Government of **Western Australia**
School Curriculum and Standards Authority

SAMPLE ASSESSMENT TASKS

APPLIED INFORMATION TECHNOLOGY
GENERAL YEAR 12

Sample assessment task

Applied Information Technology – General Year 12

Task 6 – Unit 3 – Project: Create a digital product or digital solution

Assessment type: Project

Conditions
Time for the task: six weeks
The class periods allocated to this assessment task are outlined in the timeline provided.

Task weighting
15% of the school mark for this pair of units
_____

'The Battle of the Bands' is an event conducted each year at your school. Your school has requested that you create a digital product or digital solution that will advertise this event. Your advertisement 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 (i.e. Year 10, 11 and 12 students).

Your advertisement will take the form of a digital presentation that includes audio, video and images and could be presented using Prezi, Keynote or PowerPoint.

The development of your advertisement will need to occur in three phases:

Phase one
- Brainstorm your ideas, including:
  - type of advertisement you could actually produce
  - theme you could use
  - goals your advertisement needs to achieve.   (3 marks)
- Develop a time plan (i.e. proposed times for completion of the phases of the task).   (3 marks)
- Describe the purpose of the advertisement.   (2 marks)
- Taking into consideration the target audience, describe five 'design criteria' that
  you plan to use.   (5 marks)
- Describe the characteristics of the target audience.   (3 marks)
- Describe **three** possible requirements associated with this advertisement (e.g. school policy).
                                                                                           (3 marks)
- Describe the technology(ies) that you plan to use. Collect any audio, video and images that you
  intend to use; ensure you document all sites visited and images collected.   (5 marks)
- Track the development of your advertisement in comparison to your predicted time plan.
  Include notes on the software, hardware and processes used during the development.   (6 marks)
                                                              Phase one total = 30 marks

Phase two

- Develop a design plan for your advertisement satisfying the requirements you identified in Phase one. 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 your digital product or digital solution   (6 marks)
  - include notes, drafts and annotations to document a progression of ideas.   (4 marks)

Phase two total = 10 marks

Phase three

- Use appropriate software application tools, media (include audio, video and images), skills and techniques to develop your advertisement. Ensure that:
  - the planned design criteria are correctly applied   (5 marks)
  - there is an effective use of design principles and the use of the necessary elements of design in this digital product or digital solution   (3 marks)
  - there is consistency of design throughout (e.g. colours, layout, fonts)   (4 marks)
  - there is demonstrated originality/creativity in the design   (1 mark)
  - there are demonstrated skills in the use of application/s   (6 marks)
  - there is an appropriate use of audio, video and images throughout.   (9 marks)

Phase three total = 28 marks
Total = 68 marks

Marking key for sample assessment Task 6 — Unit 3

Description	Marks
Phase one	
Brainstorm • identifies an appropriate digital product or digital solution to be produced • identifies an appropriate theme(s) • identifies appropriate goals	1 1 1
Subtotal	**/3**
Time plan • produces a time plan, including proposed time for each phase of the task development	1–3
Subtotal	**/3**
Purpose • provides an appropriate description of the purpose • provides limited description of the purpose	2 1
Subtotal	**/2**
Design criteria • describes five appropriate design criteria	1–5 (1 mark per design criterion)
Subtotal	**/5**
Characteristics of the target audience • provides a detailed description of target audience • provides a description of target audience • provides a limited explanation of target audience	3 2 1
Subtotal	**/3**
Requirements • provides an appropriate discussion of three (3) possible requirements associated with the advertisment	1–3 (1 mark per requirement)
Subtotal	**/3**
Technology(ies) • provides a description of the technology(ies) (hardware, software, images and/or audio) to be used	1–5
Subtotal	**/5**
Track the development • keeps detailed and complete notes each day (including screenshots, where appropriate) • keeps detailed and complete notes each day • keeps detailed and complete notes some days	5–6 3–4 1–2
Subtotal	**/6**
Phase one total	**/30**
Phase two	
Development of design plan • provides evidence of the use of an appropriate design plan	1–6
Subtotal	**/6**
Annotations of design plan • provides a design idea with detailed and appropriate notes, drafts and annotations • provides a design idea with some detailed and appropriate notes, drafts and/or annotations • provides a design idea with limited but appropriate notes, drafts and/or annotations • provides a design idea with inappropriate or no notes, drafts and/or annotations	4 3 2 1
Subtotal	**/4**
Phase two total	**/10**

