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## Sample assessment task

## Applied Information Technology – ATAR Year 11

Task 5 - Unit 1 - Project: Create a digital product or digital solution for an event

### Assessment type: Project

### Conditions

Time for the task: six weeks

You will be provided a timeline at the commencement of this assessment task indicating the class periods allocated to regular class work and skill exercises, and this assessment task

### Task weighting

10% of the school mark for this pair of units

'The Battle of the Bands' is an event which will be conducted at your school. You have been requested to develop a digital product or digital solution to advertise the event at your school. Your digital product or digital solution could take the form of a series of digital still posters, a Prezi or PowerPoint presentation, a video or an app.

Your digital product or digital solution will need to:

- provide all the essential information about the event, including: what it is; where the event will be held; date and time; and who will be performing at the event
- reflect a theme (e.g. 70s disco, rock/indie, cartoon animation, flashbacks, wanted poster)
- use a range of digital applications such as graphic production and audio editing
- capture the user's attention, cater to the target audience (Year 10, 11 and 12 students) and assist in increasing attendance at the event.

Development needs to occur in four phases.

## Phase one

- Brainstorm your ideas for the digital product or digital solution, including:
  - type of digital product or digital solution you could actually produce
  - theme you could use for your digital product or solution

	<ul> <li>goals your digital product or digital solution needs to achieve.</li> </ul>	(3 marks)
•	Develop a time plan for the development of the digital product or digital solution	
	(i.e. proposed times for completion of the phases of the task.	(3 marks)
•	Describe the purpose of the digital product or digital solution.	(2 marks)
•	Taking into consideration the target audience, describe five (5) 'design criteria' that	
	you will use to develop your digital product or digital solution.	(5 marks)
•	Describe three (3) characteristics of the target audience.	(3 marks)
•	Describe the requirements associated with this digital product or digital solution	
	(e.g. school policy, religious or ethnic considerations).	(3 marks)
•	Describe the technology(ies) that you plan to use in the development of the digital pro	duct or
	digital solution. Collect any images and audio that you intend to use, ensuring that you	document
	all sites visited and images collected.	(5 marks)

- Document Phase one:
  - the purpose of the digital product or digital solution
  - the five (5) 'design criteria' of the digital product or digital solution
  - the characteristics of the target audience
  - the requirements of the target audience
  - the technology(ies), including the medium that you will use for your product
  - reference of all internet sites visited, images and audio collected.
- Track the development of your the digital product or digital solution in comparison to your predicted time plan. Include notes on the software, hardware and processes used during the development. (3 marks)

#### Subtotal = 27 marks

#### Phase two

- Develop a plan for your digital product or digital solution that will satisfy the requirements identified in your design criteria. Ensure that you:
  - use an appropriate design plan (this can include storyboards, thumbnails, wireframes/sketches and images) to represent your idea to demonstrate your ideas for digital product or digital solution
     (6 marks)
  - include notes, drafts and annotations to document a progression of ideas. (4 marks)
- Develop a set of five (5) evaluation questions that will enable a peer evaluation of your digital product or digital solution by two members of your class.
   (5 marks)

Subtotal = 15 marks

#### Phase three

- Use appropriate software application tools, media (including audio and images), skills and techniques to develop your digital product or digital solution. Ensure that:
  - the described design criteria are correctly applied in the digital product or digital solution

(5 marks)

- there is an effective use of design principles and the use of the necessary elements of design to create them (3 marks)
- there is consistency of design throughout (e.g. colours, layout, fonts)
   (3 marks)
- there is demonstrated originality/creativity in the design (1 marks)
- there is demonstrated skills in the use of application/s (5 marks)
- there is an appropriate use of audio and images throughout the digital product or digital solution (6 marks)

#### Subtotal = 23 marks

#### Phase four

Conduct a peer evaluation with two (2) members of your class of your the digital product or digital solution, using your evaluation questions developed in Phase two. Your evaluation should identify elements of your digital product or digital solution that are successful or require improvement. (3 marks)

