Pearson

Support Notes (Issue 1)

September 2017

Certificate in Digital Applications (DA204) Game making

Gaming for Grandparents

edexcel

Key points for this SPB

The DA204 SPB 0917 is valid for moderation in June 2018, December 2018, June 2019 and December 2019.

Unit 4 is a 90-Guided Learning Hours (GLH) unit. Centres must allow 30 hours for students to complete their Summative Project.

There is no maximum size for the evidence in this unit.

For this SPB the products are:

- a finished game with a tutorial level
- user instructions
- a promo.

For this SPB the evidence is:

- a moodboard
- a game overview
- an assets table
- detailed designs
- a development log
- a game review.

The target audience for the game is the over 50s.

These support notes should be read in conjunction with the Chief examiner's available on the Pearson website.

Introduction

Unit 4 is a 90-Guided Learning Hours (GLH) unit. 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. 60 hours should be allocated for this teaching. Centres are strongly advised to ensure this teaching has been completed prior to the commencement of the SPB.

Teachers and students should remember that the emphasis of the CiDA/DiDA 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 addition to game authoring skills, students will 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.

Section 1: Tackling the Gaming for Grandparents SPB

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.

It is particularly important that students look at what games are successful with the over 50 age group and why.

Software

Any suitable software may be used to construct the game and promo. The game must not be created in presentation software. It must be possible to view the evidence using only the Digital Applications moderators' toolkit. The game itself must be in a playable format and may be submitted as an .exe file.

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, etc. before they embark on their game overview and moodboard.

Whilst students should aim for an original game that offers the best playability and interactivity features for the target audience, they 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, they must comply with copyright.

Students must obtain teacher approval before continuing.

The moodboard

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 paper-based or digital. Evidence of a paper-based moodboard should be in a suitable digital form, such as annotated images or video.

It is important that if a paper-based system is used the scans/photographs are clear enough and contain sufficient detail for the moderator to make judgements about them.

Design

From the research students will have undertaken it is important that the designs for the game reflect the ideas and styles that are effective with the target age group.

Design documentation should be sufficiently detailed to clarify ideas, allow constructive feedback and facilitate implementation of the designs.

It is essential that students document the development of their game from the moodboard, through prototyping and testing, to the finished products.

Students should aim to communicate this 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. Each storyboard should include some annotations to describe such things as the events on the screen, assets used, features that would be suitable for the target audience, etc. Storyboards should not be created retrospectively. Where significant changes have been made to the final game these should be indicated on the original storyboards.

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

Students should be reminded that credit is given for producing a game that

meets the requirements of the brief and is suitable for the target audience and purpose.

Gathering assets

Students will need to gather and create a variety of assets for their game and promo. Students should be 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 that 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, or 'the internet' should not be cited as sources.

Students should give details of any assets they create, and justify why they are appropriate for the audience and purpose. If they use ready-made assets, they should record any changes they have made to them.

It is important that students explain why they have developed or edited their assets to make them appropriate for their game. This can be achieved in the assets table if it is fully completed as described in the SPB.

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

Rules

A rules table needs to be constructed before the development of the game and an initial set of basic rules needs to be created and added to the table. Rules should not be created as the game is built but pre-planned. Students should not retrospectively copy rules from the game engine after the completion of the game.

It is an important part of the development process that where these rules have changed in the final game, because either the original rule hadn't worked, or different elements had been added to the game that had necessitated a change, these should clearly be documented.

Development and testing

As students only submit the final version of their game, it is essential that they record major development issues in their development log. It is important that they justify the steps in development, explaining 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 as they built the game. It may be helpful to include 'before and after' screenshots to show what they did to solve a problem.

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 easy it will be to show them their game and how often.

The development log must include details of all testing including feedback received and any changes made. Students should also acknowledge when a change was suggested but ignored, and give the reason.

Students need to allow sufficient opportunities for testers, from the target audience, to play the final game and comment on its playability. Explicit usability testing needs to be evident and cannot be implied when awarding marks.

