

Live Assessment Material

Model Assignment 1

OCR Level 1/2 Cambridge National Award in Creative iMedia
OCR Level 1/2 Cambridge National Certificate in Creative iMedia
OCR Level 1/2 Cambridge National Diploma in Creative iMedia
Unit R092: Developing Digital Games

Please note:

This OCR model assignment is to be used to provide evidence for the unit identified above. Alternatively, centres may 'tailor' or modify the assignment within permitted parameters (see Information for Teachers). It is the centre's responsibility to ensure that any modifications made to this assignment allow learners to show that they can meet all of the learning outcomes and provide sufficient opportunity for learners to demonstrate achievement across the full range of marks.

INSTRUCTIONS TO TEACHERS

The OCR administrative codes associated with this unit are:

- unit entry code R092
- certification codes Award J807 / Certificate J817 / Diploma J827.

The accreditation numbers associated with this unit are:

- unit reference number
- qualification reference.

Duration: approximately 12 hours

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Version 2 - update to page 6, the change is indicated by a black line |

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Model Assignment: Information for Learners

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Unit R092: Developing Digital Games

Scenario for the assignment – Developing a digital game for ‘Mowve’

Your task is to create a playable game from a brief for a company called Mowve which sells lawn mowers and garden strimmers. Their products come in a shade of mauve (purple) which has been chosen to make them stand out from other brands. Mowve would like you to create a game to make their lawn mowers and garden equipment more widely recognised by the public and increase sales. They aim to sell their products to adults between the ages of 20 and 50.

Mowve have provided you with a brief for the game they want you to produce. The platform, hardware and controls are up to you, but should be chosen according to the platforms likely to be popular with the target audience. You also have the freedom to decide on the genre of the game, and might choose this after researching other games involving lawn mowing.

You must read the proposal carefully and prioritise the client’s requirements, concentrating on the components which you think are most important.

Mowve It Game Brief

The main player in the game is a gardener whose job is to mow the lawns. The playable game should contain some of the following:

- In each garden area there are stone ornaments which are very valuable. Colliding with one of these causes it to break which loses you points or money. Hitting more than two means you have to restart the game.
- Other obstacles to avoid include ponds, rockery, flowers and household pets. Each of the pets moves out of the way but at different speeds depending on the animal.
- In each garden area there are garden gnomes, and the garden’s owner will actually be pleased if you break them. You might choose to award extra points, or give extra time to complete the game if you break a gnome.
- You have a time limit to mow the garden.

The type of lawn mower to be used in the game could be chosen from the following equipment which Mowve sells:

The Mowve Monster

This is a ride-on mower with a wide cutting blade. It cuts lots of grass at once but is slow and not very manoeuvrable.

The Mowve Mover

This is a smaller push-mower. It cuts less grass but is very speedy and quite difficult to control.

The Mowve Mini

Designed for tight spaces, this is an awesome strimming machine which is fast and easily controlled but cuts the least grass at one time. Its controls mean it is super-fast to switch on and off, perfect when you need to avoid many obstacles or pets.

Read through all of the tasks carefully, so that you know what you will need to do to complete this assignment.

Your Tasks

The tasks should take approximately 12 hours to complete.

Task 1: Explore digital game creation hardware, software and peripherals

Parts of Learning Outcome (LO) 1 and LO2 are assessed in this task.

Before you create your game, you must consider the available software and hardware for creating and testing games, and decide which is the most appropriate for the client and target audience requirements.

Understand game creation hardware, software and peripherals

You need to:

- investigate the 2D and 3D software available to create digital games, identifying the capabilities and limitations of each
- investigate the various types of hardware and peripherals which might be used to create digital games
- identify the gaming platform hardware and peripherals used when testing digital games
- present your findings in a report or presentation.

Task 2: Planning the digital game

Parts of LO2 are assessed in this task.

You need to organise your time and resources so that you can plan the design of the digital game. You must decide which parts of the game brief you are going to include in your game and document how you intend to test your game.

