IGB190 – Game Mechanics Implementation

Assignment 2

Mechanics Setup and Integration

|  |  |
| --- | --- |
| **Assessment Overview** | |
| **ITEM:** | **Assignment 2: Mechanics Setup and Integration** |
| **WEIGHTING:** | 50% |
| **OBJECTIVES:** | Unit Objectives 1, 2, 3, 4, 5 & 6 from Unit Outline |
| **DUE DATES:** | Friday October 25th, 2024 by 11:59pm (End of Week 13) |
| **DESCRIPTION:** | This is an group assignment. Group sizes are between 3-4 individuals. Your deliverable for this assignment will consist of a package that includes:   * Part A:   + A Unity project (compressed) containing your group’s completed content (20%)   + A Unity build of your project (10%) * Part B:   + A document breaking down your design and justification for the design of aspects of Part A. A simple (optional) template will be provided   + This document should be around 5000-10000 words and/or up to 20 pages in length (this is just a guide)   This assignment is intended to allow you and your team a platform for delivering an interesting gameplay experience which you have deliberately designed for in an intricate manner. This Assignment is not a continuation of your project from the previous Assignment 1 – you are given a fresh assignment base that contains additional content which forms the primary point of development for Assignment 2. You will submit this assignment as a package containing a variety of submission formats that you are expected to deliver at QUT during the BGIE. Some walkthrough of these formats and how to prepare the submission package will be detailed in workshops associated with the development of these deliverables. Some of the skills learned are also garnered from pre-requisite units to IGB190.  You will submit the contents of this assignment via Canvas before the due date. |
| **CONTENT:** | You will submit via Canvas a single compressed folder (.zip or .rar) containing (in separate folders):   * Your Unity Project (i.e. what you open with Unity) * Your Unity Build (i.e. a compiled .exe of your Unity Project) * A document containing your designs and justifications (i.e. .docx or .pdf file) |
| **FORMAT:** | This Assignment submission will require you to work on and submit content from workshops (and in your own time) with your group over the latter 6 weeks of content in IGB190. This content primarily consists of the following assessable items:   1. **Part A: Unity Project (20%)**    * The Unity folder containing your work from the latter 6 weeks of IGB190 Lecture and Workshop content. This should contain a Unity scene that forms the primary assessable item of your build – they should be very similar. This scene should an expanded version of the Assignment 2 base with at least the expected workshop content deliverables completed.    * For more information on the content you are expected to have within your project, you should refer to your workshop content and the steps related to implementing it in C# and Unity. The workshop content is the bare minimum to expect a passing grade. This assignment allows you to expand on the workshop content substantially and you should endeavour to add and include as much of your own work as possible for additional marks.    * Workshop activities (and therefore Project content) will relate to designing and implementing the following:      1. A new or adjusted character to play as      2. This character’s abilities      3. Items and gear available to the character      4. Adjusted enemies and enemy related mechanics      5. Formulas and mechanics driving core gameplay      6. Level design, layout and objectives      7. An overarching gameplay and player experience      8. General Unity/Project tweaks and adjustments   These components form the crux of your design and justification detailed in the documentation component of Part B.   * + Your Project is also evaluated critically from a file and folder structure perspective, as well as file size and naming conventions.  1. **Part A: Unity Build (.exe) (10%)**    * In addition to your Unity Project, you are expected to make a build of your project for demonstration purposes, which you may also use for your own purposes (e.g. itch.io, Youtube videos etc)    * This is a generic, default settings Unity 3D build that should not require any additional settings or tweaks.    * The build is assessed from a gameplay look and feel perspective regarding your personal implementation of the expected content and how you have chosen to tweak and present it. Additions you have made to the gameplay and presentation will also be evaluated here.    * Information on creating a Unity build will be detailed in a related workshop 2. **Part B: Design and Justification Document**    * Some of the workshop activities will involve the Design and Justification of aspects of Assignment 2. These workshop activities will allow you and your group to document and contribute towards a Design and Justification Document. This document should contain a detailed, low-level breakdown of what you have added and tweaked in Assignment 2 in intricate low-level detail. It should also contain substantial justification as to WHY your group has designed it in this way, preferably related to the **4 Design Pillars** introduced in Lectures and Workshops. Design and Justification topics should consist of (but are not limited to) the following:      1. The design and justification of a new character      2. The design and