Task 1: Home Computer Office

Your parents have decided that you need a room to study in. This room is to be fitted with the latest computer hardware, software, peripherals and furniture to help you complete your homework every night. The total amount of money you may spend is $2000. Your task is to investigate this hardware and software and to choose everything that you require for your new room.

Before you go ahead you will need to have a sound understanding of the hardware and software involved and the laws governing their use.

Your final product will be a **PowerPoint slideshow** designed to outline the following information to your parents.

**Time allocation**
Three (3) weeks in and out of class to complete this task.
Make sure all work is in your own words and **not plagiarised**.

<table>
<thead>
<tr>
<th>What needs to be submitted for assessment</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning including a time plan, journal, storyboard and concept map</td>
<td>24 February (Week 4)</td>
</tr>
<tr>
<td>Research and presentation of findings, including a bibliography</td>
<td>2 March (Week 5)</td>
</tr>
<tr>
<td>Completed PowerPoint</td>
<td>2 March (Week 5)</td>
</tr>
<tr>
<td>Evaluation, including written report and ‘How Good is My Work’ sheet</td>
<td>2 March (Week 5)</td>
</tr>
</tbody>
</table>
**Step 1**
Planning

Devise a **time plan** on how you will complete the task on time - **Example**

Use **concepts maps** and **storyboards** to plan out your ideas.

After each lesson record what you have achieved in your **journal**.

---

**Step 2**
Researching & Choosing

Using a **variety** of sources research the points below ensuring you record all your references in a **bibliography**.

**Try:** Harvey Norman, Computer Online, Officeworks, Equip Office Furniture, Softwaretime, Edsoft
(All products MUST be Australian prices from Australian stores)

1. **Computer hardware**
   - **Explain** – What are the main parts of a computer system and what do they do? (e.g. monitor.)
     (this website may help you)
   - **Choose** a computer system– explaining why you have chosen each component of the computer. Why is it suitable for you? Insert a picture of the advertised computer.

2. **Peripherals**
   - **Explain** – What are possible peripherals you would use for your home and what they do? e.g. printer
   - **Choose 2 peripherals** - why you have chosen these and what you will use them for? Insert a picture of the advertised product.

3. **Computer Software**
   - **Explain** - What is operating software (e.g. Microsoft Vista) and application software (e.g. Microsoft Word)? Explain what you could use each stated software for and what is does.
   - **Choose** an operating system and some application software that would help you complete your homework – explain you decisions. Insert a picture of the advertised products.

4. **Ergonomics**
   - **Explain** - how would you use ‘good ergonomics’ when using your computer?
   - **Choose a computer desk** and **chair** that correctly designed (in terms of ergonomics). Why are they suitable for you? Insert a picture of the advertised products.
**Step 3**

Creating

Create your Interactive PowerPoint Presentation

Make sure you use the **principles** and **elements** of good design.

Ensure you have a section for each of the following:

- Computer Hardware
- Peripherals
- Software
- Ergonomics

**Step 4**

Evaluating

Assess your information quality by completing the “How Good is My Work” sheet.

Explain the following in a **Word document**

- the suitability of your slideshow to the target audience
- use of design principles and elements
**Computer Hardware**

**RAM**
The Random Access Memory (RAM) takes the form of integrated circuits that allow stored data to be accessed in any order.

**Sound Card**
A sound card is an internal expansion card that facilitates the input and output of audio to and from a computer.

**Video/Graphics Card**
A video card is an expansion card which generates output images to a computer.

---

**Menu**

1. **Menu**
2. **Computer Hardware**
   - What is Computer Hardware
3. **Software**
   - What is Software
4. **Peripherals**
   - What are Peripherals
5. **Ergonomics**
   - What are Ergonomics
6. **Extra accessories**
7. Extra stuff to spend the left over money with
8. **Total cost table**

To view selected slide just click on the aqua writing
Task 2: ICT Trends Informative Poster/Brochure

Information Communication Technology (ICT) is important to the lives of people all over the world. Your task is to investigate one piece of ICT - looking at the impact it has made to our lives and how the technology has changed over the years. Once you have collected this information you need to present it as an informative Poster/Brochure. The poster/brochure must appeal to a target audience of your choice and include the elements of design.

