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Lab - Research a Hardware Upgrade

Introduction

Use the Internet, a newspaper, or a local store to gather information about hardware components. Your customer's computer currently has one module of 2 GB of RAM, a 500 GB hard disk drive, and a PCIe video adapter card with 256 MB of RAM. Your customer wants to be able to play advanced video games.

Instructions

Step 1: Research memory options.

Shop around, and in the table below list the brand, model number, features, and cost for two different 8 GB modules of DDR3.

Brand and Model Number	Features	Cost
Kingston Hyper X Fury	8GB DDR3 1600MHZ DIMM	₱ 550
HKCMemory	DDR3 8GB 1600MHZ	₱ 559

Question:

Based on your research, which RAM would you select? Be prepared to discuss your decisions regarding the RAM you select.

- *I chose Kingston Hyper X Fury as my RAM. It has a flexible compatibility on both comfort and low profile heat spreader. It is well-suited for gaming too. Well-suited RAM is equal to high performance and high high speed latencies.*

Step 2: Research hard disk drive options.

Shop around, and in the table below list the brand, model number, features, and cost for a 3 TB 7200 rpm SATA 3 hard disk drive and a 500GB or 1TB solid state drive (SSD).

Brand and Model Number	Features	Cost
Seagate ST3000VX000	3TB 7200 RPM SATA 3	₱ 7,486.58
Samsung 870 Evo SSD	500 GB SATA 3	₱ 1,652.01

Question:

Based on your research, which hard disk drive would you select? Be prepared to discuss your decisions regarding the hard disk drive you select.

- *For me, I would choose the Samsung 870 Evo SSD, Its cheaper and more convenient. Easily recoverable compared to HDD, where a slight damage, the performance drops down, and it has slow transfer rate. SSD has faster faster rate, cheaper, and easily recoverable when it comes to corruption.*

Step 3: Research video adapter card options.

Shop around, and in the table below list the brand, model number, features, and cost for two different PCIe video adapter cards with at least 1 GB of RAM.

Brand and Model Number	Features	Cost
ASUS NVIDIA® GeForce® GTX 1030-SL	2GB Memory 64-BIT	₱ 5,990
INNO3D NVIDIA® GeForce® RTX™ 3050	8 GB Memory 128-BIT Enhanced Gaming Performance	₱ 13,311

Question:

Based on your research, which video adapter card would you select? Be prepared to discuss your decisions regarding the video adapter card you select.

I chose INNO3D NVIDIA GeForce RTX 3050. It has a high performance and fast FPS rate. It has enhanced gaming performance, which means high resolution and graphics setting. It's expensive but it is much worthy to invest in.