**HG3F35 Digital Design and Development: Graded Unit 2**

**Assessment instructions**

The assessment is a project-based practical assignment, whereby you will be required to analyse, plan, design, develop, test and evaluate a small scale digital product and then produce an evaluative report. The assessment must be undertaken individually.

The assessment is open-book which means you can make use of a variety of resources over the course of the project; however, you must always clearly attribute all resources used within your project.

The project brief is provided overleaf.

When you are given the assessment task instructions you will also be given a date for submission of the practical assignment. During this time, you may ask your assessors for clarification, guidance and reasonable assistance. Any support received from your assessor or other members of staff **will be recorded and may have an impact on your final grade depending on the level of support provided**.

This also applies if you use a third party to create assets for your product and where this is the case your assessor must be made aware of the level of support received.

The project requires that you:

* analyse the task and decide on a course of action for undertaking the project
* plan and organise work and carry it through to completion
* reflect on what has been done and draw conclusions for the future
* produce evidence of meeting the aims that this graded unit has been designed to cover

There are three stages and each stage has allocated marks as follows:

* Planning — 15 marks
* Developing — 70 marks
* Evaluating — 15 marks

You must pass each stage, in order, before proceeding to the next. To pass a stage you must have submitted and passed all the minimum evidence required for that stage. Your assessor will give you further information of what minimum evidence is required for each stage.

Successful achievement of the unit will be graded, based on the final mark attained as follows:

* Grade A: 70%–100%
* Grade B: 60%–69%
* Grade C: 50%–59%

More information on how grades are determined can be found in the unit specification. The grade related criteria (GRC) provide a guide for your assessors when determining your overall grade.

This grade will apply only to the graded unit and not to the group award as a whole.

A grade will not be given until the final stage is complete and your work can be viewed as a whole. However, feedback will be given at each stage to indicate how well you are progressing and to highlight any remediation required before progressing to the next stage. Grades are subject to external verification by SQA.

The knowledge and skills gained in the following units should be utilised during this assessment:

**Unit code Title**

HF55 34 User Interface Design

HF3K 34 Web Technologies 1: HTML and CSS

H178 34 Team Working in Computing

H182 34 Systems Development: User Centred Design

HF3F 34 Digital Graphics Fundamentals

H173 34 Developing Software: Introduction

HF53 35 Interactive Media Composition

HF52 35 Human Computer Interface

HF3E 35 Developing Digital Media for an Interactive Product

HF3D 35 Designing and Developing an Interactive Media Product

Before you start the project, you should read the complete assessment to make sure you are familiar with what is required in all stages. Throughout the assessment it is strongly advised that you keep a record of your progress, such as a diary or blog. This could cover how you managed your time, problems you encountered throughout the project and your approach to the development of the project. It is also important to keep a record of all the sources of information you used throughout the project at each stage including meetings with and feedback from the client. This is particularly important for the Evaluating stage as the report you have to produce will refer to the work you have done during the previous two stages.

**Project brief**

You have been commissioned freelance by a local games company to create a new web-based game with a theme of time travel; this should be suitable for an age range of 12 and above. This theme can contain educational content to teach on aspects of history or science but in a subtle non-intrusive way, with fun being the priority for engaging the player. You should also consider making the game as accessible as possible to all users.

You can focus on any aspect of time travel whether historical or futuristic, you are only limited by your imagination! The mission within the game could be to right a wrong, change the future, gain a remedy or save humanity. The game may take the form of a platformer with more than one level, a quiz, a first person shooter, a strategy game or any other suitable genre.

You are required to produce a fully functional computer game using Unity game engine. The game should incorporate at least one 3D aspect. This could take the form of an imported 3D model or a 3D introduction to the game. It should also include some form of audio. Any assets that are not original work must show compliance with copyright law and have full attribution.

You should research and propose the best solution for your game and justify your choice.

**Assessment 1**

**Stage 1 — Planning**

You are required to produce evidence in the form of a set of documents that includes the following.

|  |  |
| --- | --- |
| **Minimum Evidence Requirement** | **Description** |
| Project Proposal | The initial investigation of the project, eg project overview, identification of the factors influencing the project and interpretation of the brief. |
| Definition of project requirements | Statement of the project requirements including functional and non-functional requirements. |
| Project Plan | A project plan which identifies realistic timescales, necessary tasks, resources, milestones and project deliverables. |
|  |  |
| **Total Marks** | **15** |

You must achieve all of the minimum evidence specified above in order to pass the Planning stage.

You must pass this stage before moving on to the Development stage.

**Assessment 2**

**Stage 2 — Developing**

You are required to produce evidence of managing the project and designing and developing a tested solution to the project that includes the following.

|  |  |
| --- | --- |
| **Minimum Evidence Requirement** | **Description** |
| Design Documentation | A detailed design specification appropriate to the project being undertaken. |
| Digital Product | Implementation of the proposed interactive product. |
| Testing Documentation | Testing of the developed solution using multiple testing methods and documentation of results. |
|  |  |
| **Total Marks** | **70** |

The documentation should be submitted in a neat and well-organised manner.

The completed project should be available in a format which clearly demonstrates the design and functionality.

You must achieve all of the minimum evidence specified above in order to pass the Developing stage.

You must pass this stage before moving on to the Evaluating stage.

**Assessment 3**

**Stage 3 — Evaluating**

You are required to produce evidence in the form of an evaluation report which includes all of the following.

|  |  |
| --- | --- |
| **Minimum evidence requirement** | **Description** |
|  | Your report must include:   * summary of project * extent to which solution meets the requirements * strengths and weaknesses of the solution * effectiveness of the development approach and process * how the process and product could be improved |
| **Total marks** | **15** |

The documentation should be submitted in a neat and well organised manner.

You must achieve all of the minimum evidence specified above in order to pass the Evaluating stage.