**Time allocation**
Four (3) weeks *in and out* of class to complete this task.
Make sure all work is in your own words and **not plagiarised.**

<table>
<thead>
<tr>
<th>What needs to be submitted for assessment</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> Planning - Timeplan</td>
<td>23 March (Week 8)</td>
</tr>
<tr>
<td><strong>Step 2:</strong> Information Collection – Completed Information Collection Table and Referencing</td>
<td>30 March (Week 9)</td>
</tr>
<tr>
<td><strong>Step 3:</strong> Design – Completed questions 1-4 and hand sketching of design draft</td>
<td>30 March (Week 9)</td>
</tr>
<tr>
<td><strong>Step 4:</strong> Creating – Hand in final copy of Poster/Brochure</td>
<td>5 April (Week 10)</td>
</tr>
<tr>
<td><strong>Step 5:</strong> Evaluation – Hand in evaluation questions 1-4 completed</td>
<td>5 April (Week 10)</td>
</tr>
</tbody>
</table>

---

**Step 1**
Planning

Devise a **time plan** on how you will complete the task on time.

After each lesson record what you have achieved in your **Journal.**

**Step 2**
Information Collection and Referencing

Using a **variety** of sources research the points below ensuring you record all your references in a **bibliography.**

1. **Information Communication Technology (ICT)**
   - **Explain** – What is the ICT you are going to investigate? (e.g. Personal Computer.) What is the purpose of this ICT? How has it changed over time? What have been the positive and negative impacts of this technology?
   - **Use** the **Information Collection** document to help you answer the above questions.
   - **Use** the **References** document to collect the sources of your research.
Step 3
Design
- **Explain** – Who is the target audience for your poster/brochure? What design features will you use to make your product attractive to this audience?
- **Use** the Design Principles document to detail the design features you will use to make your poster/brochure attractive to your target audience.
- **Use** the Design document to make detailed sketches, with annotations, showing how your product will be laid out and the design features that will be used.

Step 4
Creating
Create your Poster/Brochure
Make sure you use the principles and elements of good design.

Ensure you have a section for each of the following:
- Purpose of the ICT?
  - What does the technology allow us to do?
  - Why was the technology invented?
  - What did it replace?
  - How does it work?
- How has the technology developed over time?
- Impacts on society (good and bad)
- References (where you quote information from a source (e.g. website) you must acknowledge that source next to where you include the information in your poster/brochure)

Step 5
Evaluation
Assess your product quality by completing the Evaluation document.
Task 2 Work Samples

Main purpose of a graphics tablet

A graphics tablet is a device that can be plugged into a computer so that you can do hand drawing, like you would with a pen and paper instead of using a mouse. It consists of a pressure sensitive pad which can be used with a stylus made to display a pointer on the screen. Artists like to use the tablet's because they feel more natural, they can also prevent wrist pain.

How does it work?

Impact on my life: Graphics tablets are really helpful and can be used to draw or paint anything. They are also really good for artists who want to get started with digital art.

Impact on other people's lives: Graphics tablets are useful for graphic design, drawing, and illustration. They can also be used for general note-taking and sketching.

How the Tablet Works

Tablet Operating System:

Tablets run on a variety of operating systems, such as iOS, Android, and Windows. These operating systems provide the necessary software and hardware to run apps and perform tasks.

Tablet Hardware:

Tablets are composed of a variety of hardware components, including the processor, memory, storage, camera, and speaker.

Tablet Applications:

Tablets can run a wide range of applications, including productivity apps, entertainment apps, and social media apps.

How It Can Impact Your Life

Tablet Design:

Tablets are designed to be portable and easy to use. They are often used for entertainment, education, and work.

Tablet Usage:

Tablets are used for a variety of purposes, including reading, browsing the internet, watching videos, and playing games.