Your client and the target audience

You need to:

- identify the client's requirements for a digital game to meet the brief
- identify the target audience and how this will affect the game play, platform and hardware to be used.

Designing the game

You need to:

- plan the structure of the game you will create
- describe how your game will include the key aspects of game creation
- identify what criteria must be met for the finished game to be successful.
- create a test plan to be used during and after the creation process

Legal restrictions

The digital game will be used in a commercial context. You need to consider any legal issues and restrictions on assets, ideas and concepts.

Present your findings in a report or presentation.

Task 3: Creating the digital game

Parts of LO2, LO3 and LO4 are assessed in this task.

You will need to produce the digital game that you have planned, making use of the range of tools in suitable software. The game must be playable, and you should check this using the test plan you created.

Obtaining assets to use in the digital game

You need to:

- obtain the assets required to create a digital game
- store the assets in a suitable format and location.

Create the digital game

You need to:

- import the assets into the game environment
- position and manipulate game objects in the game environment using appropriate geometric parameters
- set the properties and parameters for game objects and environment
- create the game play interactions and controls
- identify any algorithms used for the gameplay and their function through the game
- create the playable digital game
- test the game using the test plan
- save, export and publish the completed game

Task 4: Reviewing the digital game

Parts of LO4 are assessed in this task.

Now that you have created your digital game, you need to consider how you have met the client's requirements. Your review should also refer to the overall quality of your finished game and identify improvements that could be made.

Reviewing the digital game

You need to:

- review how the components of the final digital game work together to meet the client's requirements
- explain how and where the digital game could be improved
- describe areas for further development, giving reasons for your choices

Present your ideas in a report or presentation.

Information for Teachers

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Unit R092: Developing Digital Games

General guidance on using this assignment

1 General guidance

- 1.1 OCR assignments are available to download free of charge from our website: www.ocr.org.uk.
- 1.2 OCR assignments are intended to be used for summative assessment of learners. The OCR specification gives more information on the arrangements for assessing internally assessed units.
- 1.3 This assignment has been designed to meet the full assessment requirements of the unit. Learners will need to take part in a planned learning programme that covers the underpinning knowledge, understanding and skills of the unit.

2 Before carrying out the assignment

- 2.1 Learners should be provided with a copy of the Information for Learners section of this assignment.
- 2.2 It is estimated that this assignment will take approximately 12 hours to complete, which can be further broken down as follows:
 - Task 1: 2 hours
 - Task 2: 2 hours
 - Task 3: 6 hours
 - Task 4: 2 hours
 These timings may be used by the teacher to give learners an indication of how long to spend on each task. Where learners capture their own footage for use in the movie trailer rather than sourcing pre-existing assets, this will require the generous allowance allocated for Task 3. Centres are permitted to spread the tasks across several sessions and, therefore, it is permissible for evidence to be produced over several sessions.
- 2.3 Learners will not need to collate resources to use in the assessment prior to undertaking the assessment tasks. They may, however, wish to investigate the following three elements before they begin their assessment.
 - i. Published games on a similar theme to that provided by the brief. In this model assignment, the game proposal is for a game on the theme of lawn mowing. Several games on this theme exist, and learners may wish to investigate these games prior to creating their own digital game.
 - ii. The features of games designed for particular platforms and hardware (in other words, what distinguishes a game designed for a smartphone from a game for a specific console).
 - iii. The types of game and platform or hardware for playing games which appeal to the target audience. It is, therefore, recommended that in teaching the content of LO1 and LO2, centres encourage learners to relate the hardware and platforms they investigate to their most likely audience and market.

3 When completing the assignment and producing evidence

- 3.1 Each learner must produce individual and authentic evidence for each task in the assignment.
- 3.2 Centre staff may give support and guidance to learners. This support and guidance should focus on checking that learners understand what is expected of them and giving general feedback that enables the learner to take the initiative in making improvements, rather than detailing what amendments should be made. It is not acceptable for teachers/deliverers to provide answers, to work through answers in detail or to detail specifically what amendments should be made.

