Web Technologies Coursework Specification

Scenario

As a team, you are competing in QUB's Indie Games Club annual competition. This year, teams have been asked to develop a 'web-based escape room themed game' as per the following brief.

What is an Escape Room?

Escape Room (ER) games are experiences that require a player to escape from a location by exploiting the environment around them. These experiences can be real world or virtual in nature, the latter of which you are being asked to create as part of this project. The following Wikipedia entry provides further background on Escape Room video games and links onwards to several other useful resources.

https://en.wikipedia.org/wiki/Escape_the_room

Requirements

General Requirements

Broadly speaking, it is anticipated that most games will contain three stages or parts.

- Game Landing: Introduction to the game and recording of player information.
- Game Play: Execution of the game itself.
- Game Summary: The game has ended (by either winning or losing) and some player performance data is displayed.

Key Features

While a great variety in the style of game produced is expected, all should incorporate and clearly evidence the following features as part of the final submission.

- The game must be personalised by using information collected from HTML form elements (at a minimum) and any other data sources that may be appropriate.
- The 'Game Play' element must incorporate JavaScript timed events and automatically end the game after no more than five minutes (per playthrough).
- In addition to text elements, the game should incorporate a range of media such as images, video, audio effects/music, animations and other modern techniques to enhance the players experience.
- Remember, be mindful of copyright and intellectual property. Ensure you use your own or 'free to use' content. If 'free to use' content has been incorporated within your project, ensure it is suitably referenced in the code and documentation.
- A series of statistics about the user's performance in the game must be collected and displayed during the 'Game Summary', e.g. time taken to complete, number of attempts taken at the game in the current session or other objectively measured metrics.
- The game should embed a range of suitable accessibility features to ensure that the game may be enjoyed by those with additional needs.

Deliverables

PowerPoint

The aim of the PowerPoint is to provide a clear reference guide to the key deliverables of your project and should have the following structure.

- Cover slide showing the project/game name and a list of team members (names & student numbers).
- A slide with an annotated screenshot showing the collection of data using an HTML form.
- A slide with an annotated screenshot showing how the HTML form data has been used to personalise the game.
- A slide illustrating the operation of the JavaScript timed event, this may include annotated screenshots of both the rendered page in the browser and corresponding code.
- A slide illustrating the operation of the escape room game elements, this may include annotated screenshots of both the rendered page in the browser and corresponding code.
- A slide showing a screenshot of the statistics generated for the player. Annotations briefly explaining how the statistics were derived should be included.
- A slide with annotated screenshot(s) showing the operation of accessibility features that have been incorporated in the game and the issues they are designed to mitigate.
- A slide summarising where game images have been sourced and a declaration that all copyright/IP conditions have been satisfied.

For the above, a maximum of TWO slides per point is permissible. For clarity, your complete PowerPoint should be no longer than 18 slides.

Individual Video Submissions

As the title suggests, these videos should capture the key individual contributions of the group members. One video shall be submitted for each group member, last no more than two minutes, and will normally have the following structure:

- Demonstrate the individual contributions of each group member to the games core requirements.
- Demonstrate individual contribution to the 'best bits' in terms of technical complexity and user experience.

Individual Summary Report

This report provides an opportunity for each group member to reflect on their individual contributions to the project. Unlike the other elements, the structure of the document is very flexible, but should describe features within the game that you worked on and the level of contribution. You should clearly describe:

- Key examples of HTML, CSS and JavaScript where you have had a significant development role.
- Highlight the top features of the game in terms of technical complexity and/or quality of user experience where you have had a leading role.
- Annotations and code snippets should be included as appropriate.

Please note that this is a short* document that highlights key contributions, it should NOT be an exhaustive list of everything you have undertaken as part of the project. * To define short, approximately 1 page of textual content, but longer when factoring in screenshots, code snippets etc.