Level 1- Unit 26 - Computer Games Development (3 Credits)

Relevant LINKS

BACK TO ITQ UNITS **[1]**

Handbook home page [2]

Overview

Candidates will need to demonstrate the ability to understand and assist in the development of some computer game components. At the Silver level, the requirement is to understand the basic hardware and software components used in game design. Candidates should be able to show an understanding of how the industry works and what features make a good game design. Candidates can then use this knowledge, with assistance if required, to begin producing a game design. This will involve some pre-production activities and sketching out some possible ideas. Candidates will then take some of these designs and some game elements.

Example of context: Work as a small team to research and develop an element of a game such as a background or character..

Note that the facilities to support this unit are provided freely on the TLM website at www.tlm.org.uk [3]. Make an account and go to the "How-tos" section or use the free online course. This is recommended but not mandatory. As long as we can access evidence via a URL to the learners' work we can apply the quality assurance procedures. Assessors should contact their Account manager early to discuss their methods of providing evidence.

Assessor's guide to interpreting the criteria

General Information

QCF general description for Level 1 qualifications

- Achievement at QCF level 1 (EQF Level 2) reflects the ability to use relevant knowledge, skills and procedures to complete routine tasks. It includes responsibility for completing tasks and procedures subject to direction or guidance.
- Use knowledge of facts, procedures and ideas to complete well-defined, routine tasks. Be aware of information relevant to
  the area of study or work
- Complete well-defined routine tasks. Use relevant skills and procedures. Select and use relevant information. Identify whether actions have been effective.
- Take responsibility for completing tasks and procedures subject to direction or guidance as needed

Requirements

(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){ (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o), m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m) })(window,document,'script','//www.google-analytics.com/analytics.js','ga'); ga('create', 'UA-46896377-2', 'auto'); ga('send', 'pageview');

- Standards must be confirmed by a trained Silver Level Assessor or higher

- Assessors must at a minimum record assessment judgements as entries in the online 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 online work. Assessors should ensure that relevant web pages are available to their account manager on request by the 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 website.

- This unit should take an average level 1 learner 30 hours of work to complete.

Assessment Method

Assessors can score each of the criteria L, S, H. N indicates no evidence and is the default starting position. L indicates some capability but the secure capability has not yet been achieved and some help is still required. 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. The candidate will 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 candidates 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.

(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){ (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o), m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m) })(window,document,'script','//www.google-analytics.com/analytics.js','ga'); ga('create', 'UA-46896377-2', 'auto'); ga('send', 'pageview');

1.2 I can identify some activities required to develop modern computer games

The candidate demonstrates that they fully understand 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. At Level 1 the learner just needs to be able to identify to the assessor their independent understanding of the game development activities.

1.3 I can list some of the features of an existing computer game

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

Evidence: observations by the 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. The candidate will know how to develop a computer game specification

2.1 I can contribute to the production and 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 1 the requirement is simply to identify and assist in functions used.

2.2 I can identify some 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:

(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){ (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o), m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m) })(window,document,'script','//www.google-analytics.com/analytics.js','ga'); ga('create', 'UA-46896377-2', 'auto'); ga('send', 'pageview');

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 projects. 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 some ideas 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 within budget.

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

Additional Guidance:
The candidates may well work in a team and produce 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 the 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. The candidate will implement a component of a computer game

3.1 I can assist in the design of a component of a computer game

Candidates should show that they can understand the use of program editing tools to support their work and create a component.

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 1 the coding aspects will be straightforward and achieved through structured guidance.

3.2 I can assist in the development of 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 the needs identified and their finished product.

Moderation/verification

(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){ (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o), m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m) })(window,document,'script','//www.google-analytics.com/analytics.js','ga'); ga('create', 'UA-46896377-2', 'auto'); ga('send', 'pageview');

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 online mark book. They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios, and final projects and through their signed witness statement associated with the criteria matching marks in the online markbook. Before authorizing certification, the Account Manager must be satisfied that the assessor's judgements are sound.

Source URL: https://theingots.org/community/sil1u26x

Links
[1] http://www.theingots.org/community/ITQ_UNIT_development
[2] http://theingots.org/community/handbook2
[3] http://www.tlm.org.uk

(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){ (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o), m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m) })(window,document,'script','//www.google-analytics.com/analytics.js','ga'); ga('create', 'UA-46896377-2', 'auto'); ga('send', 'pageview');