- 3.3 Learners may use information from any relevant source to help them with producing evidence for the tasks.
- 3.4 Learners must be guided on the use of information from other sources to ensure that confidentiality is maintained at all times.
- 3.5 We have specified what evidence the learner is expected to produce. Usually, the type of evidence provided may be modified, with the exception of certain types of evidence listed below under the section 'Permitted changes'. It is important to note that it is possible to generate the evidence in a variety of formats. Centres must advise learners regarding the most appropriate format of evidence. The nature of this assessment means that learners are free to use the format that they feel is most appropriate for the purpose and target audience for each individual task.

4 Presentation of work for marking and moderation

- 4.1 Centres wishing to produce digital evidence in the form of an e-portfolio should refer to the appendix in the specification on guidance for the production of electronic assessment.
- 4.2 Centres may wish to discourage learners from excessive use of plastic wallets for presentation of their evidence as this may hinder the assessment process. Instead, centres may wish to encourage learners to present their work so that it is easily accessible, e.g. spiral bound, stapled booklet, treasury tag.

5 Scope of permitted model assignment modification

The model assignment is self-contained in its present form. The set of tasks form a coherent whole addressing all the learning outcomes and allowing access to the full range of marks.

You must not change the following:

- the learning outcomes
- the marking criteria
- the requirements for supervision and authentication as described in the specification (Section 4 The centre assessed units).

Permitted changes:

The model assignment may be modified in terms of the areas described below, with the permission of OCR, but centres must be sure that learners still have the opportunity to cover all of the learning outcomes and to access the full range of marks.

- The type of evidence and the format each takes may vary, **with the exception of:**
 - a report or presentation on the game creation software applications and hardware development platforms suitable for the assessment task
 - a test plan
 - a playable digital game exported in a suitable format for it to be played on a different computer system without any specialised software
 - screenshots which evidence the game's creation and the techniques used
 - a formal review.

The above are **required types of evidence**; however, the formats of these may vary. For example, learners may choose to provide evidence using non-text-based formats such as audio or video presentation if required.

- A logical approach is suggested, however, centres may wish to change the order of the tasks depending on learners' individual requirements.
- The learner's assignment, which can be contextualised or amended to suit local needs. The game proposal is based on what is thought to be a 'typical' scenario, but this can be altered in terms of its theme, objectives, target audience and game components if this better suits teachers and/or learners.
- Centres may wish to allow learners to create the digital game for unit R092 based on the game proposal written for unit R091. This is permitted, regardless of whether the model assignment for unit R091 is used as published or whether it has been contextualised or amended to suit local needs.
- Any additional client requirements which fit in with the brief of producing a digital game, may be specified providing they do not fall outside the content of the unit, and are reasonable to expect learners to understand and be able to achieve.
- Any appropriate game creation software may be used. It must, however, be suitable for the tasks given and enable learners to achieve the full range of marks available. A variety of free game development tools are available, for example:
 - GameMaker <http://www.yoyogames.com/gamemaker/studio>
 - Blender <http://www.blender.org/>
 - Unity <http://unity3d.com/unity/>
 - Kodu [http://www.kodugamelab.com/.](http://www.kodugamelab.com/)
- Each specific task may be appropriately contextualised to match with any permitted changes you have made to the scenario.

OCR has ensured that in the language used and the tasks and scenario provided, we have avoided discrimination, bias and stereotyping, and supported equality and diversity. In the development of qualifications and assessments, we use the guidance given in the Ofqual publication, *Fair access by design*. Notably this includes:

- using language and layout in assessment materials that does not present barriers to learners
- using stimulus and source materials in assessment materials (where appropriate) that do not present barriers to learners.

If centres wish to modify the model assignment, we strongly advise that staff responsible for modifying the model assignment and the quality assurance of it refer to the publication, *Fair Access by Design*.

If modifications are made to the model assignment, whether to just the scenario or to both the scenario and individual tasks, it is up to the centre to ensure that all learning outcomes can still be met and that learners can access the full range of marks.