National Unit specification: general information

Unit title: Mobile Game Development (SCQF level 5)

Unit code: FN8X 11

Superclass: CD

Publication date: July 2011

Source: Scottish Qualifications Authority

Version: 01

Summary

The purpose of this Unit is to enable candidates to acquire a basic understanding of the fundamentals underpinning mobile technology and game development. Candidates will learn to recognise the technologies that influence how mobile games are designed and created. The candidate will gain an understanding of how the environment within which the game is played influences the way it is designed. Candidates will also investigate the opportunities mobile technology can offer to computer games.

This Unit is an optional Unit in the National Certificate in Computer Games Development, but can also be taken as a free-standing Unit.

Outcomes

1   Demonstrate an understanding of how mobile technologies can be used in designing and creating a mobile game.
2   Demonstrate an understanding of how the user's environment can impact on the design and creation of a mobile game.
3   Investigate how emerging technology could be used in mobile gaming.

Recommended entry

While entry is at the discretion of the centre, it would be beneficial if candidates possessed the basic IT skills covered in the following unit:

F3GC 10 Information Technology (Intermediate 1) or equivalent qualification or experience.

National Unit specification: general information (cont)

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Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5*)

SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

National Unit specification: statement of standards

Unit title: Mobile Game Development (SCQF level 5)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Demonstrate an understanding of how mobile technologies can be used in designing and creating a mobile game.

Performance Criteria

(a) Identify the hardware specifications available within a chosen mobile platform.
(b) Identify the screen display specifications available within a chosen mobile platform.
(c) Identify the different game play controls used within mobile gaming.
(d) Contrast how mobile technology differs from other gaming platforms.

Outcome 2

Demonstrate an understanding of how the user's environment can impact on the design and creation of a mobile game.

Performance Criteria

(a) Identify different environments within which mobile games can be played.
(b) Explain how the design of a mobile game must take account of these different environments.
(c) Explain how the user's environment could impact on the playability of a mobile game.

Outcome 3

Investigate how emerging technology could be used in mobile gaming.

Performance Criteria

(a) Identify and describe a current emerging technology in mobile platforms.
(b) Discuss the possibilities this emerging technology might offer to gaming.
(c) Storyboard a game that could be used in a mobile device that incorporates emerging technology.

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Evidence Requirements for this Unit

The evidence requirements for this Unit should be in the form of an investigation that would cover all three Outcomes and should incorporate the following topics:

♦ choice of one mobile platform and identification of processor speed, memory and storage capacity
♦ choice of one mobile platform and identification of screen size and resolution
♦ identification and description of three different control methods used in mobile game play
♦ choice of one games console, comparison and contrast with a chosen mobile platform
♦ identification of three different possible environments where mobile games could be played
♦ explanation of how these environments may impact on the design of a mobile game
♦ explanation of how these environments may impact on the playability of a mobile game
♦ investigation and discussion of a current emerging technology and description of possible uses within mobile gaming
♦ storyboards for a basic mobile game that incorporates one emerging technology

Written and/or oral evidence is required which demonstrates that the candidate has achieved all three outcomes to the standards specified in the Performance Criteria.

National Unit specification: support notes

Unit title: Mobile Game Development (SCQF level 5)

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

It is envisaged that this Unit is delivered in a computing games development context appropriate to the candidate, whether as part of the National Certificate in Computer Games Development or as a free-standing Unit.

This Unit is aligned to the following Skillset National Occupational Standards (NOS):

♦ IM8 Determine the Implementation of Designs for Interactive Media Products
♦ IM9 Provide Creative and Strategic Direction for Interactive Media Projects

Guidance on learning and teaching approaches for this Unit

In this Unit the candidate should be encouraged to look at and play as wide as variety of mobile games as possible. As wide a variety of platforms should also be used to demonstrate these games. Candidates should also be encouraged to do their own research through online or printed publications.

It is envisaged that the research needed for the Unit should be student led with the lecturer acting as a facilitator in their research. This learning could be facilitated by group work, peer work or by individual research.

The candidate is encouraged to use the internet, journals and periodicals where available and the evidence produced must be in their own words. Tutors should assure themselves of the authenticity of the candidate's evidence.

Guidance on approaches to assessment for this Unit

An investigative report for an approach to assessment should be taken. This report may be either paper based or electronic format. There is also a design part of the Unit this should be incorporated into the report either by including it within the main body or as appendices.

An integrated assessment approach across several Units is encouraged where appropriate. This Unit could form part of a candidate's portfolio.

National Unit specification: support notes (cont)

Unit title: Mobile Game Development (SCQF level 5)

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003), SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

This Unit offers the candidates the opportunity to research and produce an investigative report into Mobile Games Development. This could be used as evidence towards aspects of *Communication* at SCQF level 5.

There are also opportunities within the Unit to work in groups that could be used as evidence towards aspects of *Working With Others* at SCQF level 5.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website **www.sqa.org.uk/assessmentarrangements**

History of changes to Unit

Version	Description of change	Date