edexcel

Support Notes (Issue 1)

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Certificate in Digital Applications (DA204) Game Making

Changing Worlds

Introduction

Before tackling the Summative Project Brief (SPB), students should have acquired the appropriate ICT skills, knowledge and understanding as specified in the 'What You Need To Learn' sections of the DA204 specification. Students must have access to a range of appropriate multimedia software. Some suggestions can be found at the end of this document.

The DA204 SPB 014 is valid for moderation in **June 2014, December 2014, June 2015** and **December 2015**.

Teachers and students should remember that the emphasis of the new CiDA specification is 'creative computing'. It is therefore vital that students take the chosen or specified audience and purpose into account when designing and creating products.

In order to encourage an independent approach to the SPB, the template documents that were present on DiDA SPBs are no longer provided. Students will therefore need to be taught how to create and use appropriate types of documentation to support and record the planning, design, production and evaluation of their work.

Time

Unit 4 as a whole is a 90 Guided Learning Hours (GLH) unit. Centres must allow 30 hours for students to complete their Summative Project. As a guide, it is recommended that this time is divided up as follows:

- Game overview – 5 hours
- Design, building and development – 22 hours
- Game review – 3 hours.

Section 1: Using the SPB

Access and Navigation

The SPB is intended to be accessed on-screen.

Although the links in the navigation bar are roughly in sequence, students should be reminded that one task often depends on one or more other tasks and they should make use of the interactive nature of the brief.

Where more than one page relates to a main task, they appear as a submenu from the main link.

The symbol  at the top of each page allows students to print the page.

Section 2: Saving the evidence

What evidence is required?

Students do not need to submit evidence of everything they do during their work on the project. They are asked to create named folders to store the required evidence.

The symbol  indicates a product to be stored in the PRODUCTS folder. For this project the products are the final game, instructions and promo.

The symbol  indicates supporting evidence to be saved in the EVIDENCE folder. This evidence must include the assets table, game overview, moodboard, detailed designs, development log and game review.

Students must ensure that they present the products as clearly as possible, remembering that assessors and moderators will view all evidence on-screen.

Copyright

Students MUST comply with copyright. They must have demonstrated an awareness of copyright and other constraints on the use of information either by producing products that are fully compliant or by explaining what changes would need to be made to make them so. It is not sufficient to simply acknowledge the source of the assets used in the products. They must identify each individual copyright asset which is an issue and explain what would need to be done to comply with copyright.

The CiDA Moderator's Toolkit

The CiDA Moderator's Toolkit specifies the file types that all moderators can view. It is each student's responsibility to ensure that their eportfolio **only** includes files in the listed formats.

The CiDA Moderator's Toolkit is published on the Edexcel website. It will be updated when necessary.

Files in .exe format will be accepted for the final game **for this unit only**.

Section 3: Supervision and Feedback

Supervision and authentication of student work

With the exception of the research, asset gathering and feedback gathering activities listed below, students are only able to work on the SPB in lessons, under the informal supervision of a teacher:

- researching information and assets
- gathering assets and updating assets table
- gathering feedback on designs and products from game testers.

This means that there must be adequate supervision to ensure that work can be authenticated.

All other work, including any manipulation or development of this material, must be done under supervision in the classroom. Any material brought back into the classroom must be checked by the teacher to ensure that it can be authenticated as the student's own work. At the end of the lesson, all of the student's materials, paper-based and electronic, must be collected in, stored securely and handed back at the beginning of the next session.

The role of the game testers and game reviewers

Each student will work with a game tester(s) to give and receive feedback on their game designs and prototypes. Students must be made aware of what is expected of a game tester: they can comment on the '*what*' (what they think is good and what they think could be improved), but they must not feed back on the '*how*' (eg how to make changes or specific solutions to any problems).

Game reviewers comment, in the same way, on the final game.

What feedback can students receive, when?

The controlled assessment task for each unit can be divided into three broad stages. The level of feedback and collaboration allowed varies between stages, as outlined below.

Feedback and collaboration at each stage of the project

Stage 1 – Game overview

This stage starts with the students being provided with the SPB and ends when the game overview has been completed and all additional assets gathered. Students must work individually to come up with their own game overview.

