

Sample question paper and mark scheme

**DRAFT**

LEVEL 3 CAMBRIDGE ADVANCED NATIONAL (AAQ) IN

# COMPUTING: APPLICATION DEVELOPMENT

**Certificate H029**

**Extended Certificate H129**

For first teaching in 2025

**F160: Fundamentals of application development**

# Introduction

**This is Sample Assessment Material (SAM). It is an example exam paper that we publish alongside a new specification to help illustrate the intended style and structure of our question papers.**

During the lifetime of the qualification, updates to the question paper template may happen. We always recommend you look at the most recent set of past papers where available.

We also produce two further specific resources to support you with using this SAM:

- An assessment story. We explain the research we have undertaken during the development of the qualification and how consultation with teachers, students and schools have helped shape our assessment approach.
- Annotated SAMs. We take you through the key points of the assessment and highlight the different types of questions your students will experience in the exam.

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Designed and tested with teachers and students



Helping young people develop an ethical view of the world



Equality, diversity, inclusion and belonging (EDIB) are part of everything we do

## Summary of updates

Date	Version	Page number	Summary of change
July 2023	1 DRAFT	All	Creation of document

# Teacher support

**We have a range of support services to help you at every stage, from preparation to delivery.**

Our teacher support is designed to make teaching our qualifications straightforward, whether you are an experienced teacher, new to teaching, new to OCR, or not a subject specialist of the qualification you are teaching.

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- Updates on resource developments and training opportunities
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- celebrate differences and promote positive attitudes to belonging
- include perspectives that reflect the diverse cultural and lifestyle backgrounds of our society
- challenge prejudicial views and unconscious biases
- promote a safe and supportive approach to learning
- are accessible and fair, creating positive experiences for all
- provide opportunities for everyone to perform at their best
- are contemporary, relevant and equip everyone to live and thrive in a global, diverse world
- create a shared sense of identity in a modern mixed society with one humanity.

**To learn more, including our work on accessibility in our assessment materials, visit our [People and planet page](#).**

**If you prefer to use a printed copy of the SAMs, consider printing a selection of pages.  
The following are the pages which you might find useful to print:**

**Question paper pages 5-20**

**Mark scheme pages 21-31**



Oxford Cambridge and RSA

## Level 3 Cambridge Advanced National (AAQ) in Computing: Application Development (Certificate)

## Level 3 Cambridge Advanced National (AAQ) in Computing: Application Development (Extended Certificate)

H029/H129 F160: Fundamentals of application development

### Sample Assessment Material (SAM)

Time allowed: 1 hour 15 minutes



No extra materials are needed.

Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

--	--	--	--	--	--

Candidate number

--	--	--	--	--

First name(s)

---

Last name

---

Date of birth

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

### INSTRUCTIONS

- Use black ink.
- Write your answer to each question in the space provided. You can use extra paper if you need to, but you must clearly show your candidate number, the centre number and the question numbers.
- In the live exam there might be lined pages at the end of the question paper for you to use if you need extra space. Remember, you must clearly show the question numbers.
- Answer **all** the questions.

### INFORMATION

- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [ ].
- This document consists of **16** pages.

### ADVICE

- Read each question carefully before you start your answer.

Progress Walk is developing a smartphone health application to encourage adults to exercise by walking around their local town instead of driving. They will call their application ProgressWalk.

1 (a) Outline **two** characteristics of an application.

1 .....

.....

2 .....

.....

[2]

(b) Complete the table to match the correct application software category to each characteristic.

Write the name of **one** application software category in each of the **two** spaces in the table.

Application software categories:

**Embedded**

**Freeware**

**Open**

**Shareware**

Characteristics of application software categories	Application software category
Specialised for a particular device or machine that may not be considered as a computer.	
Developer retains the right to control, distribute modify and sell the software.	

[2]

2 (a) (i) Identify **one** type of operating system that the ProgressWalk application could run on.

..... [1]

(ii) Explain **one** reason why the type of operating system you have chosen in 2(a)(i) is suitable for the ProgressWalk application.

.....  
..... [2]

Players will score points when using the application. Players can exchange their points for healthy food and drink in local shops. Players will be able to compete and share their progress with their peers and monitor their weekly scores.

3 (a) (i) Identify **one** application type that the ProgressWalk application could be included in.

..... [1]

(ii) Describe the purpose of the application type you have chosen in 3(a)(i).