Who Invented It and What Did It Replace

Tablets were invented by HP in 1992. They replaced traditional paper and ink pads.
Task 5: Test Part A – Hardware and Software *(20 marks total)*

1. Complete the following diagram by adding labels *(2 marks)*:

   ![Diagram](image)

2. List 3 common input devices and briefly explain their purpose. *(3 marks)*

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

3. What is the purpose of Storage in a computer system? *(2 marks)*

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

4. Why do we need Output devices? *(1 mark)*

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

5. What is RAM? Why is it important in a computer system? *(2 marks)*

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
Applied Information Technology Stage 2
Work Samples

Typical ‘Investigation’ Task

In this task you are required to investigate and produce a Concept Map (Inspiration) that shows the components and associated links to students and parents’ regarding information on “Getting Digital and Getting Legal” in their use of ICT.

This Concept Map is designed to give the audience valuable information for the requirements of a high end computer workstation that has a focus on digital applications like graphic and animation production, photographic, audio and video editing and the many peripheral (hardware) devices available.

Also, this Concept Map is designed to give students and parent’s information on the correct and legal use of digital information (images, audio, and video) and the various products and related industries that now exist to cater for these “digital needs”.

Your Concept Map should be logically set out and contain numerous notes and appropriate images to illustrate each topic.

Typical ‘Production’ Task

TASK 1: Digital Event Promotion—85 marks (4 weeks)

In this task you are required to design and construct a digital promotional product designed to advertise a music festival or sport event. It must be entirely your own work.

The design should incorporate a range of digital media including image manipulation and creation, animations, audio and be produced to a high standard.

The design needs to really grab the audience’s attention but also needs to cater for the diverse nature of the audience that will see the promotional product that you have created.

You MUST create one of each of the following:
Digital version of your Logo
Promotional Website with some element of animation

<table>
<thead>
<tr>
<th>What you need to submit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorm</td>
</tr>
<tr>
<td>Project Requirements</td>
</tr>
<tr>
<td>Investigate</td>
</tr>
<tr>
<td>Design ideas sketched, storyboards etc (at least 3) fully annotated</td>
</tr>
<tr>
<td>Production of Website (Week 3 and 4)</td>
</tr>
<tr>
<td>Project evaluation</td>
</tr>
</tbody>
</table>
BEFORE YOU START

Make a Journal. In the journal you should regularly record:
- Timeline (including updates)
- Production plan (including updates)
- Software and hardware used (extended notes, observations and examples)
- Specific processes used (extended notes, observations and examples)

Typical ‘Response’ Task

Two types of assessments:

1. Examination and tests which focus upon course theory delivered in class.
2. In class response tasks (time restricted)

In class response:
Complete the investigation sheet ‘The Good, The Bad and The Ugly’.

Of the three websites you have investigated you are asked to rate them in order of quality. You must justify your ranking based on the topics you have researched.
- Target audience
- Useability/design
- Inclusivity
- Accuracy
- Authority
- Objectivity
- Currency
- Coverage

Overall which is the best website?

Higher marks will be awarded for detailed answers that use specific examples (‘print screen’ the examples and explain them) that relate to the websites that you are looking at.

Examination question examples:
1. Describe ‘Digital Convergence’ and provide 2 examples.
2. Which of the following is a peripheral device?
   (a) Network card
   (b) Printer
   (c) ROM
   (d) VDU
3. Describe the main purposes of a computer network.
4. Explain the use of the design elements and principles in the above website.
5. Based on the above stimulus, sketch a design of a website that would cater for an elderly target audience.
Applied Information Technology Stage 3
Work Samples

**TASK 1: Investigate online hypermedia players (58 marks)**

Popular music groups will need to diversify the types of products and accessibility services that they offer to the listening public if they are to remain competitive in fiercely contested and constantly changing recording industry.

In this task, you will investigate ways in which current music groups use the Internet to reach their fan base through the use of hypermedia.

**Time allocation**

| Two weeks |

**What you need to do:**

A well-known band has been investigating more effective ways of communicating with their public audience. Their manager mentioned that a number of popular groups are presenting more and more video content on their websites to increase promotion. Consequently, the band would like to explore new ways of displaying information and promoting themselves. It is hoped that this will help provide more information for current supporters and help attract new followers.

The band manager decided to approach your company to have an online media player designed and developed. It is envisaged that the media player will be able to display video, audio, images, and text through a user-friendly interface. The manager has outlined that the product must:

- include all the services available on the bands current website
- appeal to current supporters and help attract new ones
- include an audio and video player as well as a picture viewer to make it more desirable to clients.

