ASSIGNMENT DETAILS

This is a group-based project with a module weighting of 60%.

Submission Deadlines:

- Project Updates on Canvas: Continuous Delivery, Sunday by 23:59 during weeks 7-11 inclusive. Additionally, as the final submission deadline is just after the Easter holiday period, one further project update should be added to Canvas immediately prior to your submission to highlight any work completed during this time.
- All Other Deliverables: By 5pm on Monday 26th April (Week 12)

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

Searching online for 'Virtual Escape Room' will also yield a wide range of examples and various guides/tutorials that may also be useful when planning and implementing your ER game. Needless to say, while these are good resources for ideas, be careful of plagiarising content! University guidance on plagiarism can be found here. You should also be mindful of copyright and intellectual property issues.

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.

It is expected that students will use a broad range of HTML, CSS and JavaScript skills in the development of this game. As this assignment aims to assess your ability with these technologies, the use of templates or frameworks is not expected, and their use may reduce, rather than enhance your coursework mark.

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.

No online multiplayer-online functionality is expected within the scope of this project. Games should be aimed at solo players on a standalone device.

Project Management

For many of you, this may be the first time you have undertaken a significant project as a team. To help ensure the success of your group, a support framework has been but in place to help drive your project.

Meetings With Teaching Staff

All teams are **required** to formally meet **at least twice** with teaching staff throughout the project and **attendance by all members is mandatory**. Meetings will last 10 minutes and have been largely scheduled during lab times to ensure that everyone shall be available to attend. Meetings can be booked online on a first-come-first-served basis, details on Canvas.

Weekly Office Hours

Weekly office hours will continue throughout the module as normal and can be used to for additional time with Andrew individually or as a team. Meetings can be booked online, details available on Canvas.

Longer or ad hoc meetings can be arranged by emailing Andrew (andrew.mcdowell@qub.ac.uk).

Weekly Project Updates on Canvas Group Page

All group members are expected to demonstrate their contribution to the ongoing design and development of the game through weekly log entries posted on their canvas group page. These entries should be posted in the 'Discussion' area before 23:59 on the Sunday of each week during the project (note special instructions above on Easter holiday period). Specifically, these entries should be up to the equivalent of one A4 page in length and as appropriate include images, code, etc highlighting the following:

- What have you done since your last post (or start of the project in Week 7)?
- What will you undertake over the next week (not necessary project update)?
- Are there any issues currently impacting your progress on the project (technical or otherwise)?

Assessment Criteria

For this assignment a score (percentage) out of 100, rounded to the nearest integer will be returned based on the following marking criteria. The weighting of each criterion within the assignment has also been listed.

Note, size of group will be considered when evaluating the scope of work the submitted.

Marking Criteria, Group Components, 50% Total Weighting

An overall mark for these criteria will be determined, then adjusted for each individual based on peer assessment.

Meeting the Assessment Brief: Production of a '*web-based escape room themed game*' (10% Weighting)

1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
An excellent, refined, novel, engaging game, true to the genre has been produced. Good practice from existing similar games has been evaluated and adopted.	A very good, refined, novel, engaging game, true to the genre has been produced. Some consideration of existing practice and adoption into game is evidenced.	A game reminiscent of the genre has been produced. Weak evidence of considering existing approaches and incorporating good practice into the game.	A game reminiscent of the genre has been produced. Game experience may lack some cohesion, be lacking in content or omit other elements.	A game reminiscent of the genre has been produced. Game experience significantly lacks cohesion, has insufficient content or omits other key parts.	Game not reminiscent of the genre. Severely lacks in cohesion, content or other key elements.

Implementation of Key Features (30% Weighting, up to 6% per feature)

	1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
Personalised Game Experience	Complete, suitable implementation and free of all but very trivial defects.	Suitable implementation and mostly free of defects.	Clear attempt at implementation, has some functionality, may have noticeable minor defects	Clear attempt at implementation, has some functionality, may have significant major defects.	Some attempt at implementation, but broadly non-operational.	Largely missing or non-operational.
JavaScript Timed Events						
Appropriate Use of Media						
Suitable Game Statistics						
Game Accessibility						

Quality of User Interface and User Experience (10% Weighting)*

1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
A consistent, intuitive, interactive game, that creates an immersive environment through a range of well curated and diverse techniques and media.	A consistent, intuitive, interactive game, that creates a suitable environment through a range of techniques and media.	A consistent, intuitive, interactive game presented in a suitable environment. Evidence that key UX elements have been considered, albeit with weaknesses in their implementation.	A somewhat consistent, intuitive and interactive game. Significant weaknesses in UX elements, but none that prevent player engagement with the game.	Gameplay is not consistent, intuitive, and interactivity is limited. Game is playable, but with significant barriers to user engagement and completion.	Gameplay is not consistent, intuitive, and interactivity is limited. Game is broadly not playable.

