

CMPS1134 Final Project

DUE DATE: Wednesday 26 November 2025

FORMAT: Digital Submission (zipped) and Presentation

TOTAL POINTS: 100 (35% of course grade)

INSTRUCTIONS:

You will work with a team for this assignment to complete the tasks. A template for the cover page is provided on the CMPS1134 Moodle site. This cover page includes a signature block. Team members are to sign if they have contributed to, and are knowledgeable of, the work done for the submission. Team member names that appear on the signature block without a signature will not receive a grade.

THE ASSIGNMENT

1. Teams are expected to complete their respective task using any resources available, including course materials, textbooks, online documentation, and peer collaboration. High expectations are set for the quality of the final product, as this project is designed to challenge you to apply the computing concepts learned throughout the course. Each team is encouraged to explore innovative solutions and demonstrate a thorough understanding of the principles covered in the lectures. The implementation should showcase not just the functionality of the solution but also the depth of knowledge gained. Be prepared to explain the techniques and resources used, the problem-solving strategies adopted, and how you overcame any challenges during the development process. Each team will design and publish a multi-page website hosted on GitHub Pages. This website will serve as your team's final project portfolio, demonstrating your technical knowledge, creativity, and mastery of core computing concepts learned throughout the semester.

Example: <https://kryanbz.github.io/foc2020/index.html>

Your website must include the following pages:

1.) Cover Page

- Course title: **Fundamentals of Computing**
- Short description of the course, including what students learn and how it applies to computing.
- A team introduction or mission statement describing the website's purpose and your approach to the final project.

2.) Team Members Page

- A professional photo of each team member.
- A short biography including:
 - Full name

- Program of study
- Interests in Information Technology
- One key takeaway or favorite topic from the course

3.) Video Gallery Page

- Embed or link to the videos each team members created from the video assignment.
- Organize them clearly with captions describing what each video demonstrates.

4.) Documentation Page

- Include a link to your written report and presentation slides, uploaded to Google Drive (with public access enabled).
- Include any additional documentation (e.g., screenshots, code snippets, or testing logs).

Website hosting requirements:

- 1.) The website must be hosted on github pages.
Your github repository should include:
 - All html, css, and javascript files used in the project.
 - A properly configured readme.md file that introduces your project.
 - A live link to the hosted github pages version.
 - Ensure your repository is public so I can view both your code and live site.

Each team will be assigned one of the following projects:

BINARY CALCULATOR APPLICATION (Task 1)

- ✓ **Objective:** Create a calculator on a webpage that performs arithmetic operations on binary values.
- ✓ **Skills:** Programming logic, binary arithmetic, UI design.

STUDENT INFORMATION FORM (Task 2)

- ✓ **Objective:** Create a webpage with a form that accepts basic student information and stores it in a database. Display a confirmation message after insertion and retrieve stored records on the same page.
- ✓ **Skills:** Form handling, database connection, SQL CRUD operations.

TIC TAC TOE (Task 3)

- ✓ **Objective:** Create a UI on a webpage that has an interactive two-player web-based game.
- ✓ **Skills:** Logical design, condition handling, event-driven programming.

TO-DO LIST APPLICATION (Task 4)

- ✓ **Objective:** Create a UI on a webpage that allows users to add, remove, and check off to-do items.
- ✓ **Skills:** Data management, user interface design, programming.

DATA STRUCTURE VISUALIZER (Task 5)

- ✓ **Objective:** Create a webpage that visually demonstrates how data changes in a Stack or Queue through user interactions.
- ✓ **Skills:** Programming logic, algorithm visualization.

2. Your presentation should comprise of these components:

- a) Produce a short PowerPoint presentation that is representative of your **entire** report, to be presented in class. Your entire presentation should take between 10 – 12 minutes.
- b) Each team will present their project to the class, demonstrating the key features and functionalities. The presentation should include:
 - a) **Introduction:** brief overview of the project.
 - b) **Demo:** show your website and assigned project in action.
 - c) **Explanation:** Explanation of the implementation process, challenges faced, and solutions.
 - d) **Q&A:** Answering questions from lecturer and classmates.
- c) **Lecture connection:** Identify one lecture topic from the course that helped you complete your project.
 - a) Explain **how** that topic assisted your implementation or design.
 - b) Give examples of where it was applied in your code or design choices.