Description	Marks
Phase three	
Design criteria statements met • correctly applies each of the design criteria to the digital product/solution	1–5 (1 mark per design criteria)
Subtotal	/5
Application of the principles of design and elements of design • effective use of the principles of design and the necessary elements of design to create them	1–3
Subtotal	/3
Development of design • design is consistent throughout (e.g. colours, layout, fonts) • design demonstrates originality/creativity	1–4 1
Subtotal	/5
Application knowledge • use of applications throughout the development of the digital product reflects a high level of skill • use of applications throughout the development of the digital product reflects a developing level of skill • use of applications throughout the development of the digital product reflects a limited level of skill	5–6 3–4 1–2
Subtotal	/6
Inclusion of media *Video* • video files used are appropriate to project brief and, if required, extensively modified • video files used are appropriate to project brief and modified • video files used have limited relevance to the project brief	 3 2 1
Audio • audio files used are appropriate to project brief and, if required, extensively modified • audio files used are appropriate to project brief and modified • audio files used have limited relevance to the project brief	 3 2 1
Images • image files used are appropriate to project brief and, if required, extensively modified • image files used are appropriate to project brief and modified • image files used have limited relevance to the project brief	 3 2 1
Subtotal	/9
Phase three total	**/28**

Phase one total	**/30**
Phase two total	**/10**
Phase three total	**/28**
Final total	**/68**

Sample assessment task

Applied Information Technology – General Year 12

Task 1 – Unit 3 – Topic test: Hardware

Assessment type: Short answer

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

Task weighting
5% of the school mark for this pair of units
_____

1.   List the **five** 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.   State the purpose of secondary memory and provide **three** examples.   (4 marks)

        Purpose: _____

        _____

        Example 1: _____

        Example 2: _____

        Example 3: _____

4.	List **four** peripheral devices and describe the function of each device.	(8 marks)

Device 1:_____

Description of the function of the selected device 1: _____

_____

_____

Device 2:_____

Description of the function of the selected device 2: _____

_____

_____

Device 3:_____

Description of the function of the selected device 3: _____

_____

_____

Device 4:_____

Description of the function of the selected device 4: _____

_____

_____

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

Type 1: _____

Type 2: _____

Type 3: _____

6.   State the purpose of an operating system and provide **three** examples.   (4 marks)

Purpose: _____

_____

Example 1: _____

Example 2: _____

Example 3: _____

7.   A business decides to archive its data onto a flash drive each day and store the flash drive in a manager's office. Provide **four** reasons why the use of a flash drive is inappropriate for this purpose.   (4 marks)

Reason 1: _____

_____

Reason 2: _____

_____

Reason 3: _____

_____

Reason 4: _____

_____

8.   Based on the information below, which computer system would you recommend for an online gamer? Provide **three** reasons for your choice.   (4 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 1: _____

_____

_____

Reason 2: _____

_____

_____

Reason 3: _____

_____

_____

9.   A user is unsure whether to purchase a laptop or a desktop. Describe **two** advantages of using a laptop computer. (4 marks)

Advantage 1: _____

_____

_____

Advantage 2: _____

_____

_____

Total = 37 marks

Marking key for sample assessment Task 1 – Unit 1

1.   List the **five** 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 - coordinates the input/output operations of a computer - performs the instructions of a computer or computer program	

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

Description	Marks
States the purpose of secondary memory	1
Lists correct examples	1–3 (1 mark each)
Total	/4
Answer	
Purpose To store non-volatile data at a lower cost than main memory and enable the access of stored data later. **Examples could include:** - flash memory - optical disk (CD/DVD) - magnetic disk - tapes	