justification of this new character’s abilities      3. The design and justification of various items and gear available (drop or purchase) to the character      4. The design and justification of tweaks or additions to enemy encounters      5. The design and justification of various formula and/or mechanics driving the core gameplay experience (e.g. enemies, levelling up, damage mitigation, enemy spawn rate etc)      6. The design and justification of a simple level design layout, with basic goals and objectives      7. The intended gameplay and player experience of the game given your character, their abilities, gear, tweaks/additions etc made to gameplay. Consider the rules, mechanics and intended systems they should employ during moment-to-moment gameplay      8. Any other visual or gameplay additions and tweaks you wish to introduce within the assignment.    * Within the Design and Justification document, you should detail how and why your designs relate to the **4 Design Pillars** introduced in Lectures and Workshops. These design pillars are requirements given to you by a hypothetical game studio for your team to aim towards when designing your RPG components and overarching gameplay experience.    * This document should also contain a brief section related to the iterative process you will undertake over the next few weeks, designing and implementing features of the game as a small team. This should include a brief amount of material related to playtesting and reflection upon results. This does not need to be comprehensive, just evidence that you have done some.    * This document should be well organised, using a document structure appropriate for your team or utilizing the provided template. The document should be between 5000-10000 words, or roughly around 20 pages. This is just a guide and something to aim for! We do not critically mark your document to these specifications unless they severely fall short or exceed these expectations.    * You are allowed to implement new Game Mechanics, concepts or ideas into this Assignment base. You should also consider introducing anything from your individual Assignment 1 if you think it appropriate for Assignment 2. However, this Assignment is not heavily weighted in this direction.    * Your document should have your names and student numbers displayed on the front title page of the document.   **Submission Size**: You should ensure that your total submission does not exceed ~1000MB in size. To reduce your submission size drastically, you should aim to remove the ‘Library’ folder within your Unity Project folder as this can be recreated upon opening it again.  Please ensure you submit your assignment using a stable connection that is not prone to disconnection or packet loss. Canvas can be a bit finnicky with how stable a connection you utilize for submission. |
| **Submission Errors:** | Any unopenable project, non-working build or illegible document will be treated as a non-submitted component of this assignment. Not submitting your assignment correctly is also treated as a non-submission (QUT policy). It will be your responsibility to ensure that what you submit contains all necessary content that works on a different machine.  Projects will be opened using new version(s) of Unity (i.e. 2021+). Builds will be assessed using modern day PCs with adequate hardware. Documents opened using the latest Microsoft Word or Adobe PDF software. |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IGB190 Assignment 2: MARKING CRITERIA**  The assignment is designed to assess certain aspects of the objectives for this subject  Performance standards and criteria for each objective appear below | | | | | | | | | | | | | |
| **Criteria** | **Performance Standards** | | | | | | | | | | | | |
|  | **High Distinction** | | **Distinction** | | | **Credit** | | **Pass** | | **Fail** | | **Mark** | |
| **Part A: Unity Project Content** | Project contains all expected content. Workshop content is completed to an excellent degree with no issues identified. Objects and Assets are created to perfect specification with no runtime issues. Content is set up with excellent project hierarchy and folder structure. Project is not excessively oversized or containing unnecessary redundant files.  Project contains substantial polished and additional work well beyond workshop material and expectations. | | Project contains all expected content. Workshop content is completed to a very good degree with no issues identified. Objects and Assets are created to near-perfect specification with no runtime issues. Content is set up with good project hierarchy and folder structure. Project is not oversized or containing unnecessary redundant files.  Project contains a decent degree of polished and additional work well beyond workshop material and expectations. | | | Project contains most of the expected content. Workshop content is completed to a good degree with no major issues identified. Objects and Assets are created mostly to specification with no runtime issues. Content is set up with appropriate project hierarchy and folder structure. Project could be smaller or contains some unnecessary redundant files.  Project contains some polished and additional work beyond workshop materials. | | Project contains some of the expected content. Workshop content is completed to an appropriate degree with no major issues identified. Objects and Assets are created mostly to specification with no major runtime issues. Content is set up with mostly appropriate project hierarchy and folder structure. Project could be smaller or contains some unnecessary redundant files.  Project only contains workshop materials. | | Project contains mostly missing content. Workshop content is incomplete or contains major issues. Objects and Assets are not created to specification with some runtime issues identified. Content is set up with inappropriate project hierarchy and folder structure. Project could be much smaller or contains unnecessary redundant files.  Project does not contain expected minimum workshop content. | |  | |