** The key difference between this criterion and the individual contribution equivalent is consistency and cohesiveness across the overall game.*

MARKING CRITERIA, INDIVIDUAL COMPONENTS, 50% TOTAL WEIGHTING

Each student will be individually marked based on their contributions evidenced against the following criteria.

Quality of User Interface and User Experience (20% Weighting)*

1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
An intuitive, interactive game, that creates an immersive environment through a range of well curated and diverse techniques and media.	An intuitive, interactive game, that creates a suitable environment through a range of techniques and media.	An intuitive, interactive game presented in a suitable environment. Evidence that key UX elements have been considered, albeit with weaknesses in their implementation.	A somewhat consistent, intuitive, and interactive game. Significant weaknesses in UX elements, but none that prevent player engagement with the game.	Gameplay is not consistent, intuitive, and interactivity is limited. Game is playable, but with significant barriers to user engagement and completion.	Gameplay is not consistent, intuitive, and interactivity is limited. Game is broadly not playable.

** The key difference between this criterion and the group contribution equivalent is consistency and cohesiveness across the overall game.*

Technical Complexity of Implementation (20% Weighting)

1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
Clear evidence that extended learning beyond core module material has taken place through the implementation of suitable advanced technical features; normally using HTML, CSS and/or JS; these should be broadly defect free.	Broadly defect free use of HTML, CSS and JS to implement game. This implementation should utilise a broad range of the technical skills developed within the scope of the modules content.	Use of HTML, CSS and JS to implement game. This implementation should utilise a broad range of the technical skills developed within the scope of the modules content. There may be some minor code defects.	Use of HTML, CSS and JS to implement game. This implementation should utilise a broad range of the technical skills developed within the scope of the modules content. There may be some major code defects.	Use of HTML, CSS and JS to implement game. This implementation utilises a limited range of the technical skills developed within the scope of the modules content. There may be major code defects significantly limiting game playability.	Use of HTML, CSS and JS to implement game. This implementation utilises a very limited range of the technical skills developed within the scope of the modules content. There may be major code defects rendering the game unplayable.

Presentation of Completed Game (including documentation) (10% Weighting)

1st (>= 70%)	2.1 (60% - 69%)	2.2 (50% - 59%)	3rd (40% - 49%)	Marginal Fail (35% - 39%)	Fail (<35%)
An excellent, cohesive presentation clearly communicating core and additional game features. Excellent PPT supporting presentation delivery. Team member contributions are clearly explained.	A very good, cohesive presentation clearly communicating core and additional game features. Very good PPT supporting presentation delivery. Team member contributions are clearly explained.	A good presentation communicating core and additional game features. Good PPT supporting presentation delivery. Team member contributions are clearly explained.	Acceptable presentation communicating core and additional game features. Reasonable PPT supporting presentation delivery. Team member contributions explained.	Limited presentation. Core and additional game features poorly communicated. Poor PPT supporting presentation delivery. Team member contributions not fully explained.	Poor presentation. Core and additional game features not sufficiently discussed. Poor/No PPT aiding presentation delivery. Team member contributions not fully explained.

Group vs. Individual Components: Guidance on Splitting up the Work

There are several ways this project may be divided so that group and individual contributions may be identified and managed easily. A good starting point is to work collaboratively on the story, clarifying the beginning and end points of the game and understanding how the core requirements will be integrated across each of the game areas. Once this is done, then each area of the game can be allocated to a team member to lead and showcase their key areas of contribution. Note that leadership in the development of game areas does not mean it should be developed exclusively by one person!

Please remember that the project is collaborative in nature. While there will be areas of significant individual effort, you will need to work as a team to meet the core requirements and ensure consistency of design and experience across the entire game. Proof reading and testing of each other's work is also invaluable for improving the quality of your final submission.

Group & Peer Marking (Applicable to Group Components Only)

It is broadly anticipated that all team members will contribute significantly to the successful completion of the project, albeit some individuals may contribute more or less than others. These minor differences in contribution will be recognised through peer marking recommendations within the final submission of the group work using the process below and provided template.