.....  
..... [1]

(iii) Explain **one** reason why the application type you have chosen in 3(a)(i) is appropriate for the ProgressWalk application.

.....  
.....  
.....  
..... [2]

The application will be a bespoke application.

(b) What is a **bespoke application**?

.....  
..... [1]

The ProgressWalk application will require players to set up an account linked to their email. Players will receive a confirmation email to verify the account and vouchers for signing up.

Once they are logged into their account on the application, players can set permissions and personalise their settings. The look of the application will need to follow the ProgressWalk house style but will allow players to add an avatar and change the colour of the menu.

The application will work on smart phones and allow players to input information using the camera and touchscreen keyboard. The application always requires access to the players' location so that that their movement can be tracked. Players will score points by uploading photos of themselves outside local buildings with the GPS coordinates attached.

**4 (a)** Explain **two** functional requirements for the new application.

**1** .....

.....

.....

.....

**2** .....

.....

.....

.....

[4]

When planning the ProgressWalk application, success criteria were defined.

**(b)** Explain why success criteria are important.

.....

.....

.....

.....

[2]



(c) Document analysis is one way of gathering a client’s requirements.

State **one other** method of gathering a client’s requirements.

..... [1]

When planning the project, client requirements must be considered.

5 Identify **one** suitable storage location for the data collected by the application.

..... [1]

At the start of development, a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis is completed.

6 (a) Outline **two** advantages of using SWOT analysis.

1 .....

.....

2 .....

.....

[2]

(b) Explain **one** disadvantage of using SWOT analysis.

.....

.....

.....

..... [2]

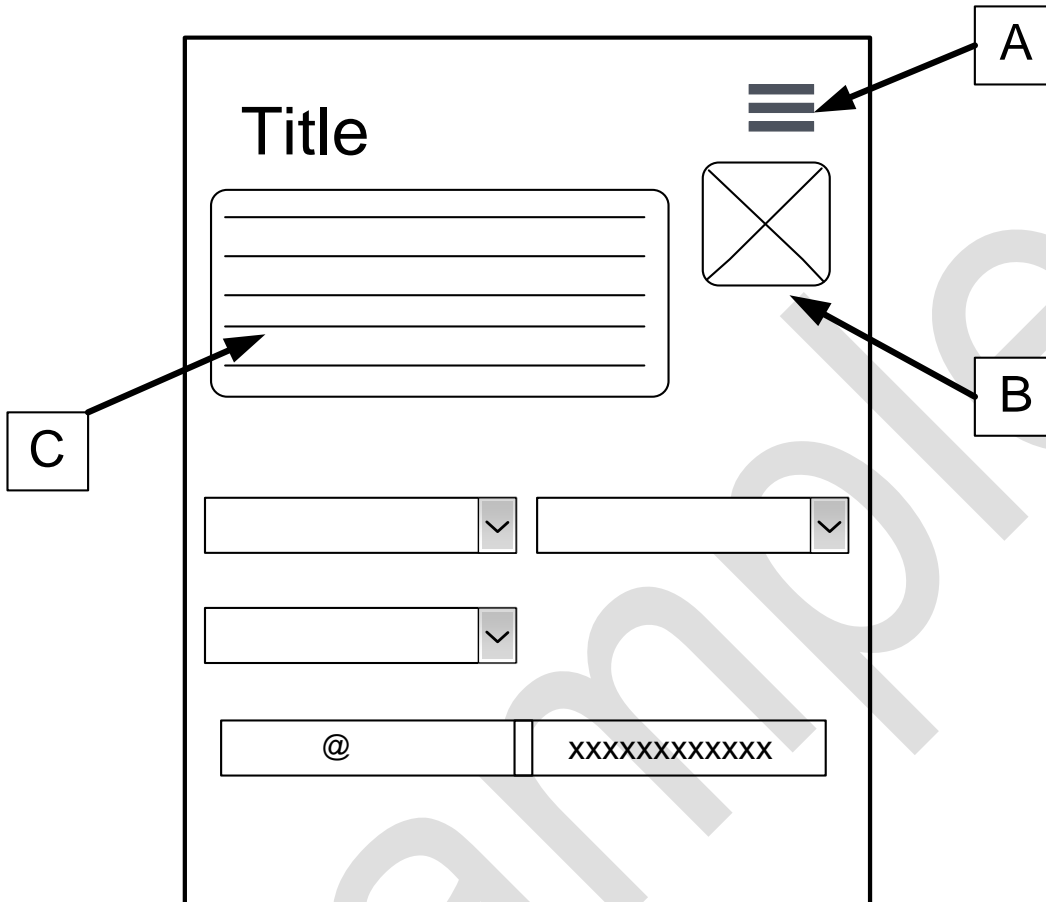


**PLEASE TURN OVER FOR QUESTION 8**

Sample

Players will score points by uploading photos of themselves outside local buildings. Players can add text to the images. The images can also be posted on players’ personal social media accounts.

