

# Cambridge **TECHNICALS LEVEL 2**

Cambridge TECHNICALS 2016

# Unit 14

# **Creating mobile applications for business**

F/615/1384 Guided learning hours: 30 Version 1 September 2016

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# LEVEL 2

# **UNIT 14: Creating mobile applications for business**

F/615/1384

## **Guided learning hours: 30**

**Essential resources required for this unit:** Learners will need access to mobile application development software and to an emulator or mobile device.

This unit is internally assessed and externally moderated by OCR.

### **UNIT AIM**

Mobile technology is becoming more and more prevalent within society both from a personal point of view as well as within business.

The aim of this unit is to provide an understanding of the uses of mobile applications for business. You will plan, create, update and improve mobile applications to meet business requirements. Feedback gathered from users and the client will form the basis of the improvements you make to the mobile application.

This is an optional unit within the Award in Digital Business and is mandatory within the Digital Software Practitioner pathway in the Diploma.

## **TEACHING CONTENT**

The teaching content in every unit states what has to be taught to ensure that learners are able to access the highest grades.

Anything which follows an i.e. details what must be taught as part of that area of content. Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used, learners must know and be able to apply relevant examples in their work, although these do not need to be the same ones specified in the unit content.

For internally assessed units you need to ensure that any assignments you create, or any modifications you make to an assignment, do not expect the learner to do more than they have been taught, but must enable them to access the full range of grades as described in the grading criteria.

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
<ol> <li>Know the uses of mobile applications within business environments</li> </ol>	<ul> <li>1.1. Uses of mobile applications within business, e.g.:</li> <li>productivity (e.g. project management, collaboration, calendars, lists)</li> <li>business travel (e.g. taxi, car rental, tour guides, hotels, flights, tickets, real-time traffic and travel updates/alerts)</li> <li>communication (e.g. conference call and speed dial)</li> <li>GPS/mapping (e.g. location, traffic, routes)</li> <li>mobile payments (e.g. paying by mobile app)</li> <li>digital marketing (e.g. social media and sharing)</li> <li>recruitment (e.g. notifications, interviews)</li> <li>security (e.g. remote monitoring and control of alarms, heating, lighting)</li> </ul>
<ol> <li>Be able to create mobile applications to meet business requirements</li> </ol>	<ul> <li>2.1. Planning considerations, i.e.: <ul> <li>business requirements, e.g.:</li> <li>purpose</li> <li>audience</li> <li>functions</li> <li>content</li> <li>limitations (e.g. time, budget, software, developer resources, devices, operating system, human resources, updates)</li> <li>risks (e.g. security of data)</li> <li>user needs and wants</li> <li>solutions (e.g. coding, algorithms, flowcharts of operation of app)</li> <li>software</li> <li>devices (e.g. Android, iPhone, Windows, Linux)</li> <li>user interfaces (e.g. splash screen, rotation)</li> <li>components and properties (e.g. buttons, text, images, controls)</li> <li>content (e.g. text, images, sound, RSS feeds, media, streaming, coupons, blogs)</li> <li>controls (e.g. sliders, scrolling)</li> <li>links to external data services (e.g. maps, databases)</li> <li>security</li> <li>design, e.g.:</li> <li>sketches or electronic designs of user interfaces</li> <li>annotated code</li> <li>flow diagrams</li> </ul> </li> </ul>

Learning outcomes	Teaching content	
The Learner will:	Learners must be taught:	
	<ul> <li>2.2. Create a mobile application, i.e.: <ul> <li>implement plans and designs</li> </ul> </li> <li>2.3. Test functionality, i.e.: <ul> <li>exporting (e.g. emulator, simulator, mobile device)</li> <li>iterative testing</li> <li>user testing</li> </ul> </li> </ul>	
3. Be able to improve mobile applications based on feedback	<ul> <li>3.1. Gather feedback, e.g.:</li> <li>questionnaires</li> <li>verbal discussion</li> <li>identify criteria for feedback (e.g. appropriateness, clarity, content, speeds, navigation, font choice, colour combinations, controls)</li> </ul>	
	<ul> <li>3.2. Make improvements, e.g.:</li> <li>improvements (e.g. download times, navigation, clarity, interactive response, colour schemes, font sizes)</li> </ul>	
	<ul> <li>3.3. Justify improvements, i.e.:</li> <li>justify improvements made, i.e.</li> <li>comparison to business requirements</li> <li>compared to feedback received</li> <li>reflect on mobile application created.</li> </ul>	

