ENGF0002 Scenario 2

Introduction

As part of your computer science curriculum, you have learned various concepts from logic and maths necessary to understand computers and computation. Your task for this scenario is to implement an interactive tool for practising/learning these concepts. In groups of 4, you will **create and demo a lightweight prototype of the system** you proposed in Scenario 1*, as well as submit **an individual reflection** on the project and how it went.

* You are not required to use the proposal you gave in Scenario 1. If you would like to make changes or go with a different idea, that is fine.

Scenario deliverables

There will be three deliverables in this scenario: (1) a URL to a 5-10 minute video demo of your system (group submission), (2) a zip of your code/design files (group submission), and (3) a 1-3 page reflection on the process of designing and implementing the teaching aid and what you contributed to the project, including a discussion of how the target audience influenced your project design (individual submission). You will receive a group mark for the presentation and an individual mark for your reflection. These will be averaged together to get your overall Scenario 2 mark.

Project

Your project should have two parts: (1) an interactive interface that allows students to solve logic/maths puzzles or problems of the type you're interested in, and (2) a system (an editor, a text file format, method of random generation, etc.) that allows new puzzles/problems/exercises of the same type to be added to the system. You may want to implement simple prototypes/mockups with limited or hardcoded functionality to give an idea of how the above two features would look like, and then go on to fill in the functionality of the system.

Demo video

In your demo, you should briefly describe the exercise your group decided to implement, demonstrate a working example, and briefly summarize how it was implemented. You should also demonstrate how other people might create new exercises of the same form. Ideally, all members of your group should have the chance to speak. Videos can be uploaded to UCL Mediacentral or to Youtube. The URL is then submitted on Moodle.

One option for recording video is to have a group Teams or Zoom call attended by all members which is then recorded. Screensharing can be used as needed to demonstrate your project. Another option is to record individually and use video editing to combine clips as needed.

Reflection contents

In your reflection, you should describe the approach that you/your group had in terms of brainstorming, prototyping, and implementing your project. If there were shortcomings, planned functionality that wasn't completed by the end, unexpected difficulties, etc. explain those and describe what further work you intended/is needed to complete the project. Please also reflect on your contributions to the project, and what you personally learned from the project.

Your reflection must also include a discussion of how your project would have changed if you had chosen a different target audience than the one your group selected. Compare your project's design as it is to what it would have been if the target audience you suggested were selected instead (if your proposed target audience was chosen, select another possibility to compare it to).

This reflection will be used to evaluate your individual contribution and knowledge of the project.

Marking

The mark for the second scenario is worth 20% of the ENGF0002 mark, or half of the 40% allocated to the Scenarios. You will receive a group mark for the presentation/code and an individual mark for your reflection, which will be averaged together with equal (50/50) weight to get a final mark.

Marking criteria for group submission:

The main criteria for marking the group submission are:

1. Achievement: The tool is usable and useful to users. Project is ambitious with high level of achievement.
2. Creativity: Tool is creative and interesting. Problems and time constraints creatively worked around.
3. Speaking / oral presentation skills: Demo of project is clear and well-explained. Presentation is concise and makes good use of time. Presentation is organized and has clear structure.

1st Distinction Exceptional / Outstanding 80-100%	• Exceptional level of accomplishment, going over and beyond to deliver a high-quality experience to users. • Tool is highly unique with creative features implemented. • Flawless and polished presentation, exceptional quality of demonstration.
1st Distinction Excellent 70-79%	• A high-quality tool that makes ambitious goals and meets them. • Creativity clearly demonstrated in design of tool and techniques used to accomplish the work. • Very high quality of delivery. Use of presentation medium with professional style.
2:1 Merit Good 60-69%	• A good solution to the task set that makes significant accomplishments. • Response to the task set demonstrates some thoughtfulness and ingenuity or attempt at creativity. • Overall good presentation or demo, persuasive and compelling.
2:2 Pass Satisfactory 50-59%	• Reasonable solution, with several shortcomings in execution. • No attempt at creativity but standard programming techniques were applied to a tool that (partially or wholly) fulfills the task set. • Able to communicate, present and/or demonstrate solution and summarise work in appropriate format.
3rd Weak 40-49%	• Rudimentary response to the task set, significantly incomplete. • No originality in approach, and difficulty executing standard techniques/solutions. • Ineffective oral presentation or demo of the solution.
Fail < 40%	• No solution to the given problem, completely incorrect code for the given task.

	• Poorly done presentation or demonstration, very low quality.

Marking criteria for individual reflection:

The main criteria for marking individual reflections are:

1. Demonstrating thought about the project and the development process.
2. Demonstrating familiarity with the project and contribution to it.

1st Distinction Exceptional / Outstanding 80-100%	• Exceptional response demonstrating thought and nuance about the project and various considerations related to design/implementation. • Demonstration of deep familiarity with and high-quality contributions to the project. Demonstration of exceptional support of and cooperation with team members.
1st Distinction Excellent 70-79%	• A distinctive response that develops a clear account of the project and design/implementation decisions, with evidence of nuance. • Demonstration of deep familiarity with the parts of the project that were personally worked on. Demonstration of high-quality contributions to the project.
2:1 Merit Good 60-69%	• A sound response with a reasonable account of the project and design/implementation decisions. • Demonstration of familiarity with some part of the project and demonstration of significant contributions to the project.
2:2 Pass Satisfactory 50-59%	• A basic account of the project with some understanding/explanation of design/implementation decisions. • Basic familiarity of the project with some evidence of contribution.
3rd Weak 40-49%	• Basic understanding of the project with minimal understanding/explanation of design/implementation decisions. • Basic familiarity of the project with weak evidence of contribution.
Fail < 40%	• No understanding of project or involvement with decisions demonstrated. • No evidence of contribution.