4.   List **four** peripheral devices and describe the function of each device.

Description	Marks
Correctly lists peripheral devices	1–4 (1 mark each)
Provides a correct description of the function for each of these devices	1–4 (1 mark each)
Total	**/8**
Answer could include, but is not limited to:	
Devices:	
• scanner • barcode reader • printer • LCD projector • digital camera • external hard drive • webcam • flash drive • joystick • disk drive • keyboard • smartphone • mouse • CD-ROM drive • monitor • DVD-ROM drive • graphics tablet • modem • touch screen • speakers	
Suggested descriptions: • scanner: scans a hard copy of a document into a digital copy • printer: prints a document • digital camera: takes video or pictures • webcam: takes still images to send to a live video • joystick: controls the movement of on-screen objects	

5.   List the **three** main types of computer systems.

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

6. State the purpose of an operating system and provide **three** examples.

Description	Marks
Correctly states the purpose of an operating system	1
Correctly lists the examples of an operating system	1–3 (1 mark each)
Total	**/4**
Answer	

Purpose
Purpose of an operating system is to provide user interface, to maintain system resources, management of security and access rights, and running system and user applications
Answers could include:
- Windows
- Mac OS
- Android
- Linux

7. A business decides to archive its data onto a flash drive each day and store the flash drive in a manager's office. Provide four reasons why the use of a flash drive is inappropriate for this purpose.

Description	Marks
Correctly provides reasons why the use of a flash drive is inappropriate	1–4 (1 mark each)
Answer could include, but is not limited to:	

- data could become corrupt on the flash drive and no other storage has been completed
- flash drive could become lost
- flash drive could be stolen
- flash drive could be easily damaged
- flash drive has limited lifecycle or finite number of read writes
- limited storage capacity
- security of data can be compromised

8. Based on the information below, which computer system would you recommend for an online gamer? Provide **three** reasons 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
Recommends the appropriate computer system	1
Provides valid reasons for choice	1–3 (1 mark each)
Answer could include, but is not limited to:	

Recommendation: Computer 1
Reasons:
- more DDR3 RAM – 8GB
- more cache – 2MB
- more powerful 1GB GeForce GTX 460 Graphics Card

9. A user is unsure whether to purchase a laptop or a desktop. Describe **two** advantages of using a laptop computer.

Description	Marks
Provides a description of two advantages of using a laptop computer	3–4
Provides a limited description of two advantages of using a laptop computer	1–2
Total	/4
Answer could include, but is not limited to:	

- Mobility
    - provides the user with the ability to be mobile and use the laptop computer in a variety of locations
    - mobile networking capability provided by built-in wireless
    - can run on batteries
- Size
    - physical size of a laptop is smaller than a desktop computer
- Connectivity
    - provide the user with improved connectivity to external devices
    - has an inbuilt mouse/touch pad

Sample assessment task

Applied Information Technology – General Year 12

Task 3 – Unit 3 – Extended answer: Design concepts

Assessment type: Extended answer

Conditions
Time for the task: one class period

Task weighting
8% 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
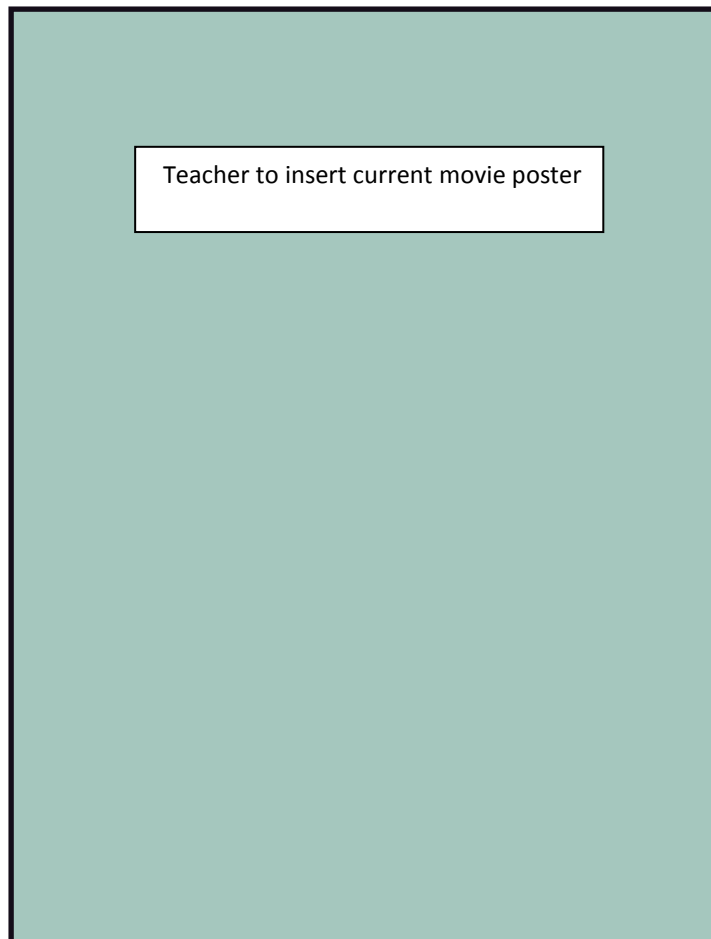
Answer the following questions based on the movie poster provided on the previous page.