Instructions

The game should have clear and comprehensive user instructions. Students are free to choose the format and means 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 instructions should not be just about which keys to press but also about what the player has to do in the game.

With this particular SPB a tutorial level is required that demonstrates to the player the major keystrokes and mouse inputs and what they have to do within the game to complete

The promo

This should promote the game by attracting attention and persuading members of the target audience to try it. It should use appropriate assets, repurposing from the game where appropriate. Supplementary content can also be added with the notion of persuading people to play 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 and style 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 review should not merely be a narrative of the game but should contain detailed and evaluative comments on the strengths and weaknesses of the game.

The final game

Students should use any suitable games authoring software. Possible choices include: Gamemaker, Flash, Unity, Torque and Multimedia Fusion. When making a decision about which software to use students need to ensure that it will allow them to create a suitable game and allow the use of original characters and other assets from primary sources. It should also allow the inclusion of instructions within the game.

Section 2: The evidence

Students must create a single, easily recognisable index page in the main folder. This should include candidate name and number, centre name and number, and 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. There is no maximum size for the evidence in this unit.

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 computer. If students have access to a standalone computer which only has the Digital Applications moderators' toolkit installed then they will also be able to check that all their evidence conforms to the technical specification.

Section 3: 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.

Section 4: 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 subfolders to store work for submission.

The symbol P indicates a product to be stored in the PRODUCTS subfolder.

The symbol E indicates supporting evidence to be saved in the EVIDENCE subfolder.

Students must ensure that they present their evidence as clearly as possible. For example, scans of hand drawn storyboards must be legible.

Copyright

Students must comply with copyright.

They should consider whether they have fully met this requirement. If not, it is not sufficient to simply acknowledge the sources. They must demonstrate their understanding of copyright issues and what would need to be done to make the products fit for use in the public domain. They must identify each individual asset that is an issue and explain what would need to be done to comply with copyright.

It is generally the case that suitable assets can be obtained from primary or copyright-free sources.

The Digital Applications moderators' toolkit

This toolkit specifies the file types that moderators can view. It is each students' responsibility to ensure that their submission only includes files in the listed formats.

The Digital Applications moderators' toolkit is published on the Pearson website. It will be updated as necessary.

Section 5: Supervision and feedback

Supervision and authentication of student work

With the exception of the activities listed below, students are only allowed to work on the SPB in lessons, under the supervision of a teacher.

The activities that may be carried out away from the classroom are:

- researching information and assets
- gathering assets
- 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 should work with a game tester to receive feedback on the product designs and prototype products.

Students may also act as a game tester for other students. Game testers should comment on the '*what*' (what they think is good and what they think could be improved); but they must not feedback on the '*how*' (how to make changes or specific solutions to any problems).

Game reviewers comment, in the same way, on the finished product(s).

What feedback can students receive?

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

This stage starts students being provided with the SPB. Students must then work individually to come up with their own proposal.

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

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

Stage 2

Students must work individually to design, build and develop their products.

The teacher may provide feedback on students' designs, such as highlighting strengths, weaknesses and problems with the planned designs, but the teacher must not suggest specific solutions.

The teacher must not provide feedback on the students' finished products, but may suggest general questions for consideration (which will be useful in the project review), for example '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 the game testers and game reviewers* above) on their work and incorporate this into their finished products.

Stage 3

Students must work individually to complete the project review.

Before starting their project review, the students must seek feedback from their end-of-project reviewer on the finished products, which will be incorporated into the project review. No other feedback from any source is allowed and students cannot receive feedback on the project review itself.

Further support

Centres are reminded the following additional support is available:

- Ask the Expert
- Subject Adviser
  TeachingICT@pearson.com
  UK: 020 7010 2161
  Intl: +44 (0)20 7010 2161
- Sample marked learner work
- Chief examiner's report
- Training from Pearson