Each project team will be given an overall mark for the group component, which will be adjusted based on the agreed peer marks submitted to determine the individual results. These adjustments will be calculated on the 'contribution score' assigned to each team member. The contribution score is based on the number of points assigned to each member using the following method. **At the core of this, each team member has 5 points to start with**. Take an example team of 4-persons with a combined 20 points (5 per team member) available to be allocated throughout the group. Each team members contribution shall be weighted, and their final mark adjusted dependant on the points allocated to each individual by the group. For example, a project team receives 30/50 as an overall total for the group component.

- A team member is awarded 5 points (an average project contribution) by the team, they will receive 30/50 marks.
- A team member is awarded 1 point (a low project contribution) by the team, they will receive 26/50 marks.
- A team member is awarded 10 points (a high project contribution) by the team, they will receive 35/60 marks.

Important Notes: This peer marking scheme is designed to recognise minor differences in individual contribution. It is expected that any greater disparity in individual effort be identified and reported to the lecturer well before submission. The contribution scores submitted by each group are considered recommendations, the final grades will ultimately be awarded based on the academic judgement of the module lecturer.

Where a group cannot agree peer marking, or the lecturer has cause to query the contributions of a group or members within, other evidence such as meeting attendance, weekly log submission etc. will be evaluated. If deemed necessary, further group or individual vivas may be called to clarify contributions to the submitted work.

Getting Feedback

Feedback will be provided during the assessment (formative) and after the assignment has been submitted (summative).

Formative Feedback

This feedback aims to provide a useful scaffold towards the successful completion of the group assignment. Formative feedback will be available via the meetings with teaching staff (as described above) and through demonstrator support in the labs. Additionally, feedback can be requested via the normal channels such as office hours.

Summative Feedback

After assignment work has been submitted, summative feedback is available in three forms:

- An individual mark broken down by the criteria provided above with some brief commentary.
- Class wide feedback, highlighting in detail the broad strengths and weaknesses for the work submitted.
- The opportunity to receive further individual and team feedback will be made available via office hours.

Please note that feedback will be returned as soon as possible, subject to marker availability and other constraints.

Project Deliverables

All team members are expected to contribute to the design and development of the game with the following deliverables.

1. **Continuous Submission:**
   - Routine project updates on Canvas as previously described.

2. **Required by the final deadline:**
   - Website, to include all files and folders needed to view your game (HTML, CSS, JS, Images, Sound, Video, etc.).
   - Presentation PowerPoint Slides (guidance follows).
   - One group and a set of individual (one per group member) video demonstrations of the game (guidance follows).
   - A short (approx. one page) summary report from each team member describing their contributions.
     - Where useful, please include images or code snippets to help the reader contextualise your work.
   - Completed and agreed peer marking sheet.

Submission Instructions

- Please submit the project updates to Canvas as per the instructions previously provided.
- Further guidance and detailed submission instructions for the other deliverables follows.

Further Guidance on Project Deliverables: PowerPoint, Videos, Reports

This section provides further guidance around the PowerPoint, Video, and Individual Report submissions of the coursework.

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 text adventure 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.

Video Submissions

Submission requires that a collective group video and a series of individual videos (one per group member) be submitted.

Group Video

The video demonstration is a group effort that should provide a practical demonstration of the points covered in the PowerPoint submission (see here). For clarity, this is a practical demonstration of the game in action, the slides are not expected to be used. Additionally, the focus should be on the operation of the game in the browser, any inclusion of the underlying code is expected to be by exception and minimal.

The video shall last no more than 10 minutes (absolute max 11 mins), should consist of screen recording with a corresponding student narrative, and will normally have the following structure:

1. Video opening should briefly introduce and contextualise the game (max 1 minute).
2. A successful playthrough of the game (i.e. player wins). Ensure you take enough time so that the environment created through the game can be appreciated and graded accordingly. Rushing over parts may impact your grade.
3. At least one unsuccessful playthrough of the game (i.e. player fails to win). As above, ensure that you dedicate enough time to this so the experience may be appreciated.
4. The video should conclude with a summary of 'best bits' in terms of technical complexity and quality of experience.