8 (a) (i) This is a wireframe of the main screen human computer interface.



Complete the table using the letters (A-C) from the wireframe.

Wireframe component	Letter
Text box	
Image	
Menu	

[3]

(ii) Explain **two** ways that the effectiveness of the human computer interface in **8(a)(i)** could be improved.

1 .....

.....

.....

.....

2 .....

.....

.....

..... **[4]**

(b) Describe **two** types of interaction that can be used with the human computer interface.

1 .....

.....

.....

.....

2 .....

.....

.....

.....

**[4]**

(c) Identify **two** ways error messages can help players use ProgressWalk application’s human computer interface.

.....

.....

.....

..... [2]

9 Describe **two** characteristics of a smartphone that make it suitable for use with the ProgressWalk application.

1.....

.....

.....

.....

.....

2.....

.....

.....

..... [4]

**10** The wireframe will be used by a User Interface Designer (UID) to gather feedback from ProgressWalk.

**(a)** Explain **one** way the UID can use verbal communication skills to gather feedback about the wireframe.

.....

.....

.....

..... [2]

**(b)** Describe **one** responsibility of a UID, other than gathering feedback.

.....

.....

.....

..... [2]

Sample

**11** Discuss whether ProgressWalk should use the Rapid Throwing Prototype model for the development of the application.

In your answers you must write about:

- any **advantages** to ProgressWalk
- any **disadvantages** to ProgressWalk
- whether you would recommend that ProgressWalk use the Rapid Throwing Prototype model **and** your reasons.

**[9]**

Sample

**END OF QUESTION PAPER**



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Sample

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Sample

Sample

This is sample assessment material for our specification. It is to help show how the live assessment materials will look. During the lifetime of the qualification you might see small adjustments to the assessment materials. This is part of continuous improvement, designed to help you and your students. We recommend you look at the most recent set of past papers where available.



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## **OCR Level 3 Cambridge Advanced National (AAQ) in Computing: Application Development (Extended Certificate)**

## **OCR Level 3 Cambridge Advanced National (AAQ) in Computing: Application Development (Certificate)**

### **F160 – Fundamentals of application development**

**Sample assessment material** 

**Mark scheme** 

This document has **13** pages.

# MARKING INSTRUCTIONS

## Crossed-out answers

If a student has crossed out an answer and written a clear alternative, do **not** mark the crossed-out answer.

If a student has crossed out an answer and **not** written a clear alternative, give the student the benefit of the doubt and mark the crossed-out answer if it's readable.

## Multiple choice question answers

When a multiple choice question has only one correct answer and a student has written two or more answers (even if one of these answers is correct), you should **not** award a mark.

## When a student writes more than one answer

### 1. Questions that ask for a set number (including 1) of short answers or points

If a question asks for a set number of short answers or points (e.g. **two** reasons for something), mark only the **first set number** of answers/points.

**First** mark the answers/points against any printed numbers on the answer lines, marking the **first** answer/point written against each printed number. **Then**, if students have not followed the printed numbers, mark the answers/points from left to right on each line and **then** line by line until the set number of answers/points have been marked. Do **not** mark the remaining answers/points.

### 2. Questions that ask for a single developed answer

If a student has written two or more answers to a question that only requires a single (developed) answer, and has **not** crossed out unintended answers, mark only the first answer.

### 3. Contradictory answers in points-based questions

When a student has written contradictory answers, do **not** award any marks, even if one of the answers is correct.