# **GRADING CRITERIA**

LO	Pass	Merit	Distinction
	The assessment criteria are the Pass requirements for this unit.	To achieve a Merit the evidence must show that, in addition to the Pass criteria, the candidate is able to:	To achieve a Distinction the evidence must show that, in addition to the pass and merit criteria, the candidate is able to:
<ol> <li>Know the uses of mobile applications within business environments</li> </ol>	P1: Describe the uses of mobile applications within business		
2. Be able to create mobile applications to meet business requirements	P2: Plan a mobile application to meet business requirements		
	P3: Create a mobile application for business	M1: Test functionality of the mobile application and update if required	
<ol> <li>Be able to improve mobile applications based on feedback</li> </ol>	P4: Gather feedback on the mobile application	M2: Make improvements based on feedback	D1: Justify the improvements made to the mobile application

## SYNOPTIC ASSESSMENT AND LINKS BETWEEN UNITS

When learners are taking an assessment task, or series of tasks, for this unit they will have opportunities to draw on relevant, appropriate knowledge, understanding and skills that they will have developed through other units. See section 6 of the Centre Handbook for more information on synoptic assessment.

This unit and specific LO LO1: Know the uses of mobile applications within a business	
	Unit 1: Essentials of IT
environment	LO4: Know about the Internet and related technologies
	LO5: Know about the benefits of using IT in business
	Unit 2: Essentials of cyber security
	LO1: Know about aspects of cyber security
	LO2: Understand the threats and vulnerabilities they can make
	LO3: Understand how organisations/individuals can minimise impacts from cyber
	security incidents
	Unit 6: Participating in a project
	LO2: Be able to contribute to a project
	Unit 7: Pitching the product
	LO2: Be able to pitch a product to internal stakeholders
	Unit 13: Creating websites
	LO1: Know how websites are used by organisations
	LO2: Be able to review existing websites in relation to business needs
LO2: Be able to create mobile applications to meet business	Unit 1: Essentials of IT
requirements	LO2: Know about software components
•	LO4: Know about the Internet and related technologies
	LO5: Know about the benefits of using IT in business
	Unit 2: Essentials of cyber security
	LO1: Know about aspects of cyber security
	LO2: Understand the threats and vulnerabilities they can make
	LO3: Understand how organisations/individuals can minimise impacts from cyber
	security incidents
	Unit 4: Creating programming solutions for business
	LO3: Be able to place business solutions using programming languages
	LO4: Be able to create business solutions using programming languages
	Unit 6: Participating in a project
	LO2: Be able to contribute to a project
	Unit 7: Pitching the product
	LO2: Be able to pitch a product to internal stakeholders
	Unit 8: Using emerging technologies

This unit and specific LO	Name of other unit and related LO
	LO2: Be able to explore how emerging technologies can support business needs Unit 15: Games creation
	LO3: Be able to create games from games designs
LO3: Be able to improve mobile applications based on feedback	Unit 1: Essentials of IT
	LO2: Know about software components
	LO5: Know about the benefits of using IT in business
	Unit 2: Essentials of cyber security
	LO1: Know about aspects of cyber security
	LO2: Understand the threats and vulnerabilities they can make
	LO3: Understand how organisations/individuals can minimise impacts from cyber security incidents
	Unit 4: Creating programming solutions for business
	LO3: Be able to place business solutions using programming languages
	LO4: Be able to create business solutions using programming languages
	Unit 6: Participating in a project
	LO2: Be able to contribute to a project
	Unit 7: Pitching the product
	LO2: Be able to pitch a product to internal stakeholders

### **ASSESSMENT GUIDANCE**

#### LO1 Know the uses of mobile applications within business environments

**P1:** Learners are required to describe the uses of mobile applications within business. Evidence could be presented as a report, magazine article, a presentation with speaker notes, a recording of a presentation delivered to an audience or a guide to help businesses make decisions with respect to implementing a mobile application in their business.