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

Characteristic 1:_____

Characteristic 2:_____

Characteristic 3:_____

Characteristic 4:_____

2.   List **four** 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** 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.   (a)   Describe how the elements of design and principles of design that you have identified
            work together in this poster.   (4 marks)

_____

_____

_____

_____

(b) Describe how typography has been used in this poster. (2 marks)

_____

_____

_____

(c) Describe how compositional rules have been used in this poster. (2 marks)

_____

_____

_____

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.

(a) Provide **one** possible positive use and **one** possible negative use of the use of smart posters downloaded in this way. (4 marks)

Positive use: _____

_____

_____

_____

Negative use: _____

_____

_____

_____

(b) List and describe **one** innovative item of information technology that could be used in conjunction with a smart poster.

(5 marks)

_____

_____

_____

_____

_____

_____

Total = 29 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 **four** characteristics of the target audience of the movie poster.

Description	Marks
Correctly lists **four** characteristics of the target audience	1–4 (1 mark each characteristic)
Note: the target audience characteristics will vary, depending upon the poster	

2. List **four** design principles used in the design of the movie poster.

Description	Marks
Correctly lists **four** 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	

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

Description	Marks
Correctly lists **four** 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	

4. (a) Describe how the elements of design and principles of design you have identified work together in this poster.

Description	Marks
Describes how the elements of design and principles of design work together in the poster	3–4
Provides a limited description of how the elements of design and principles of design work together in the poster	1–2
Note: answers will vary, depending upon the poster used in this task	

(b) Describe how typography has been used in this poster.

Description	Marks
Describes how typography has been used the poster	2
Provides a limited description of how typography has been used in the poster	1
Note: answers will vary, depending upon the poster used in this task	

(c) Describe how compositional rules have been used in this poster.

Description	Marks
Describes how compositional rules have been used in the poster	2
Provides a limited description of how compositional rules have been used in the poster	1
Note: answers will vary, depending upon the poster used in this task	

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.

(a) Provide **one** possible positive use and **one** possible negative use of the use of smart posters downloaded in this way.

Description	Marks
Describes **one** positive use of the use of smart posters	1–2
Describes of **one** negative use of the use of smart posters	1–2
Total	/4
Answer could include but is not limited to:	
Positive uses of smart posters	
• provides an interactive and dynamic advertising experience	
• enables a customisable message	
• allows for the use of greater range of multimedia	
Negative uses of smart posters	
• potential to be intrusive and annoying	
• distracting to user while driving	
• will require user permission to receive the smart poster alert	

(b) List and describe **one** innovative item of information technology that could be used in conjunction with a smart poster.

Description	Marks
Lists **one** item of technology that could be used on a smart poster	1
Subtotal	/1
Describes how **one** innovative item of information technology could be used with a smart poster	3–4
Provides a limited description of how **one** innovative item of information technology could be used with a smart poster	1–2
Subtotal	/4
Total	/5
Answer could include but is not limited to:	
• Application of a large range of multimedia (audio, sound, video, images)	
• Utilise the hardware and software resources of smart phone (GPS, internet, scripts, vibrate)	
• Potential interface with applications on the smart phone (calendar, reminders, location maps, address book)	