Important Notes:

- Within Points 2-4, all the areas described in the PowerPoint slides must be covered.
- Each member of the group is expected present for 'roughly' an equal amount of time.
- Group members should introduce themselves (just their name) when they begin presenting their part of the video.
- It is the responsibility of the group to ensure the quality of the video is sufficient to clearly see and hear all elements of the demonstration. A poor-quality video will likely have the corresponding effect on final marks!

Individual Videos

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.

Recording the Video

Given the current challenges presented by ongoing social distancing, getting the videos together will require careful planning. As previously highlighted, all members of the group are expected to partake in the group and individual videos. While the administrative particulars are up to groups to decide, the following is recommended for capturing the group video:

1. Plan the demonstration collectively, for example, as a series of bullet points with approximate timings beside each. Use this outline to divide the presentation (roughly equally) among the group.
2. Each group member records their individual element and sends it to a nominated person for submission.
    a. This nominated person (ideally) joins the videos together into a single file, however, the submission of multiple smaller videos is acceptable. If a series of smaller videos are submitted, the order in which they are to be played must be made clear in their filenames.

The recording and submission of individual videos is not expected to be problematic.

The videos may be recorded using any suitable software, however, OBS Studio (https://obsproject.com/) is freeware that works well for screen recordings etc. and has been used successfully for similar work in other modules. Note, high resolution screens have been known to cause some problems with OBS and may require some additional configuration. Please test carefully before spending time recording your final demonstration videos. Again, please bear in mind that the quality of your video recordings is important to ensure that your work can be accurately marked. To this end, it is recommended that you use a minimum recording resolution of 720p (ideally 1080p) and a video format of mp4. Note that if you are using QuickTime on Mac, this records in .mov by default, but you can export to mp4.

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.

FINAL PROJECT SUBMISSION GUIDELINES

Please follow these instructions carefully for submission of the CSC1030 Group Project.

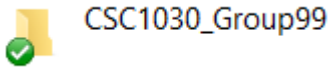
1. Review all assignment guidance and make sure that you have completed all the required work.

2. Compile your work into the following folder/file structure.

- CSC1030_GroupXX (Folder)
  - Code (Folder)
    - *All website files go here – HTML, CSS, JS, Images, Video, Sound, etc.*
  - Documentation (Folder)
    - Reports (Folder)
      - *All individual summary reports to be placed here.*
    - PowerPoint Presentation (File)
    - Completed Peer Marking Grid (File, use template provided)
  - Videos (Folder)
    - Individual Videos (Folder)
      - *All individual videos to be placed here.*
    - Group Video Demonstration (file)

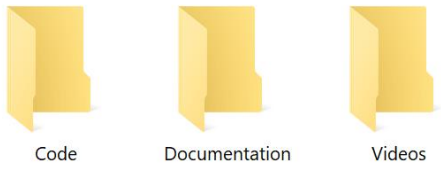
Screenshots of Example Submission for Group 99:

Ensure you follow the same naming conventions!



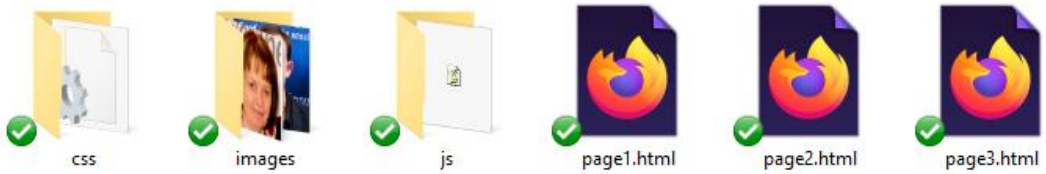
All material should be submitted in a parent folder as shown above.

Contents of 'CSC1030_Group99' Folder



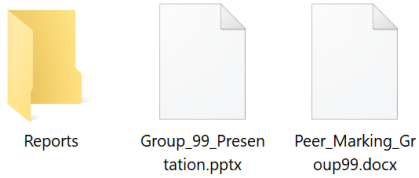
The submission will have three sub folders, one for the website code and other necessary resources, such as images. The second contains all documentation and the third all videos.

Contents of 'Code' Folder



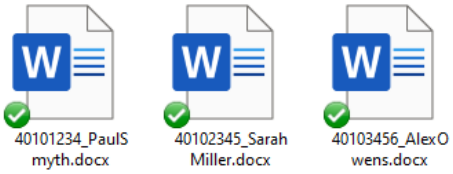
This is an example of what may be contained within the 'Code' folder. Every groups website structure will likely be different. It is essential that you check the website works as expected when everything is copied into this location.

