

Lab - Research a Hardware Upgrade

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CPE11S1

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
Sundisk,: <u>SDSDAA-008G</u>	<ul style="list-style-type: none">○ · Speed Class 10, U1 cards ideal for, photography, HD video, applications and fast file transfer times○ U3, V30 cards optimal for 4K video, applications and fast file transfer times	580 ₱
Lexar, E3LXLS16GABNLC10	<ul style="list-style-type: none">● · Speed Rates at Class 4● · Built-In Erasure Prevention Switch	2,439₱

Question:

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

- *Based on my research Lexar and sundisk are one of the trusted memory card options, both are good but if you'd ask me to choose if I would get Lexar, sundisk may have lower price but if I have the budget I would get the Lexar, it maybe pricey but quality.*

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, (ST3000DM001)	<ul style="list-style-type: none">• 3TB-per-disk hard drives now have advanced power modes to save more energy. One of the trusted brands. Proven and quality performance.	4,999₱
Kingston A400	<ul style="list-style-type: none">• Sequential Read Up to 2,900 MB/s• Sequential Write Up to 1,300 MB/s• TRIM Support: Supported• S.M.A.R.T Support: Supported• Garbage Collection: Auto Garbage Collection Algorithm	6,800₱

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.

- *I would choose Kingston A400 rather than Seagate, Kingston A400 has a better quality in gaming, office and is good for storing large amount of data.*

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
NVIDIA RTX 4090 Founders Edition (24 GB)	<ul style="list-style-type: none">• GPU-24GB• UNMATCHED QUALITY FOR, INTERFERENCE, RENDERING	183, 998₱
MSI RTX 4080 16 GB Gaming X Trio	<ul style="list-style-type: none">• 16GB VRAM• GREAT FOR 4K	88,995₱

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 would choose *NVIDIA RTX 4090 Founders Edition (24 GB)* even though its pricy the quality of it is unmatched it's and is highly recommended, and is one of the trusted brand in the market.