

## Gold - Unit 26 - Computer Games Development

### Activities supporting the assessment of this unit

(To be linked to e.g. Minecraft or other game development applications)

**Please note: this is a new unit so guidance is very provisional at present**

### Assessor's guide to interpreting the criteria

#### *General Information*

#### **QCF general description for Level 2 qualifications**

The full details of the descriptions of Level 2 of the QCF are provided from this [link](#) [1].

QCF Level 2 is referenced to EQF level 3

In interpreting these levels in the context of these units, the following guidance should be used.

#### **Complexity**

**The context for Level 2** projects and the associated assessment will be sets of straightforward tasks with a clearly structured and defined brief. The following example is for the use of JavaScript as the target Specialist Software. It is not mandatory, just there to give an idea of the type of activity that can be used.

**Example -** [Here is a JavaScript game called "Ship"](#) [2] the player has to guess letters to make up a word. If they guess wrong the ship begins to sink. Improve the game by using new graphic images or change the game so that it uses a different set of words. Your assessor will provide guidance for whichever task you choose. You will need to study the code for the original game in your web browser and work out which part of the program handles the things you want to change. You can work with friends to solve your problems but you must demonstrate to your assessor that you have learnt how to make the modifications and could use what you have learnt to tackle similar tasks in the future.

#### **In addition for Level 2, the guidance from e-skills for this unit is**

- the software tools and functions involved will at times be non-routine or unfamiliar
- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step
- the user will take some responsibility for inputting, manipulating and outputting the information.

#### **Requirements**

- Standards must be confirmed by a trained Gold Level Assessor
- Assessors must at a minimum record assessment judgements as entries in the on-line mark book on the INGOTs.org certification site.

- Routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work will be available from their e-portfolios and on-line work. Assessors should ensure that relevant web pages are available to their account manager on request by supply of the URL.
- When the candidate provides evidence of matching all the criteria to the specification, subject to the guidance below, the assessor can request the award using the link on the certification site. The Account Manager will request a random sample of evidence from candidates' work that verifies the assessor's judgement.
- When the Account Manager is satisfied that the evidence is sufficient to safely make an award, the candidate's success will be confirmed and the unit certificate will be printable from the web site.
- This unit at Level 2 should take an average level 2 learner 28 hours of work to complete.

### **Assessment Method**

Assessors can score each of the criteria N, L, S, or H. N indicates no evidence and is the default starting position. L indicates some capability but secure capability has not yet been achieved to meet the criterion in the context of the general description of level 2 qualifications above and the assessor guidance below. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least "S" on all the criteria to achieve the unit. They should demonstrate a complete and fully working system that incorporates the secure application of the criteria, including original elements and a clear standard of documentation to explain how their application works.

### **Expansion of the assessment criteria**

## **1. Know computer game components and the computer games industry**

### **1.1 I can identify the hardware and software components of a video game system**

Candidates need to show that they know the hardware and software requirements needed to create and maintain their games development.

**Evidence:** from candidates' working game and assessor feedback.

#### **Additional Guidance:**

The candidate's will need to choose the right mix of hardware and software in order to make effective and efficient games. Some of this will depend on what you have in your centre, so in many cases this may well be based on Raspberry Pi hardware and the system running it. Level 2 will be characterised by the requirement for structured help and support using the general description of Level 2 qualifications in the QCF.

### **1.2 I can identify the activities required to develop modern computer games**

The candidate must show within their programming that they fully understand all the aspects of game design and the importance of the end user's experience.

**Evidence:** from completed working games and assessor observations

### Additional Guidance

The candidate's game design should show an awareness of modern design techniques and facilities to maximise the potential of the finished product. Level 2 will be characterised by the requirement for less structured help than for level 1 and support using the general description of Level 2 qualifications in the QCF.

#### 1.3 I can describe the features of an existing computer game

The candidate should show a good level of understanding across a range of computer games and be able to describe their main features and facilities.

**Evidence:** observations by candidate on ePortfolios or documentation

### Additional Guidance

Candidates will likely have a particular style of game in mind that they like to play, but need to show that they can see the main aspects of a wide range of games as this will better inform their own designs and make sure that the games they design are appealing to a wider audience and are more objective.

## 2. Know how to develop a computer game specification

### 2.1 I can contribute to the production of a pre-production proposal document for a computer game project

Candidates should show that they have considered which programming structures to use e.g. program loops, data arrays, functions and variables to handle input from the user and output effects to the screen appropriately in terms of structure, layout and style, as well as a possible client's needs.

**Evidence:** from the candidate's portfolio pages and their final documented application.

### Additional Guidance

They should document their choices in their portfolio explaining their approach to producing their application. At level 2 the requirement is simply to describe the functions they have used.

#### 2.2 I can identify the components required to develop a computer game

Candidates should demonstrate that they understand the chosen development environment well enough to know what components can be used or what components are too simple or too complex to add to the final product.

**Evidence:** from the candidate's portfolio pages and their final documented application.

### Additional Guidance

Candidates will need to explore the hardware and software elements that they have at their disposal and show that they can choose the most effective and efficient ones to complete their project. Much of this will be determined by what the expectations are of their "client" as there may be very specific demands for e.g. sound components which the candidate will need to be able to deliver on.

#### 2.3 I can contribute to the production of an implementation plan for a computer game development

Candidates should show a basic understanding of implementation plans and also the working of teams in developing and delivering projects on time and to budget.

**Evidence:** comments in e-portfolios describing their work, assessor observations,

### Additional Guidance

The candidates may well work in a team and product different aspects of a game. In this case, all of the team will need to know their role and their specific objectives. The implantation plan will help them to stay focused and not go off task. In a real development environment wasting time is wasting money and potentially losing business so they need to understand and acquire these skills for successful development of computer games. Aspects of this criterion could be used from or combined with Unit 21 where they could use a CRM system to track their work and deadlines. A basic implantation plan should consist of them at least setting objectives, working to those objectives, reviewing those objectives (with timelines) and reflecting on any issues.

## 3.Implement a component of a computer game

### 3.1 I can design a component of a computer game

Candidates should show that they can use program editing tools to support their work and create a component. Their program code should be clearly laid out with sufficient comments to allow one of their peers to follow their work.

**Evidence:** Documented program and source code

### Additional Guidance

The documentation should make it clear which parts of any code were taken from other people's work and what they have done to add to, improve or extend the application. They should use analysis of their work and consideration of their comments to improve their approach to tackling the problem. A component could be a character or scene for the game. For Level 2 the coding aspects will be straight forward and achieved through structured guidance.

### 3.2 I can develop a component of a computer game

Candidates should evidence that they can improve an existing game component.

**Evidence:** Working program that meets identified revised needs. Description of process.

### Additional Guidance

Discuss the development of their component in order to improve it. They should document bug fixes in their e-portfolio pages related to planning an/or evaluation. There should be a clear relationship between needs identified and their finished product.

### Moderation/verification

The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialogue with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book. They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios, final projects and through their signed witness statement associated with the criteria matching marks in the on-line markbook. Before authorizing certification, the Account Manager must be satisfied that the assessors judgements are sound.

**Source URL:** <https://theingots.org/community/sil2u26x>

### Links

[1] [http://theingots.org/community/QCF\\_levels](http://theingots.org/community/QCF_levels)

[2] <http://ingotgames.org/ship/en/ship.htm>