#### LO2 Be able to create mobile applications to meet business requirements

P2: Learners are required to plan a mobile application to meet the requirements for an identified business. Learners should be presented with a detailed business scenario providing details of the purpose, content, audience, functions required and an indication of content with a selection of suitable assets. Learners must produce plans and designs for a mobile application that meets the business requirements. It is important that learners document all aspects of planning and design. The plans should be supported by annotated designs and details of any coding used. Evidence could be presented as a report or business requirements document supported by annotated sketches or wireframe designs of the interface, flow diagrams and pseudo code.
P3: Learners are required to create a mobile application that meets the business requirements. Learners should implement the plans and designs created for P2. Evidence will be the mobile application created which could be supported with annotated code.

M1: Learners must test the functionality of the mobile application created and update it if required. Iterative testing should take place while the mobile application is being created as well as final testing once the mobile application is completed. Evidence would be a fully documented test plan of the iterative testing and final user testing. Evidence will be the updated mobile application.

#### LO3 Be able to improve mobile applications based on feedback

**P4:** Learners are required to gather feedback from stakeholders on the mobile application they have created. Evidence of feedback could be completed questionnaires or learners could demonstrate their application to an audience and obtain evidence of audience feedback.

M2: Learners should make improvements to the mobile application based on the feedback they receive. Evidence will be the mobile application once the improvements have been implemented.

**D1:** Learners should justify the improvements they have made to the mobile application. Learners should base their justifications on the business requirements and the feedback received from stakeholders. Evidence could be presented as a report, a presentation or a recording of a presentation delivered to an audience.

**Feedback to learners**: you can discuss work-in-progress towards summative assessment with learners to make sure it's being done in a planned and timely manner. It also provides an opportunity for you to check the authenticity of the work. You must intervene if you feel there's a health and safety risk.

Learners should use their own words when producing evidence of their knowledge and understanding. When learners use their own words it reduces the possibility of learners' work being identified as plagiarised. If a learner does use someone else's words and ideas in their work, they must acknowledge it, and this is done through referencing. Just quoting and referencing someone else's work will not show that the learner knows or understands it. It has to be clear in the work how the learner is using the material they have referenced to inform their thoughts, ideas or conclusions.

For more information about internal assessment, including feedback, authentication and plagiarism, see the centre handbook. Information about how to reference is in the OCR Guide to Referencing available on our website: <u>http://www.ocr.org.uk/i-want-to/skills-guides/</u>

## **MEANINGFUL EMPLOYER INVOLVEMENT - a requirement for the Technical certificate qualifications**

These qualifications have been designed to be recognised as Technical certificates in performance tables in England. It is a requirement of these qualifications for centres to secure for every learner employer involvement through delivery and/or assessment of these qualifications.

The minimum amount of employer involvement must relate to at least one or more of the elements of the mandatory content. This unit is mandatory in the Digital Software Practitioner pathway.

Eligible activities and suggestions/ideas that may help you in securing meaningful employer involvement for this unit are given in the table below.

Please refer to the Qualification Handbook for further information including a list of activities that are not considered to meet this requirement.

	eaningful employer engagement Learners undertake structured work-experience or work- placements that develop skills and knowledge relevant to the qualification.	Suggestion/ideas for centres when delivering this unit Whilst in work-placement, learners could contribute to the creation of a mobile application for the employer, e.g. helping to investigate requirements, developing graphical images for use in a mobile application, producing sections of a user guide, etc.
2.	Learners undertake project(s), exercises(s) and/or assessments/examination(s) set with input from industry practitioner(s).	The Tutor could set a project with a local employer – the employer could be the client for the mobile application and they could be asked to provide details of their mobile application business needs and sample content for the learners to work from.
3.	Learners take one or more units delivered or co-delivered by an industry practitioner(s). This could take the form of master classes or guest lectures.	A mobile application development employer could teach the learners the technical elements of this unit, for example creating components or interactive features.
4.	Industry practitioners operating as 'expert witnesses' that contribute to the assessment of a learner's work or practice, operating within a specified assessment framework. This may be a specific project(s), exercise(s) or examination(s), or all assessments for a qualification.	Witness statements could be obtained from industry practitioners who have observed the learners participating in the creation or updating of mobile applications whilst on work-placement or whilst working on relevant tasks within the centre.

You can find further information on employer involvement in the delivery of qualifications in the following documents:

- Employer involvement in the delivery and assessment of vocational qualifications
- DfE work experience guidance

### To find out more ocr.org.uk/it or call our Customer Contact Centre on 02476 851509

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