Subtotal = 3 marks

Total = 67 marks

# Marking key for sample assessment task 5 - Unit 1

Description	Marks
Phase one	
Brainstorm	
<ul> <li>identifies an appropriate digital product or digital solution</li> </ul>	1
<ul> <li>identifies of an appropriate theme(s)</li> </ul>	1
identifies appropriate goals	1
Time plan	1 0
<ul> <li>produces a time plan, including proposed time for each phase</li> </ul>	1–3
Purpose	
<ul> <li>provides an appropriate description of the purpose</li> </ul>	2
provides limited description of the purpose	1
Subtotal	2
Design criteria	1-5
describes the five identified design criteria	
• describes the live identified design criteria	(1 mark per
	design criterion)
Characteristics of the target audience	
<ul> <li>provides a detailed description of target audience</li> </ul>	3
<ul> <li>provides a description of target audience</li> </ul>	2
<ul> <li>provides a limited explanation of target audience</li> </ul>	1
Subtotal	3
Requirements of the target audience	1–3
<ul> <li>provides an appropriate discussion of three possible target audience characteristics</li> </ul>	(1 mark per
	requirement)
	requirement)
Technology(ies)	
<ul> <li>provides a description of the technology(ies) (hardware, software, images and</li> </ul>	1–5
audio) to be used in the development of the digital product or digital solution	
Record of the development	2
keeps detailed and complete notes each day (including screenshots, where	3
appropriate)	2
<ul> <li>keeps detailed and complete notes each day</li> </ul>	2
<ul> <li>keeps detailed and complete notes some days</li> </ul>	1
Subtotal	3
Phase one total	23
Phase two	
Development of design plan	
<ul> <li>provides evidence of the use of an appropriate design plan</li> </ul>	1–6
Annotations of design plan	
<ul> <li>provides a design idea with detailed and appropriate annotations</li> </ul>	4
<ul> <li>provides a design idea with some detailed and appropriate annotations</li> </ul>	3
<ul> <li>provides a design idea with limited but appropriate annotations</li> </ul>	2
<ul> <li>provides a design idea with inappropriate or no annotations</li> </ul>	1
Subtotal	4
Peer evaluation questions	1–5
• provides <b>five (5)</b> evaluation questions that would enable the evaluation by peers of	
the digital product or digital solution	(1 mark per
	question)
Phase two total	15

Design criteria statements met	1–5
<ul> <li>correctly applies design criteria to the digital product/solution</li> </ul>	(1 mark per
	design criteria)
Application of the principles of design and elements of design	
• effective use of the principles of design and the use of the necessary elements of	1–3
design to create them	
Development of design	
<ul> <li>design is consistent throughout (e.g. colours, layout, fonts)</li> </ul>	1–3
design demonstrates originality/creativity	1
Subtotal	4
Application knowledge	
<ul> <li>high level of skill demonstrated in the selected application/s</li> </ul>	5
<ul> <li>medium level of skill demonstrated in the selected application/s</li> </ul>	4
<ul> <li>medium level of skill demonstrated in a limited range of application/s</li> </ul>	3
limited level of skill demonstrated in a limited range of application/s	2
basic tools utilised in the selected application/s	1
Subtotal	5
Inclusion of media	
Audio	
• use of modified audio file in digital product that is appropriate to the project brief	2
use of unmodified audio piece	1
Images	
• all images are appropriate to project brief and, if required, extensively modified	3
<ul> <li>all images are appropriate to project brief and modified</li> </ul>	2
images have limited modification	1
Subtotal	5
Phase three total	22
Phase four	
Peer evaluation	
• provides detailed evidence of a peer evaluation using the evaluation questions, with	3
conclusions	
<ul> <li>provides evidence of a peer evaluation using evaluation questions</li> </ul>	2
<ul> <li>provides minimal evidence of a peer evaluation using the evaluation questions</li> </ul>	1
	3

Phase one total	27
Phase two total	15
Phase three total	22
Phase four total	3
Total	67

## Sample assessment task

## Applied Information Technology – ATAR Year 11

Task 1 – Unit 1 – Topic test: Hardware

## Assessment type: Short answer

## Conditions

Time for the task: 1 class period In class, under test conditions

#### Task weighting

3% of the school mark for this pair of units

1.	List the <b>five (5)</b> hardware components of a computer system.	(5 marks)
	Component 1:	
	Component 2:	
	Component 3:	
	Component 4:	
	Component 5:	
2.	State the purpose of the central processing unit.	(1 mark)
3.	Describe the purpose of each of the following components of the central processing	unit.
	Control unit:	(3 marks)

Arithmetic logic unit:	
Register:	
State the purpose of secondary memory and provide three (3) examples.	(4 mark
Purpose:	
Example 1:	
Example 1	
Example 2:	
Example 3:	
List <b>four (4)</b> peripheral devices and describe the function of <b>one (1)</b> of these devices.	(6 mark
Device 1:	
Device 2:	
Device 3:	
Device 4:	
Description of the function of the selected peripheral device:	