## Levels of Response marking

**1. To determine the level** start at the highest level and work down until you reach the level that best describes the answer

**2. To determine the mark within the level**, consider the following:

Quality of the answer	Award mark
Consistently meets the criteria for this level	At the top of the level (6 and 9 mark questions)
Meets the criteria but with some inconsistency	At the middle of the level (9 mark questions)
On the borderline of this level and the one below	At the bottom of the level (6 and 9 mark questions)

## ANNOTATIONS

Annotation	Meaning

## MARK SCHEME

<b>1a</b>	
<b>Max mark</b>	2
<b>Answer</b>	Any <b>two</b> marks from: <ul style="list-style-type: none"> <li>• Computer software designed to meet the specific requirements of a user. (1)</li> <li>• A computer program designed to perform specific tasks. (1)</li> <li>• Computer software designed to run on a specific operating system. (1)</li> </ul> <b>Credit any other appropriate response</b>
<b>Guidance</b>	<b>One</b> mark for <b>each</b> correct answer. Max <b>two</b> marks.

<b>1b</b>							
<b>Max mark</b>	2						
<b>Answer</b>	<p><b>Two</b> marks for:</p> <table border="1"> <thead> <tr> <th><b>Characteristics of application software categories</b></th> <th><b>Application software category</b></th> </tr> </thead> <tbody> <tr> <td>Specialised for a particular device or machine that may not be considered as a computer.</td> <td> <ul style="list-style-type: none"> <li>• Embedded (1)</li> </ul> </td> </tr> <tr> <td>Developer retains the right to control, distribute modify and sell the software.</td> <td> <ul style="list-style-type: none"> <li>• Freeware (1)</li> </ul> </td> </tr> </tbody> </table>	<b>Characteristics of application software categories</b>	<b>Application software category</b>	Specialised for a particular device or machine that may not be considered as a computer.	<ul style="list-style-type: none"> <li>• Embedded (1)</li> </ul>	Developer retains the right to control, distribute modify and sell the software.	<ul style="list-style-type: none"> <li>• Freeware (1)</li> </ul>
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<b>Guidance</b>	<b>One</b> mark for <b>each</b> correct answer. Max <b>two</b> marks.						

<b>2 a (i)</b>	
<b>Max mark</b>	1
<b>Answer</b>	Any <b>one</b> from: <ul style="list-style-type: none"> <li>• Proprietary operating system (1)</li> <li>• Open operating system (1)</li> </ul>
<b>Guidance</b>	



<b>2 a (ii)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for explaining a reason.  <b>One</b> mark for identifying a reason.  <b>One</b> mark for saying how the reason affects the suitability, e.g:</p> <ul style="list-style-type: none"> <li>• The ProgressWalk application will be used on a smartphone which run using proprietary software such as android (1) so the application needs to be compatible with these forms of operating system. (1)</li> <li>• Some smartphones are not tied to a specific system (1) so it needs to be designed for an open operating system. (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining why the operating system is appropriate.  Maximum <b>one</b> reason.  Explanation must match the answer given in <b>2(a)(i)</b>.</p>

<b>3 (a) (i)</b>	
<b>Max mark</b>	1
<b>Answer</b>	<p>Any <b>one</b> from:</p> <ul style="list-style-type: none"> <li>• Lifestyle (1)</li> <li>• Education (1)</li> <li>• Games (1)</li> </ul>
<b>Guidance</b>	

<b>3 (a) (ii)</b>	
<b>Max mark</b>	1
<b>Answer</b>	<p><b>One</b> mark for the describing the purpose of the application type  e.g.:</p> <ul style="list-style-type: none"> <li>• Lifestyle <ul style="list-style-type: none"> <li>○ To manage a person's lifestyle (1)</li> <li>○ To streamline everyday tasks (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> <li>• Education <ul style="list-style-type: none"> <li>○ To teach users about topics/issues (1)</li> <li>○ To inform users about specific topics (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> <li>• Games <ul style="list-style-type: none"> <li>○ To entertain users (1)</li> <li>○ To develop mental agility techniques (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> </ul>
<b>Guidance</b>	<p>Up to <b>one</b> mark <b>max</b> for describing the purpose of the application type.  Description must match the answer given in <b>3(a)(i)</b>.</p>

<b>3 (a) (iii)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for explaining a reason.  <b>One</b> mark for identifying a reason.  <b>One</b> mark for saying how the reason affects the appropriateness, e.g.:</p> <ul style="list-style-type: none"> <li>• Lifestyle <ul style="list-style-type: none"> <li>○ To change the players habits (1) so that they lead a healthier lifestyle (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> <li>• Education <ul style="list-style-type: none"> <li>○ To teach players to be healthier (1) by getting them to be more active (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> <li>• Games <ul style="list-style-type: none"> <li>○ To motivate players to be healthier (1) by allowing them to win rewards (1)</li> <li>○ Credit any other appropriate response</li> </ul> </li> </ul>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining why the application type is appropriate.  Maximum <b>one</b> reason.  Explanation must match the answer given in <b>3(a)(i)</b>.</p>