3. Write a report that highlights a specific lecture session from the course that assisted you with the project. In your project report, specify which lecture topic you referred to, what concepts or techniques you extracted from that session, and explain how you implemented them in your project. **DO NOT PLAGIARIZE**. The report text should be 1.5 spaced, font size 12; and should comprise a minimum of 5 pages, maximum of 7 pages, excluding the cover page, contents, references, and appendices. The report document should be assembled with the cover page containing the signature block in a **PROFESSIONAL** format and submitted as:

- a) Upload all files to a Google Drive, enable public access, and submit a link inside a PDF document, all due **BEFORE** the start of class on the due date.

Team 1	Team 2	Team 3	Team 4	Team 5
Task 1	Task 5	Task 4	Task 3	Task 2
Macario Cus	Samta Sandhu	Andrew Faber	Kiyanee Gamez	Abner Bobadilla
Kevin Taca	Jabez Jou	Lisandro Figueroa	Ismael Teul	Valentino Vernon
Jenner Velasquez	Albert Gilharry	Derick Cal	Ashley Kwok	Carlos Chulin
Nikita Link	Jamilah Usher	Adrian Morris	Robyn Vasquez	Jadon King

For more detailed grading information please review the **Grading Criteria** and the **Presentation Rubric**, provided.

GRADING CRITERIA/FINAL PROJECT (Worth 100 points: 35%)

1	Website	50.00
a.	Sophistication of interactive animated webpage	30.00
b.	Clarity of description of concept assigned	10.00
c.	Demonstrated proficiency for task execution	10.00
2	Presentation (see Presentation Rubric)	25.00
a.	Organization	4.00
b.	Visual Aids	4.00
c.	Mechanics	4.00
d.	Eye Contact	4.00
e.	Verbal Techniques	4.00
f.	Subject Knowledge	4.00
g.	Content	4.00
h.	Timing	4.00
3	Report	25.00
a.	Cover page/ signature block	1.00
b.	Table of contents	1.00
c.	Topics structure: Major/ minor topics & Conclusion	1.00
d.	Grammar, spelling and punctuation	1.00
e.	Professional appearance	1.00
f.	Length (1500 words/ 5-7 pages)	5.00
g.	Content	
	1. Overview (300 words minimum)	5.00
	2. The Program	
	i. Overview of work distribution (300 words min.)	5.00
	ii. Team member subtopics (600 words min.)	5.00
	iii. Code	5.00
	3. Conclusion (300 words minimum)	10.00
h.	Late submission	
Total Value/ Points		100.00
VALUE/ GRADE		35.00

Presentation Rubric				
	1	2	3	4
Organization	Audience cannot understand presentation because there is no sequence of information.	Audience has difficulty following presentation because student jumps around.	Student presents information in logical sequence which audience can follow.	Student presents information in logical, interesting sequence which audience can follow.
Visual Aids	Student uses superfluous visual aids or no visual aids.	Student occasionally uses visual aids that rarely support the presentation.	Student's visual aids relate to the presentation.	Student's visual aids explain and reinforce the presentation.
Mechanics	Student's presentation has four or more spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.
Eye Contact	Student makes no eye contact and only reads from notes.	Student occasionally uses eye contact, but still reads mostly from notes.	Student maintains eye contact most of the time but frequently returns to notes.	Student maintains eye contact with audience, seldom returning to notes.
Verbal Techniques	Student mumbles, incorrectly pronounces terms, and speaks too quietly for audience in the back of class to hear.	Student's voice is low. Student incorrectly pronounces terms. Audience members have difficulty hearing presentation.	Student's voice is clear. Student pronounces most words correctly. Most audience members can hear presentation.	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.
Subject Knowledge	Student does not have grasp of information about subject.	Student is uncomfortable with information, provides only rudimentary information and fails to elaborate.	Student is at ease and provides most information with explanations and some elaboration.	Student demonstrates full knowledge (more than required) by providing information with explanations and elaboration.
Content	Overview of topic	Use of examples	Relevance of material presented	Correctness of material presented
Timing	<8 mins	8-12 mins	>15 mins	12-15 mins