6.	List the <b>three (3)</b> main types of computer systems.	(3 marks)
	Туре 1:	
	Туре 2:	
	Туре 3:	
7.	List and describe the <b>four (4)</b> functions of an operating system.	(12 marks)
	Function 1:	
	Function 2:	
	Function 3:	
	Function 4:	
8.	Describe the key difference between an operating system software and applicat	ion software. (4 marks)

7

A business decides to archive its data onto a flash drive each day and store the flash drive in a manager's office. Explain, with an example, why the use of the flash drive is inappropriate.
 (3 marks)

a) Based on the information below, which computer system would you recommend for an online gamer? Describe **one (1)** reason for your choice. (3 marks)

Computer 1	Computer 2
Quad Core i5-2400 CPU (3.1Ghz)	Quad Core i5-2410M CPU (2.3Ghz)
Windows 7 Home Edition	Windows 7 Professional Edition
8GB DDR3 RAM	4GB DDR2 RAM
2MB cache	1MB cache
500GB SATA Hard Drive	500GB SATA Hard Drive
1GB GeForce GTX 460 Graphics Card	Integrated graphics card

Recommendation: \_\_\_\_\_

Reason:

b) A user is unsure whether to purchase a laptop or a desktop. Describe **two (2)** advantages of using a laptop computer. (6 marks)

Advantage 1: \_\_\_\_\_\_

Advantage 2: \_\_\_\_\_

Total = 50 marks

## Marking key for sample assessment task 1 - Unit 1

1. List the **five (5)** hardware components of a computer system.

Description	Marks	
Correctly lists the hardware components of a computer system	1–5	
	(1 mark for each	
	component)	
Answer:		
• Input		
Output		
Central Processing Unit		
Main memory		
Secondary Storage		

2. State the purpose of the central processing unit.

Description	Marks	
States the purpose of the central processing unit 1		
Answer could include, but is not limited to:		
performs the arithmetic and logical instructions		
<ul> <li>coordinates the input/output operations of a computer</li> </ul>		
the instructions of a computer or computer program		

3. Briefly describe the purpose of each of the following components of the central processing unit. Control unit

Arithmetic logic unit

Register

Description	Marks	
Briefly describes the purpose of each of the components of the central processing 1–3		
unit	(1 mark each)	
Answer could include, but is not limited to:		
Control unit: directs or coordinates the operation of the processor		
• Arithmetic logic unit: performs the arithmetic and logic operation for the computer/central		
processing unit		
• Register: random access memory used by the processor for fast access to instructions or calculations		

4. State the purpose of secondary memory and provide **three (3)** examples.

Description	Marks	
States the purpose of secondary memory	1	
Lists correct examples	1–3	
	(1 mark each)	
Total	4	
Answer:		
Purpose of secondary memory is to store non-volatile data at a lower cost than main memory and enables the access of stored data at a later time.		
Examples could include, but are not limited to:		
flash memory		
• optical disk ( CD/DVD)		
magnetic disk		
• tapes		

5. List **four (4)** peripheral devices and describe the function of **one (1)** of these devices.

	Description			Marks
Correctly lists peripheral devices		1–4		
		(1 mark each)		
			Subtotal	4
	vides a description of the function of one of these			2
Pro	vides a limited description of the function of one	of th	ese devices	1
			Subtotal	2
			Total	6
An	swers could include, but are not limited to:	1		
•	scanner	•	barcode reader	
•	printer	•	LCD projector	
•	digital camera	•	external hard drive	
•	webcam	•	flash drive	
•	joystick	•	disk drive	
٠	keyboard	٠	smartphone	
٠	mouse	•	CD-ROM drive	
•	monitor	٠	DVD-ROM drive	
•	graphics tablet	٠	modem	
•	touch screen	•	speakers	
An	swer could include, but is not limited to:			
٠	scanner: scans a hard copy of a document into a	digi	tal copy	
٠	printer: prints a document			
٠	digital camera: takes video or pictures			
•	webcam: takes still images to send to a live vide	0		
•	joystick: controls the movement of on-screen ob	ject	5	

6. List the **three (3)** main types of computer systems.

Description	Marks	
Correctly lists the three (3) types of computer systems	1–3	
	(1 mark each)	
Answer:		
desktop systems		
mobile devices		
• servers		

7. List and describe the **four (4)** functions of an operating system.

Description	Marks
	3
Correctly lists and provides a description of each function of an operating system	(3 marks for each
	function)
Correctly lists and provides a limited description of each function of an operating system	2
	(2 marks for each
	function)
	1
Correctly lists the functions of an operating system	(1 mark for each
	function)
Total	12
Answer:	•

Provision of user interface: provides the interface between the user and the software and hardware. The interface enables user to provide commands that instruct the software and hardware to complete required tasks. Command line interface and Graphical User Interface are two types of user interfaces.
 Management of system resources: provides the routines and tasks that manage the resources used by the hardware and software, including input and output operations, memory management and scheduling of tasks, programs and file management.