<b>3 (b)</b>	
<b>Max mark</b>	1
<b>Answer</b>	<p><b>One</b> mark for an explanation of what bespoke application means e.g.:</p> <ul style="list-style-type: none"> <li>• A computer program designed to meet the specific needs of a business. (1)</li> <li>• A computer program that is tailored to the needs and specifications of an individual user/organisation (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	Up to <b>one</b> mark <b>max</b> for explaining what bespoke application means.

<b>4 (a)</b>	
<b>Max mark</b>	4
<b>Answer</b>	<p>Up to <b>two</b> marks for each functional requirement  <b>One</b> mark for each requirement identified  <b>One</b> mark for saying how it meets ProgressWalks needs e.g.:</p> <ul style="list-style-type: none"> <li>• An account needs to be created (1) allowing for reward vouchers to be distributed. (1)</li> <li>• The facility to upload photographs including GPS data (1) to verify the players movements/location. (1)</li> <li>• The application must be able to track players movements (1) so that the players walking can be monitored in the app (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining <b>each</b> functional requirement. Max <b>four</b> marks.  Maximum <b>two</b> requirements.</p>

<b>4 (b)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for explaining why success criteria are important e.g.:</p> <ul style="list-style-type: none"> <li>To provide clear expectations of what needs to be achieved (1) ensuring everybody involved within the project is on task. (1)</li> <li>So that progress to the desired outcome can be measured (1) allowing those involved to track the progress and make any adjustments if needed. (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	Up to <b>two</b> marks <b>max</b> for explaining why success criteria are important.

<b>4 (c)</b>	
<b>Max mark</b>	1
<b>Answer</b>	<p>Any <b>one</b> from:</p> <ul style="list-style-type: none"> <li>Interview (1)</li> <li>Meeting (1)</li> <li>Observation</li> <li>Questionnaire (1)</li> <li>Shadowing (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	

<b>5</b>	
<b>Max mark</b>	1
<b>Answer</b>	<p>Any <b>one</b> from:</p> <ul style="list-style-type: none"> <li>ProgressWalks' own cloud servers (1)</li> <li>Players' phones hosting servers (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	

<b>6 (a)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Any <b>two</b> from:</p> <ul style="list-style-type: none"> <li>Allows the weaknesses of an organisation/application to be described clearly (1)</li> <li>Simplifies the analysis of a situation by breaking it down into four key areas (1)</li> <li>Allows quantitative and qualitative data to be used to assess the situation (1)</li> <li>Allows the threats to a project such as funding issues to be identified at the start of the project (1)</li> </ul> <p><b>Credit any other appropriate response.</b></p>
<b>Guidance</b>	<b>One</b> mark for <b>each</b> correct answer. Max <b>two</b> marks.

<b>6 (b)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for explaining a disadvantage. <b>One</b> mark for identifying a disadvantage. <b>One</b> mark for saying how the disadvantage affects a development, e.g.:</p> <ul style="list-style-type: none"><li>• Can oversimplify an issue. (1) This can lead to key aspects being missed (1)</li><li>• Only having the four parts can lead to disorganisation. (1) This is because some information/data does not fit into these areas easily (1)</li><li>• Credit any other appropriate response</li></ul>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining the disadvantage identified. Max <b>one</b> disadvantage.</p>