You have been asked to explore the ways in which other bands and organisations have used this type of technology. In order to sell the use of this form of technology, you are required to prepare the following to the band and its management team:

- visual and verbal presentation
- written recommendation report.

The information contained in these will not only inform them about current trends, but also provide benefits by having their own online hypermedia player.

You will need to conduct research and take notes to help prepare the client brief and needs analysis through consideration of the following factors:

1. **Determine the needs of the client**
   - Identify the types of information the band will want to communicate through the hypermedia player
   - Collate and present your results in an appropriate format.

2. **Determine the purpose of the hypermedia player and outline the aims and objectives**
   - Who will use the product?
   - What specific forms of media can the player display?
   - Discuss possible ways in which the user might access the information and why
   - Collate and present your results in an appropriate format.
3. **What will be the impact of the product on individuals (users)?** Consider the following:
   - Resources needed to use the product
   - Costs and benefits of the product to the users
   - Values and beliefs of individuals using this product.

4. **Identify and describe the target audience and user attributes.** What are the benefits and consequences to audiences of using this product?
   - How could these benefits and consequences impact on the audience and the band?
   - What will be the economic, social, personal, physical and ethical impacts that need to be considered? Is there any legislation you must consider?

5. **Identify the applications utilised in development of similar products and the format in which they appear.**
   - Software used
   - File formats
   - Operating environment, in terms of hardware and software.

<table>
<thead>
<tr>
<th>What needs to be submitted for assessment</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Evidence of your research process (survey, notes, tables, graphs, bibliography, etc.) collected in an appropriate format.</td>
<td></td>
</tr>
<tr>
<td>□ Recommendation report</td>
<td></td>
</tr>
<tr>
<td>□ Presentation</td>
<td></td>
</tr>
</tbody>
</table>

**TASK 2: Infomercial (50 marks) (50%)**

In your investigation of social networking technologies you identified the various stakeholders and potential target audiences. In this investigation you identified types of social networking technologies and specific products. In this task you will be required to develop an infomercial of 15, 30, 45 or 60 seconds to promote awareness of social networking technology(s) either specifically or in general.

You may choose to film or animate your multimedia-based product.

**What you need to do:**

- Develop a plan/design document (see template for design document format) for your infomercial:
  - Identify the aim of your infomercial and its primary message
  - Identify your target market. Are there any special requirements you need to consider for your target market?
  - Apply standards and conventions appropriate to the design of your information product
  - Identify the technical conventions appropriate to the information product if it is to be streamed via the internet.
  - Are there any special effects that you may need to include for your target market?
- A journal outlining your process of creation, tools (hardware/software) used, skills and techniques used

*(18 marks)*
Create your infomercial using your plan as a guide:
- use appropriate conventions for data handling and storage
- marks are awarded for the quality of your information product
- save your infomercial in an appropriate file format for television and burn it to a DVD-ROM
- save your infomercial in an appropriate file format for streaming on the internet and upload it to the portal

(20 marks)

Test your information product using a methodology that you are familiar with. In your journal remember to:
- develop some specific evaluative criteria/questions with an appropriate scale to enable your target market to evaluate the effectiveness of your infomercial
- have a number of people from your target audience evaluate your information product and make suggestions for improvement. Note these suggestions in your design document in a suitable format
- have you changed your infomercial as a result of the feedback? Reflect on the changes in your design document.
- compare your product to other commercially available products.

(12 marks)

<table>
<thead>
<tr>
<th>What needs to be submitted for assessment?</th>
<th>Due dates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Infomercial</td>
<td></td>
</tr>
<tr>
<td>□ Evaluative criteria/questions</td>
<td></td>
</tr>
<tr>
<td>□ Peer evaluations/testing results in an appropriate format</td>
<td></td>
</tr>
<tr>
<td>□ Comparison of product and journal</td>
<td></td>
</tr>
<tr>
<td>□ Design document: scope, hardware/software, planning, design/technical standards and conventions</td>
<td></td>
</tr>
</tbody>
</table>

Note: It is suggested that this product will take approximately three weeks to complete.