**Management of security and access rights:** provides security to system resources and enables access permission rights to resources, files and folders.

**Running system and user applications:** provides the scheduling, resources and routines that allow the execution/running of system and user applications.

8. Describe the key difference between an operating system software and application software.

Description	Marks	
Provides description of a key difference between an operating system software and application software	3	
Provides a limited description of a key difference between an operating system software and application software	2	
Lists a key difference	1	
Answer could include, but is not limited to:		
Operating system software manages the computer system, whereas application software enables the user to perform tasks, such as word processing, video capture, database development.		

9. A business decides to archive its data onto a flash drive each day and store the flash drive in a manager's office. Explain why the use of the flash drive is inappropriate.

Description	Marks
Explains why the flash drive is inappropriate for archiving data, using appropriate examples	3
Explains why the flash drive is inappropriate for archiving data	2
Provides one (1) reason why the flash drive is inappropriate	1
Total	3
Answer could include, but is not limited to:	
<ul> <li>data could become corrupt on the flash drive and no other storage has been completed</li> <li>flash drive could become lost</li> </ul>	
flash drive could be stolen	
flash drive could be easily damaged	
flash drive has limited cycle life	
Imited storage capacity	
security of data can be compromised	

10. a) Based on the information below, which computer system would you recommend for an online gamer? Describe **one (1)** reason for your choice.

Computer 1	Computer 2
Quad Core i5-2400 CPU (3.1Ghz)	Quad Core i5-2410M CPU (2.3Ghz)
Windows 7 Home Edition	Windows 7 Professional Edition
8GB DDR3 RAM	4GB DDR2 RAM
2MB cache	1MB cache
500GB SATA Hard Drive	500GB SATA Hard Drive
1GB GeForce GTX 460 Graphics Card	Integrated graphics card

Description	Marks	
Correctly states system and provides one (1) valid reason with a suitable description	3	
Correctly states system and provides one (1) valid reason	2	
Correctly states system	1	
Answer could include, but is not limited to:		
Recommendation: Computer 1		
Reasons:		
<ul> <li>more DDR3 RAM – 8GB</li> </ul>		
• more cache – 2MB		
• more powerful 1GB GeForce GTX 460 Graphics Card.		

b) A user is unsure whether to purchase a laptop or a desktop. Describe **two (2)** advantages of using a laptop computer.

Description	Marks
Provides a description of two advantages of using a laptop computer	5–6
Provides a limited description of two advantages of using a laptop computer	3–4
Lists two advantages of using a laptop computer	1–2
Total	6
Answers could include, but are not limited to:	
mobility	
• size	
built-in wireless	
you can take a laptop anywhere with you	
can run on batteries	
laptops also take up less space	
can look neater than a desktop	
laptops have an inbuilt mouse/touch pad	
laptops can be very small (Netbook) or large in screen size	

## Sample assessment task

## Applied Information Technology – ATAR Year 11

Task 3 – Unit 1 – Extended answer: Design concepts

## Assessment type: Extended answer

### Conditions

Time for the task: 1 class period

### Note for teacher:

This task has been designed to allow a movie poster to be selected and included in the task by the teacher

### Task weighting

4% of the school mark for this pair of units

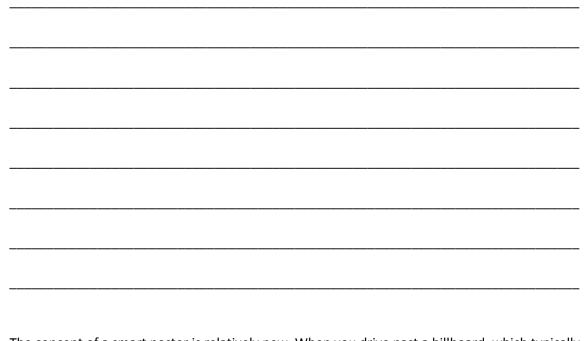
Posters are used to advertise movies. They are often located in areas of high pedestrian traffic, particularly in cinema foyers. Movies are also advertised through a variety of media, including radio, social media, the internet and television.