The teacher may provide feedback on the planned approach, such as highlighting strengths, weaknesses and possible problems with the planned game and approach, but teachers must not suggest, or direct students towards, specific solutions.

Students may receive feedback on the game overview from their game tester (see *The role of game testers and games reviewers* above) and use this to modify their game overview before gaining approval for their proposal from the teacher.

Stage 2 – Design, building and development
This stage covers all work that happens after the game overview has been completed. It ends when all products are complete but before the game review begins.

Students must work individually to design, build and develop their products. The teacher may provide feedback at the beginning of this stage on students' designs, such as highlighting strengths, weaknesses and problems with the planned designs, but teachers must not suggest, or direct students towards, specific solutions.

The teacher must not provide feedback on the student's game, but can suggest general questions for them to consider (which will be useful in the game review), eg 'how do you think *x* looks?', 'how do you think *x* could be improved?'

Students may receive feedback from their game tester (see *The role of game testers and game reviewers* above) on the designs and building and incorporate this into their final products.

Stage 3 – Review
Students must work individually to complete the game review.

Before starting their review, the students must seek feedback from their game reviewer(s) on the final game (see *The role of game testers and game reviewers* above), which will be incorporated into the final review. No other feedback from any source is allowed and they cannot receive feedback on the review itself.

Section 4: Tackling the SPB

The scenario

This project requires students to develop a game based on one of three given stories. Students may add details to their chosen story.

Students must also produce a promotional product (promo) for the game.

Students should explore existing game examples before starting work on their own designs.

Folders

An eportfolio is not required for this unit (see Section 5: The evidence).

Students should create a folder called DA204SPB which includes a subfolder called PRODUCTS for the final game, promo and instructions, and a subfolder called EVIDENCE for supporting evidence. The appropriate folder is indicated for each item.

Design

Design documentation should be sufficiently detailed to clarify ideas, allow constructive feedback and facilitate implementation of the designs. Students should also show how testing, acting on feedback and refining their designs influenced the finished game.

Students should remember that credit is not given for demonstration of technical skills and/or coding but rather for producing a game that meets the requirements of the brief and is suitable for the target audience and purpose.

Students should make use of feedback from well-chosen game testers at different stages in the process.

Software

Any suitable software may be used to construct the game and promo. It must be possible to view the evidence using only the CiDA Moderator's Toolkit. The game itself MUST be in playable format and may be submitted as an .exe file.

Research

Students should carry out considerable research into existing products to help generate ideas for the moodboard, for developing their game and promo, and for creating the game review at the end. Students should be encouraged to research a variety of digital games and games review resources.

Game overview

Before working on detailed designs, students must complete a game overview document to give an outline of their intentions for the game. They should record teacher feedback and action taken.

Students should be clear about the options for genres, gameplay, PEGI rating etc. before they embark on their game overview and moodboard.

Students must obtain teacher approval before continuing.

The moodboard

Students must complete a moodboard to show initial design ideas which will be used to gather feedback before development into detailed designs. The feedback should be recorded on the game overview document.

The moodboard need only cover the game and not the promo. It should reflect the student's initial ideas and inspirations for the game. The moodboard may be altered as a result of feedback.

The moodboard may be paper-based or digital. Evidence of a paper-based moodboard may be in any suitable form such as annotated images or video.

Whilst students should aim for an original game that offers the best playability and interactivity features for the target audience, they should not get too carried away with their ideas and should consider what can be reasonably done with the software and time available.

Students should consider how easy/difficult it will be to collect assets for their game. Assets will need to be produced by the students themselves or, if derived from secondary sources, must comply with copyright.

Design

It is essential that students save details of design and development throughout the project. This information should be stored in the EVIDENCE folder. The aim is to show the development of their game and promo from the moodboard through prototyping and testing to the finished products.

Students should aim to communicate the entire process using appropriate methods including detailed storyboards, flow charts, images, etc. They should illustrate the key parts of the game, such as the opening screen and what instructions will appear to help the user to move through different levels. Storyboards and other design documentation should be detailed enough to allow visualisation of the intended product.

Students should also show how testing, acting on feedback and refining their designs influenced the finished product. Annotated images may be used where appropriate to clarify designs and decisions.

