**Part A**

**I**

**A**

**B**

**C**

**D**

**E**

**F**

**G**

**Objective** : Name and decribe each component



**H**

|  |  |  |
| --- | --- | --- |
| Download [**http://tinyurl.com/CW208-CAG-SIM**](http://tinyurl.com/CW208-CAG-SIM) PC Build Simulator.  Go through steps of building a PC, as you complete the simulation find and describe in detail components A to I. To run simulator first install <http://www.swffileplayer.com/> and open ***RootMovie.swf*** using SWF player. Alternatively install [Macromedia Flashplayer](https://fpdownload.macromedia.com/pub/flashplayer/updaters/32/flashplayer_32_sa.exe) . Ideally use a simulator as listed in class. | | |
| Label | Name each component | Description |
| A | Random Access Memory | Short-term (volatile) memory that stores data as the processor needs to use it. |
| B | Graphics Processing Unit | Specialised processor designed for accelerated graphics rendering. Performs fast maths calculations. |
| C | Central Processing Unit | Retrieves and executes instructions. Allows users to interact with applications and programs. |
| D | Power Supply Unit | Supplies power to the components of the pc. Converts AC to DC for the components. |
| E |  |  |
| F | CD Drive | Allows CDs to be run by the PC |
| G | Hard Disk Drive | Stores and retrieves data using magnetic storage. Stores all of the digital content on a PC. |
| H | Serial ATA Cable | Bus interface that connects to the storage medium of the PC. |
| I | Motherboard | Circuit board that contains connections for most other components of the PC. |

**Part B**

**Objective**

Compare a pre-assembled system and the components that could be assembled to build a comparable system. After completing this practical, you should be able to:

1. Identify the components of a pre-assembled system
2. Locate prices for components needed to assemble a comparable system
3. Compare the cost of a pre-assembled system and a self-assembled system.

If you can’t find exact match for components, find the closest possible substitute. Use the Internet and available computer-related publications as your sources for information. Examples of websites for computer parts [www.komplett.ie](http://www.komplett.ie), [www.dell.ie](http://www.dell.ie), [www.custompc.ie](http://www.custompc.ie) [www.amazon.de](http://www.amazon.de)

MAKE SURE TO INCLUDE VALID LINKS TO WEB REFERENCES

|  |  |  |
| --- | --- | --- |
|  | **Pre-Assembled Computer Package** | **Computer Package**  **Components** |
| **CPU** |  |  |
| **Storage / Memory** | | |
| |  | | --- | |  | | RAM | | Hard Drive | |  | | |  | | --- | |  | |  | |  | |  | |  |
| **Input/Output** | | |
| |  | | --- | | Keyboard | | Pointing Device | | Monitor | | Speakers | | Network Adapter | |  | |  | |  |  |
| **Bundled Software**  (Including Operating System) |  |  |
| **Total Cost** |  |  |

**Part C**

**Objective**

You have been asked by a family friend to assist them with a computer purchase. They’re unfamiliar with technology and the terms used and have presented you with two alternatives machine choices. They would like to be able to write word documents, surf internet and play Minecraft © Mojang and Half-Life © Valve Software. They are considering playing Fortnight but are not sure yet, as it depends on machine cost and if they can extract some money from their Bitcoin wallet.

Compare Personal Computer Option A and B in relation to each of the side headings and recommend a system and any alterations.

|  |  |  |
| --- | --- | --- |
|  | Personal Computer  Option A | Personal Computer  Option B |
| CPU | 2.2 GHz Intel Celeron 450 | 3.2 GHz Intel Core i5 |
| Memory |  |  |
| |  | | --- | | Cache | | RAM | | Hard Drive | | CD-ROM/DVD | | |  | | --- | | 512 KB Cache | | 4 GB RAM | | 320 GB Hard Drive | | DVD+/-RW drive | | |  | | --- | | 4 MB Cache | | 8 GB RAM | | 1 TB Hard Drive | | DVD+/-RW drive | |
| Input/Output |  |  |
| |  | | --- | | Keyboard | | Pointing Device | | Screen | | Speakers | | Network Adapter | | |  | | --- | | USB multifunction keyboard | | USB optical mouse | | 20’’ HD flatscreen monitor | | Multimedia Speaker System | | Integrated 10/100/1000 Ethernet | | |  | | --- | | wireless multifunction keyboard | | wireless optical mouse | | 25’’ HD flatscreen monitor | | Dolby Surround Sound Speakers | | Integrated 10/100/1000 Ethernet | |

|  |
| --- |
| **Recommendations** |
|  |

**Your Recommend System**

|  |  |
| --- | --- |
|  | Personal Computer  Recommendation |
| **CPU** |  |
| **Memory** | |
| |  | | --- | |  | | RAM | | Hard Drive | | SSD Drive | | |  | | --- | |  | |  | |  | |  | |
| **Input/Output** | |
| |  | | --- | | Keyboard | | Pointing Device | | Screen | | Speakers | | Network Adapter  GPU | | |  | | --- | |  | |  | |  | |  | |  | |

Hand up this practical report at the end of session and ensure it has been checked

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name** |  | **Student Number** |  |
| **Date** |  | **Checked** |  |
| **Group** | **A / B** |  |  |