Contents of the 'Documentation' Folder



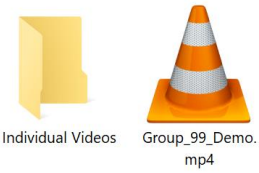
The presentation, completed peer marking grid and a folder containing the individual reports will be placed here. Please ensure that you follow the naming conventions provided. Group '99' should be replaced with your group number.

Contents of the 'Reports' Folder



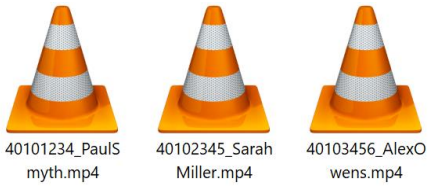
The individual reports by each group member are placed here in the format <<student number>>_<<forename>><<surname>>

Contents of the 'Videos' Folder



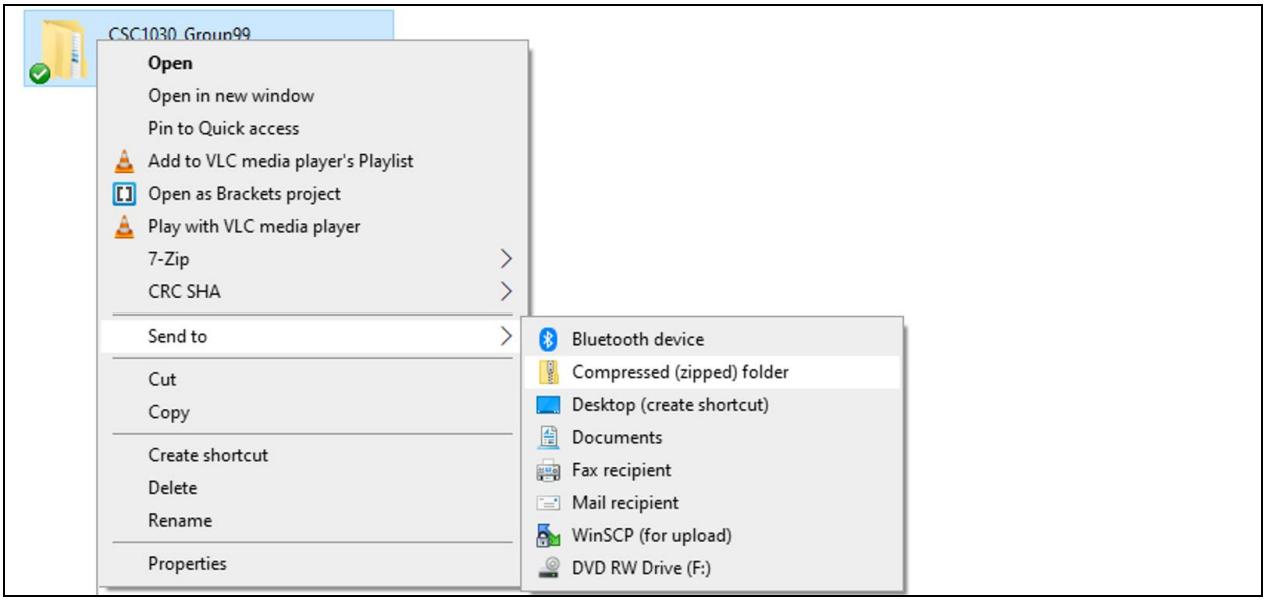
The group demonstration video and a folder containing the individual videos will be placed here. Please ensure that you follow the naming conventions provided. Group '99' should be replaced with your group number.

Contents of the 'Individual Videos' Folder



The individual videos by each group member are placed here in the format <<student number>>_<<forename>><<surname>>

3. Add the 'CSC1030_GroupXX' folder to a zip file as shown below.



4. Upload the 'CSC1030_GroupXX.zip' file to the 'CSC1030 Coursework: Escape Room' assignment area on Canvas. Note the following:
    - Only **ONE** person from each group needs to submit the file to Canvas. Once the upload has been completed, all group members will be able to see the submitted work.
    - It is a **GROUP** responsibility to ensure that the work has been correctly uploaded. Any upload problems will reflect on the group, not an individual.
    - Please do not leave uploading the assignment to the last minute, be mindful that submissions are likely to have a substantial file size. The submission time is based on the completion of a submission, not the start.