<b>7</b>	
<b>Max mark</b>	6
<b>Answer</b>	<p><b>Level 3 (high) 5-6 marks</b></p> <p>A <b>thorough</b> analysis, which includes:</p> <ul style="list-style-type: none"> <li>• identification of a <b>range</b> of impacts</li> <li>• <b>detailed</b> knowledge and understanding in the context of the question</li> <li>• <b>clear</b> explanation</li> <li>• <b>consistent</b> use of appropriate subject terminology.</li> </ul> <p><b>Level 2 (mid) 3-4 marks</b></p> <p>An <b>adequate</b> analysis, which includes:</p> <ul style="list-style-type: none"> <li>• identification of <b>some</b> impacts</li> <li>• <b>sound</b> knowledge and understanding in the context of the question</li> <li>• <b>adequate</b> explanation</li> <li>• <b>some</b> use of appropriate subject terminology.</li> </ul> <p><b>Level 1 (low) 1-2 marks</b></p> <p>A <b>basic</b> analysis, which includes:</p> <ul style="list-style-type: none"> <li>• identification of <b>at least one</b> impact</li> <li>• <b>limited</b> knowledge and understanding in the context of the question</li> <li>• <b>basic</b> explanation</li> <li>• use of appropriate subject terminology is <b>limited</b>.</li> </ul> <p><b>0 marks</b></p> <p>Answer is <b>not</b> worthy of credit.</p>
<b>Guidance</b>	<p>Indicative content.</p> <p>Answers can include some of the following:</p> <p>Examples of impacts legislation:</p> <ul style="list-style-type: none"> <li>• Personal data being gathered when signing up</li> <li>• Player location being monitored</li> <li>• DPA needs to be adhered too</li> <li>• Players must be able to actively opt in and opt out of tracking/data collection</li> <li>• Secure storage of collected data required</li> <li>• Permissions for storage/use on smartphones to access images/contacts must be actively given</li> <li>• Ownership/copyright of uploaded images</li> <li>• Personal data in transit must be protected</li> <li>• ProgressWalk only allows access to personal data by designated individuals</li> </ul> <p><b>Credit other relevant points and examples.</b></p>

<b>8 (a) (i)</b>		
<b>Max mark</b>	3	
<b>Answer</b>	<b>Wireframe component</b>	<b>Letter</b>
	Text box	<b>C</b>
	Menu/hamburger menu	<b>A</b>
	Image	<b>B</b>
<b>Guidance</b>	<p>1 mark for 1 correct answer.</p> <p>2 marks for 2 correct answers.</p> <p>3 marks for 3 correct answers.</p> <p>Correct answers only.</p>	

<b>8 (a) (ii)</b>		
<b>Max mark</b>	4	
<b>Answer</b>	<p>Up to <b>two</b> marks for each way</p> <p><b>One</b> mark for each way identified</p> <p><b>One</b> mark for saying how it improves the effectiveness of the HCI e.g.:</p> <ul style="list-style-type: none"> <li>• Prioritise the needs and preferences of the users by placing the login requirements at the top (1) so that users can log in straight away without scrolling down the screen. (1)</li> <li>• By using whitespace effectively so that the elements are spread out (1) to reduce the chances of the user making incorrect selections between the menu and image. (1)</li> <li>• Removing the use of the drop-down menus from the HCI (1) as these are hard to use on touch screen such as a smartphone. (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>	
	<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining <b>each</b> way. Max <b>four</b> marks.</p> <p>Maximum <b>two</b> way.</p>

<b>8 (b)</b>	
<b>Max mark</b>	4
<b>Answer</b>	<p>Up to <b>two</b> marks for each interaction on the human computer interface  <b>One</b> mark for each interaction identified  <b>One</b> mark for saying how it is used in the ProgressWalk application e.g.:</p> <ul style="list-style-type: none"> <li>• Players will need to touch the smartphone screen (1) so that they can type their registration details using the onscreen keyboard (1)</li> <li>• Players will need to be swipe on the screen (1) so that they can find the correct images to upload to the application (1)</li> <li>• Players can use the audio facility with the microphone (1) to ask for directions when moving. (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for describing <b>each</b> type of interaction. Max <b>four</b> marks.  Max <b>two</b> types of interactions.</p>

<b>8 (c)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Any <b>two</b> from:</p> <ul style="list-style-type: none"> <li>• Can inform the player when an image has not uploaded (1)</li> <li>• When the player is signing up the message will explain that their email address has been input incorrectly (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<b>One</b> mark for <b>each</b> correct answer. Max <b>two</b> marks.