Teacher to insert current movie poster

Answer the following questions based on the movie poster provided on the previous page.

1. List **four (4)** characteristics of the target audience of the movie poster. (4 marks) Characteristic 1:\_\_\_\_\_ Characteristic 2: Characteristic 3:\_\_\_\_\_ Characteristic 4: 2. List four (4) design principles used in the design of the movie poster. (4 marks) Design principle 1:\_\_\_\_\_ Design principle 2: Design principle 3: Design principle 4: 3. List four (4) elements of design used in the design of the movie poster. (4 marks) Element of design 1: Element of design 2: Element of design 3:\_\_\_\_\_ Element of design 4:\_\_\_\_\_

4. Explain how the elements and principles you have identified work together to create this poster. Ensure that you consider how typography and compositional rules have been used. (6 marks)



- 5. The concept of a smart poster is relatively new. When you drive past a billboard, which typically is poster in a much larger format, your smartphone passively scans the poster, downloads a poster to your phone and alerts the user.
  - (a) describe **one (1)** possible positive use and **one (1)** negative use of the use of smart posters downloaded in this way.

(4 marks)

 (b) identify and describe how **one (1)** innovative item of information technology could be used with a smart poster.

(5 marks)

Total = 27 marks

## Marking key for sample assessment task 10 – Unit 1

Based on the poster provided on the previous page, answer the following questions.

1. List a minimum of **four (4)** characteristics of the target audience of the movie poster.

Description	Marks
Correctly lists the characteristics of the target audience	1–4
	(1 mark each
	characteristic)
Note: target audience characteristics will vary, depending upon the poster used in this task.	

2. List a minimum of four (4) design principles used in the design of the movie poster.

Description	Marks
Correctly lists the design principles used in the design of the movie poster	1–4 (1 mark each design principle)
Note: the design principles will vary, depending upon the poster used in this task.	

3. List **four (4)** elements of design used in the design of the movie poster.

Description	Marks
Correctly lists the elements of design used in the design of the movie poster	1–4
	(1 mark each
	element of design)
Note: the elements of design will vary, depending upon the poster used in this task.	

4. Explain how the elements and principles you have identified work together to create this poster. Ensure that you consider how typography and compositional rules have been used.

Description	Marks
Explains how the elements of design and principles of design work together to create the poster	3–4
Provides a limited explanation how the elements of design and principles of design work together to create the poster	1–2
Subtotal	4
Provides a description of how typography has been used in the poster	2
Provides a limited description of how typography has been used in the poster	1
Subtotal	2
Provides a description of how compositional rules have been used in the poster Provides a limited description of how compositional rules have been used in the	2
poster	1
Subtotal	2
Total	8

- 5. The concept of a smart poster is relatively new. When you drive past a billboard, which typically is a poster in a much larger format, your smartphone passively scans the poster, downloads a poster to your phone and alerts the user.
  - describe one (1) possible positive use and one (1) negative use of the use of smart (a) posters downloaded in this way.

Description	Marks
Provides a detailed description of <b>one (1)</b> positive use of the use of smart posters	2
Provides limited description of <b>one (1)</b> positive use of the use of smart posters	1
Subtotal	2
Provides a detailed description of <b>one (1)</b> negative use of the use of smart posters	2
Provides limited description of <b>one (1)</b> negative use of the use of smart posters	1
Subtotal	2
Total	4
Answer could include but is not limited to:	
Positive use of smart posters	
Provides an interactive and dynamic advertising experience	
Enables a customisable message	
Allows for the use of greater range of multimedia	
Negative use of a smart poster	
Potential to be intrusive and annoying	
Distracting to user while driving	
Will require user permission to receive the smart poster alert	

(b) identify and describe how one (1) innovative item of information technology could be used with a smart poster.

Description	Marks
Provides a detailed description of how <b>one (1)</b> innovative item of information	3–4
technology could be used with a smart poster	
Provides a limited description of how <b>one (1)</b> innovative item of information	1–2
technology could be used with a smart poster	
Subtotal	4
Lists one (1) item of technology that could be used on a smart poster	1
Subtotal	1
Total	5
Answer could include but is not limited to:	
• Application of a large range of multimedia (audio, sound, video, images)	

Access to the hardware and software resources of smart phone (internet, scripts, vibrate) .

Potential interface with applications on the smart phone (calendar, reminders, location maps, . address book)