CS132 Computer Organisation and Architecture

Coursework 2 - 2022/23

Released: Friday 2nd December 2022 - 9am
Due: Thursday 12th January 2023 - 12 noon

Introduction

Throughout the module, we have looked at a large array of different elements within the world of computer hardware, how software is actually executed on this hardware, and the interactions between the two. This has culminated in the projects done within Weeks 7 through 10 of the CS132 labs.

In these labs, you were given specialised hardware, with the aim of completing specific tasks and extending these as far as possible; all within the 4 weeks of allotted time. Thus, it is good to reflect on these weeks, and how you and your partner(s) worked together to complete these goals.

Task

For Coursework 2, you and your partner(s) are required to produce a **joint report** about the development and implementation of the code for your project; whether that is the Robot Arm, the Buggy or the Oscilloscope Pong. In doing so, you should combine the skills and knowledge gained in this module (along with other modules) to produce the most complete report possible.

Requirements

- The document should be no longer than 1500 words long (not including titles, figures, captions, tables, appendix, references etc.).
- The document should include references to any sources utilised when writing the report, or when working on the project.
- The document should include the aim, design, implementation and results of the project. There should also be some reflection on the project, and could have been done with more time.
- A contribution form should be attached to each copy of the report, and each student is required to submit a version of the report.
  - The contribution forms will be used to differentiate the work done by different people within each grouping. Thus, this will be used to weight different elements of the marking scheme to better reflect how much work and effort you put in compared to your peers.
  - If any rows of the contribution form is left blank; it will be assumed that the students contributed equally for these sections.
  - If a contribution form is not included in the submission; it will be assumed that each student contributed equally.
  - If one or more students out of the pair/trio does not submit the report, but the other(s) do; then those students that do not submit the report will score 0. This is regardless of whether the student who does not submit the report submits a contribution form.

Guidance

- The report should be clear, concise and readable. The report should also be written in a formal style (avoiding 1st person where possible). Therefore, take care over how you write, and avoid jargon and clichés where possible. Figures and graphs can be extremely effective ways to communicate ideas.
- You should assume that the reader is a technically informed non-expert. With this in mind, do not give long explanations of well established technical content.
- The report should be as long as is necessary to communicate the required information (within the word limit). Quantity does not improve quality, though be sure to do your project justice.
- It is a good idea to plan the report with your partner before you begin writing. A good report will require thought and many drafts before a final version.
- Because time with the project equipment is very limited, it is a good idea to take as many notes during the labs so that these can be used when writing the report at a later date.

Submission Details

All students should submit a copy of there joint report, alongside a copy of the contribution form and there project code, as a single ZIP file, on Tabula by 12^{th} January 2023.

- Submissions should be a single ZIP file containing two folders:
  - One folder should be called `report`, and should contain the joint report and any files required for the report (images, diagrams etc.). This folder should also have the contribution form, which should be included as a separate file.
  - One folder should be called `project`, and should contain all the code relevant to the project and the report, including the final code. Each version of the code should be named clearly and concisely.
- The report must be in a PDF format.
- A link to the Tabula submission can be found on the CS132 module webpage and on Tabula itself (under "Assignments").
- All marking will be done in accordance with the Universities 20-point marking scheme (more details → `https://warwick.ac.uk/fac/sci/dcs/teaching/handbook/assessment/`).
- The work you submit should be your own work, and thus should abide by the Universities rules on plagiarism.
- All late submissions and cases of plagiarism will be handled in accordance with the Universities regulations (Reg. 36.3 and 11 respectively).
- All code should be clearly commented, well formatted and easily readable.

CS132 Coursework 2 Contribution Form

For each section in the following table, please give a score between 2 and -2 for the performance of each student, including yourself. The values you award are not required to be whole numbers, but each row of the table should total to 0. This will be used to weight different elements of the marking scheme to better reflect how much work and effort you put in compared to your peers.

For each student, please provide the ID of the person you worked with in the provided space. If you worked as part of a pair, then only the columns for yourself and "Partner Student A" need to be given, alongside the total column. If you worked as part of a trio, then all the columns must be filled in.

For example, if you contributed more than your partner in writing the design section of the report, then you can award yourself 0.5, and your partner -0.5. However, if you both contributed equally, you would give both yourself and your partner a score of 0 in those sections.

Each student should fill in the form below and attach it to there copy of the submission.

Student Details

Name	
University ID Number	
Project	
Table	
Date and Time of Lab	

Contributions

Area		**Myself (ID:_____)**	**Partner Student A (ID:_____)**	**Partner Student B (ID:_____)**	**Total**
Project	Direction and Leadership *For example, how much did the student lead on the project*				
	Organisation and Management *For example, was the student on time and not on there phone all the time*				
	Ideas and Suggestions *For example, how much did the student contribute during the project*				
Report Writing	Overall *For example, how much did the student contribute to the report structure and formatting*				
	Design Section *For example, how much did the student contribute to the design section(s)*				
	Implementation Section *For example, how much did the student contribute to the implementation section(s)*				