<b>9</b>	
<b>Max mark</b>	4
<b>Answer</b>	<p>Up to <b>two</b> marks for each characteristic on a smartphone  <b>One</b> mark for each characteristic  <b>One</b> mark for saying how it is suitable for the application e.g.:</p> <ul style="list-style-type: none"> <li>• Smartphones have camera functions that can be used to take photographs (1) which are uploaded to show the players new location(1)</li> <li>• Smartphones use GPS to monitor position so that the location of the image can be verified (1) because photographs include meta data which include the GPS position (1)</li> <li>• Smartphones have internal storage facility (1) that allows the application to be downloaded to and installed on the phone (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for describing <b>each</b> characteristic of a smartphone. Max <b>four</b> marks.  Max <b>two</b> characteristics.</p>

<b>10 (a)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for how verbal communication skills can be used with the wireframe  <b>One</b> mark for identifying the verbal communication skill  <b>One</b> mark for saying how it used gain feedback e.g.:</p> <ul style="list-style-type: none"> <li>• The User Interface Designer (UID) can provide more detail about the wireframe so that the people being shown it understand more about what it is doing (1). They could explain more about how the interaction of the human computer interface would work as the wireframe would not show enough detail (1)</li> <li>• Extra questions could be used asked by the UID when showing the wireframe to people (1) This would provide more detail about the what the view thought of the wireframe design such providing reasoning for their views on the layout of the screen (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for explaining <b>one</b> way the UID could use verbal communication. Max <b>two</b> marks.</p> <p>Max <b>one</b> way.</p>

<b>10 (b)</b>	
<b>Max mark</b>	2
<b>Answer</b>	<p>Up to <b>two</b> marks for describing another job responsibility of a User Experience Designer e.g.:</p> <ul style="list-style-type: none"> <li>• Review an existing application (1) and evaluate its current user experience (1)</li> <li>• Design the interaction flows through an application (1) so that the user has a smooth/logical experience (1)</li> <li>• Develop personas that can be used (1) when considering how a new application will be used/work (1)</li> </ul> <p><b>Credit any other appropriate response</b></p>
<b>Guidance</b>	<p>Up to <b>two</b> marks <b>max</b> for describing <b>one</b> responsibility. Max <b>two</b> marks.</p> <p>Max <b>one</b> responsibility.</p>



11	
Max mark	9
Answer	<p><b>Level 3 (high) 7-9 marks</b></p> <p>A <b>thorough</b> discussion which shows <b>detailed</b> evaluation, which includes:</p> <ul style="list-style-type: none"> <li>• a <b>range</b> of points from <b>both</b> sides of the argument</li> <li>• a <b>detailed</b> analysis in the context of the question</li> <li>• a <b>clear</b> conclusion(s) with <b>detailed</b> reasons/justifications</li> <li>• <b>consistent</b> use of appropriate subject terminology.</li> </ul> <p><b>Level 2 (mid) 4-6 marks</b></p> <p>An <b>adequate</b> discussion which shows <b>sound</b> evaluation, which includes:</p> <ul style="list-style-type: none"> <li>• <b>some</b> points from <b>both</b> sides of the argument</li> <li>• <b>some</b> analysis in the context of the question</li> <li>• an <b>adequate</b> conclusion(s) with <b>relevant</b> reasons/justifications</li> <li>• <b>some</b> use of appropriate subject terminology.</li> </ul> <p><b>Level 1 (low) 1-3 marks</b></p> <p>A <b>basic</b> discussion which shows <b>limited</b> evaluation, which includes:</p> <ul style="list-style-type: none"> <li>• a <b>few</b> points from the argument</li> <li>• a <b>limited</b> analysis in the context of the question</li> <li>• a <b>brief</b> conclusion(s) with <b>limited</b> reasons/justifications</li> <li>• use of appropriate subject terminology is <b>limited</b>.</li> </ul> <p><b>0 marks</b></p> <p>Answer is <b>not</b> worthy of credit.</p>
Guidance	<p>Indicative content.</p> <p>Answers can include some of the following:</p> <p>Advantages of using Rapid Throwing Prototype model e.g:</p> <ul style="list-style-type: none"> <li>• Increased speed of version development</li> <li>• Evolve ideas quicker</li> <li>• Lower labour costs/staffing</li> <li>• Faster decision making</li> <li>• Can show client versions easier/quicker</li> <li>• Reduced documentation</li> </ul> <p>Disadvantages of using Rapid Throwing Prototype model e.g.:</p> <ul style="list-style-type: none"> <li>• Can develop too many versions that are not needed</li> <li>• Increased costs by developing many versions</li> <li>• Confusion on feedback when many versions are created quickly</li> <li>• Lack of analysis at each stage of prototype development</li> </ul> <p><b>Credit other relevant conclusions, points and examples.</b></p>

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