investigate. This will then be approved or reviewed.
- **Using 1 PowerPoint slide only**, briefly describe your topic, its relevance and importance and why you have chosen it. This is what **you will present in the week 9 lab**.
- Outline your group members' roles and responsibilities for activities they will undertake. I**mportant roles are:**
  - **Group Leader**, the person who will keep track of progress, organise meetings and generally make sure work is being done.
  - **Editor,** the person who has ultimate responsibility of managing changes to the group website.
- You may post updates progressively to the group website as part of developing the site.

What to submit by date due [2 marks]

Group Draft Proposal Slide must be submitted on CANVAS in soft copy.

File(s) to be submitted to Canvas:

1. A PowerPoint slide that contains your one-page proposal presentation. Convert your PowerPoint file into .pdf.

2. Name your file as StreamNo GroupNo Student ID Nos.pdf;
Submit it on Canvas at: *Assignment 2 Part 1: Topic Proposal Presentation*

3. Only one group member needs to submit on behalf of the group. Group needs to agree who will post on behalf of the group. Group members need to confirm it has been done, so that your work can be marked.

4.2 Part 2 – Project Website and Submission [60 Marks]

Download the *preliminary website*; it has the set of requirements outlined in the Home page, on the Technology Topic page and Guidelines pages. You may use this *preliminary website* as the basis for your website, or you may design an entirely new website. Your group website should address the requirements outlined in the *preliminary website* and this document.

As working with the group progresses, keep track of the group process (See Guidelines Page of preliminary website) using e.g., Meeting Minutes and any other files evidencing your group's work.

Only one group member needs to submit on behalf of the group. The group needs to agree on who will submit on behalf of the group and document this in their meeting minutes. Group members also need to agree on a method to confirm that upload has been done (*E.g.,* This may be via a message from the person confirming to group members that submission was done "on this date, at this time"). This is so that your work can be marked.

Requirements for your website include:

- Scholarly expectations of design and referencing.
- You should refer mostly to academic articles (at least 10); however, reference to websites in addition to this is acceptable. (cited as APA formatted references)
- Details of the group process as indicated in the Guidelines Page including: Meeting Minutes and files evidencing Groupwork.
- Must have at least 1-3 figures (or images) on website.

Your website will be submitted as a Group artifact. The rubric gives guidance on how the Technology Topic addressed by your website will be marked.

What to submit by date due:

The Group Project Website, a zip file comprising all elements mentioned in this section and all elements progressively updated to your website *i.e.*, your research and conclusions presented as a website, meeting scholarly expectations of design, referencing and quality.

- The submitted zip file should contain a soft copy of your group website.
- A zip file that contains all your group assignment files and folders. compress all files into zip including html documents, image files and any other supporting resources.
- Name your file as StreamNo GroupNo Student ID Nos.zip; Submit it on Canvas at: *Assignment 2 Part 2: Final Group Website Submission*.
- Make sure to check the zipped website to make sure all files are included.
- Only one group member needs to submit on behalf of the group. The group needs to confirm with the person that submission has been done; this is so that your work can be marked.

4.3 Part 3 – Individual Ethical Reflection and Peer Evaluation. [20 Marks]

You will need to download the document *Assignment 2 Part 3 - Individual Components.docx, and* complete it.

1. Page 1 – Complete the Peer Evaluation [5 marks]
   Here, you will evaluate *your own contribution* to the project *and that of your group members.*

2. Page 2 – Complete page 2 onwards with your personal view on the ethical aspects of your topic. [15 marks]
   Here, you will consider and discuss ethical issues relating to the chosen technology, your individual personal reflections and recommendations.

3. Word count: Between 800-1000 words

What to submit by date due:

The file mentioned above, preferable converted to pdf, to be uploaded to Canvas.

- Name your file as StreamNo GroupNo Student LastName_FirstName.zip. Submit it on Canvas at: *Assignment 2 Part 3: Individual Component Submission.*

5. Potential Technology Topics

Potential topics or issues to be investigated are outlined in the textbooks by Baecker (2019) which canvasses a wide range of topics supported by several case studies.

- Whatever topic you choose, you should consider opportunities provided by the technology or computer application, technological threats or risks, challenges for society, the social issues, policy, legal choices, ethical and moral dilemmas (reference Baecker, chapter 13). Some example topics are given here:

1. Digital inclusion:
   - Access to the Internet
   - Gender issues
   - Technology for seniors
2. Digital media and intellectual property Intellectual property protection and fair use:
   - Music
   - Movies
   - Open source software
3. Computers in education and learning:
   - Smart and flipped classrooms
   - Online learning
   - Massive open online courses or MOOCs
4. Computers in medicine and health care:
   - Online health information
   - Electronic medical records
   - Infectious disease surveillance and modelling
   - Artificial body parts and bionic people

5. Free, speech, politics, and government:
    - Free speech
    - Print, broadcast, and Internet speech
    - Fake news

- Similarly, the text by Kaczmarcyzk (2012) presents a set of relevant case studies.
- Some other current topics:
    - Emerging Technologies
    - Digital Systems Disposal
    - AI Decision-Making
    - Community Wi-Fi Initiatives. Programs like Google Station (now discontinued) aimed to provide free or affordable Wi-Fi hotspots in underserved areas, fostering internet accessibility. Similar initiatives can be explored.
    - Mesh Networks in Rural Areas. Organizations like Guifi.net have deployed community-driven mesh networks in rural Spain to ensure internet access where infrastructure is lacking
    - Digital Literacy Programs for Women
    - Mobile Banking for Financial Inclusion M-PESA in Kenya has revolutionized access to banking for women by leveraging mobile technology.
    - Senior-Friendly Device Interfaces. Companies like GrandPad design tablets with simplified interfaces for elderly users, enhancing accessibility.
    - Digital Learning Programs. Programs such as Older Adults Technology Services (OATS) teach seniors essential digital skills to improve connectivity and independence.
    - Web Accessibility Standards Websites following WCAG guidelines ensure inclusivity for people with disabilities. Explore examples like the BBC's accessibility-first design approach.
    - Assistive Technologies Innovations like screen readers (e.g., JAWS) and voice recognition tools (e.g., Dragon NaturallySpeaking) help users with disabilities navigate digital platforms.
    - Free Basics by Meta. This program provides basic internet services for free in developing countries, promoting initial digital connectivity for underserved populations.
    - Starlink Satellite Internet. Leveraging satellite technology, Starlink aims to provide high-speed internet to remote and rural regions worldwide
    - UN Women’s EQUALS Initiative.
    - ICT for Women Entrepreneurs. Programs like "WeTech”.
    - Navigation Apps for the Visually Impaired.