

Field Study: Basics of Hardware and Software HTM 304 Section 02, Fall 2007

Assignment: Students break into teams to study assigned topics. The objective is to get a better understanding on how computer works to provide information. Based on the assigned topics, each team can conduct field study (e.g. go to local electronic stores such as CompUSA, interview IT professionals) or research online and library resources (e.g. wikipedia.org) to understand the topics. Each team is required to organize a presentation of 15-20 minutes on the assigned topic.

Topics:

1. Computer Hardware. The presentation goal of each hardware team is to educate the rest of the classroom on the following issues:
 - a. How the product(s) work and function in a computer system?
 - b. What are the major parameters that will affect the computer performance?
 - c. List the major brands of the products, compare their qualities (based on the parameters) and the corresponding price
 - d. Give cost-effective recommendations to a variety users, including home user (mainly home entertainment use), a secretary (documentation use), a store manager (data analysis use), etc.

Topics in a hardware team include the following:

- i. Central Processing: (e.g. Motherboard, CPU and Memory Usage)
 - ii. Storage Devices: (e.g. Hard Disks, Optical Disks, and USB Storage Devices)
 - iii. Input / Output Devices
 - iv. Networking Devices
2. Computer Programs and Business Software. The software team's objective is to help students distinguish the following subjects:
 - a. Explain the concept of computer programming.
 - b. The commercial product of computer programming: software packages
 - i. Explain the difference between the two major types of software packages;
 - ii. Explain the programming language courses currently offered by HTM Department. Interview the instructors if necessary.
 - iii. Select several common application software packages (available in the computers in MARK 305), explain their functionality, and check out the prices of licensing those application software.