| 20 marks | | 17 marks | | | 13 marks | | 10 marks | | 9.5-0 marks | |  | |
| **IGB190 Assignment 2: MARKING CRITERIA**  The assignment is designed to assess certain aspects of the objectives for this subject  Performance standards and criteria for each objective appear below | | | | | | | | | | | | |
| **Criteria** | | **Performance Standards** | | | | | | | | | | |
|  | | **High Distinction** | | **Distinction** | **Credit** | | **Pass** | | **Fail** | | **Mark** | |
| **Part A: Unity Build, Presentation Quality and Gameplay** | | Build executes correctly without unnecessary requirements. Build has excellent performance. Assets displayed are presented well with excellent consideration for the observer. Assets chosen for aesthetic or decorative purposes are visually pleasing and not distracting.  The Four Design Pillars are incredibly well realised during gameplay. | | Build executes correctly without unnecessary requirements. Build has very good performance. Assets displayed are presented well with very good consideration for the observer. Assets chosen for aesthetic or decorative purposes are mostly visually pleasing and not distracting.  The Four Design Pillars are well realised during gameplay. | Build executes correctly without unnecessary requirements. Build has good performance. Assets displayed are presented well with good consideration for the observer. Assets chosen for aesthetic or decorative purposes are for the most part visually pleasing and not too distracting.  The Four Design Pillars are somewhat realised during gameplay. | | Build executes correctly, but may have unnecessary requirements. Build has reasonable performance but could be better. Assets displayed are presented with minor consideration for the observer. Assets chosen for aesthetic or decorative purposes are for the most part are present but could be of better quality so as to not be distracting.  Some aspects of the Four Design Pillars are realised during gameplay. | | Build may execute with errors, crash or simply doesn’t work. Build may have serious performance that should be improved. Assets displayed are presented with very little consideration for the observer. Assets chosen for aesthetic or decorative purposes are not present or could be of much better quality so as to not be distracting.  The Four Design Pillars are not well realised or are missing during gameplay. | |  | |
| 10 marks | | 8.5 marks | 6.5 marks | | 5 marks | | 4.5-0 marks | |  | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IGB190 Assignment 2: MARKING CRITERIA**  The assignment is designed to assess certain aspects of the objectives for this subject  Performance standards and criteria for each objective appear below | | | | | | | |
| **Criteria** | **Performance Standards** | | | | | | |
|  | **High Distinction** | **Distinction** | **Credit** | **Pass** | | **Fail** | **Marks** |
| **Part B: Design and Justification Document** | The document contains an excellent level of design and justification for the character, abilities, items/gear, formulas, mechanics, level design and gameplay exp found in the project and build. Excellent degree of iteration and playtesting is evident via the document description. The document is very well presented and within format expectations. | The document contains a very good level of design and justification for the character, abilities, items/gear, formulas, mechanics, level design and gameplay exp found in the project and build. A very good degree of iteration and playtesting is evident via the document description. The document is well presented and within format expectations. | The document contains a very good level of design and justification for the character, abilities, items/gear, formulas, mechanics, level design and gameplay exp found in the project and build. A good degree of iteration and playtesting is evident via the document description. The document is mostly well presented and within format expectations. | The document contains an adequate level of design and justification for the character, abilities, items/gear, formulas, mechanics, level design and gameplay exp found in the project and build. Some iteration and playtesting is evident via the document description. The document is within format expectations. | | The document does not contain an adequate level of design and justification for the character, abilities, items/gear, formulas, mechanics, level design and gameplay exp found in the project and build. Some expected elements of the document are missing. Little or no iteration and playtesting is evident via the document description. The document is not within format expectations. |  |
| 1. marks | 17 marks | 13 marks | 10 marks | | 9.5-0 marks |  |
| **Comments:** | | | | | Total Mark Awarded | |  |