Gathering assets

Students will need to gather a variety of assets for their game and promo. Students should be quite clear about the need to comply with copyright if they use secondary sources. Students need to be aware that many sprite sheets available on 'copyright free' sites are illegal 'rips' from existing games. If these are still subject to copyright they should not be used.

An assets table is required. Students must give details of all assets which have been used in the promo or the game, from both primary and secondary sources. This includes resources used from within the games authoring software. They should be reminded that search engines such as Google should not be cited as sources.

Students need to be encouraged to give details of any assets they create, to justify why they think they fit with the audience and purpose, and – if they use ready-made assets – to record any changes they have made to them. For example:

- taking a ready-made character and making changes to its size, appearance, or other characteristics
- taking an image and animating it
- taking some sound and cropping it
- overlaying some speech over music.

The key part here is explaining WHY students have developed or edited these assets. This can be achieved in the assets table. We do not require a narrative description of the process itself or a series of detailed screenshots.

A detailed description of assets used in the moodboard is not required.

Rules

Although even a simple game will have quite a few rules, students will need to be careful about the overall number of rules. They need to understand that the more they add, the more there is that needs to be documented and tested. Do they have time? There may be a need for compromise on time versus perfection.

A rules table needs to be constructed before the development of the game begins. Rules copied from the game engine after the completion of the game are not acceptable.

Development and testing

Students must only submit the final version of their game so it is essential that they record major development issues on their development log. It is important that they justify steps in development – how each is intended to improve the game.

It is imperative that students not only record the summative testing at the end of the game but also the formative testing – that is, how they corrected errors themselves as they built the game. It may be helpful to include 'before and after' screenshots to show what they did to fix a bug, eg code examples.

Students should think carefully about who they choose to be game testers. Ideally, the testers need to be part of the target audience, but students need to consider how easily they will be able to show them their game and how often.

The development log must include details of all testing including feedback received and how the student took account of it. Students should also acknowledge when a change was suggested but ignored, and give the reason.

Instructions

The game must include clear and comprehensive user instructions. Students are free to choose the format and method of access to these instructions. They could be at the start of the game, in the game (sound, pop-ups, animations, videos, help file etc), in a printed supplement, or a combination of these.

The rules should not be just about which keys to press but also about what the player has to do in the game, how to move between levels and how a player can win.

Students should be careful to use appropriate language for the target audience and should ensure that the instructions are thoroughly tested by appropriate game testers.

The promo

This is a product that should promote the game by attracting attention and persuading members of the target audience to try it. It should use appropriate assets, re-purposing from the game where appropriate. This is an opportunity for students to showcase what they have achieved in the game, highlighting the parts they are most proud of that should 'sell' the game.

Students should research trailers and/or current promotional media for existing games, to get an idea of what to create.

Game review

Students should be encouraged to study the content of a range of online game reviews before gathering material for their own. They should be encouraged to practise writing magazine style reviews for existing games to help them with this.

Students should make full use of feedback from game reviewers to ensure that comments and any ratings are realistic and valid.

The Final Game

The game must be exported into a format that can be viewed with the CiDA Moderator's Toolkit (an .exe file is acceptable for this unit). Game authoring software project files are not acceptable.

Students may use any suitable games authoring software. Possible choices include: Gamemaker, Flash, Unity, Unreal Development Kit, Torque, RPG Maker, Multimedia

Fusion. When making a decision about which software to use students need to ensure that it will allow them to create a game for their chosen scenario, will allow the use of primary assets and also allow the inclusion of instructions within the game.

Section 5: The evidence

An eportfolio is not required for this unit.

Students must create a single, easily recognisable index page in the main folder. This should include candidate name and number, centre name and number, SPB name. It must allow access to the game, instructions, promo and all other required evidence. Comments to introduce the evidence are not required.

Students are expected to remove redundant and duplicated work before submission.

Students should ensure that they provide working links to all the specified items of evidence. This can only be done effectively when the work is viewed on a standalone machine. If students have access to a standalone computer which only has the CiDA Moderator's Toolkit installed then they will also be able to check that all their evidence conforms to the technical specification. It is often the case that absolute links are not picked up until moderation with a resulting disagreement of marks.