

Assignment 7: “Hardware and Software, Parts III and II”

due in section during the week of 6 April 1999

Please write or type your answers on one or more separate pieces of paper.

Although this assignment is not due until after Spring Break, it requires use of a word processing program as well as a trip to a local computer store. We are distributing the assignment well in advance of its deadline to allow you sufficient time to fulfill its requirements.

Do plan ahead, as we will not be inclined to grant extensions for this assignment.

Short answers. (2 points each.)

Please answer each of the four questions below in one or more words or sentences.

1. Recall that, each week, I put copies of handouts and assignments online on the course Web site. I always post these documents in Microsoft (MS) Word format. Sometimes I post them in HTML as well. And I always provide them in one other format.

In what other format do I post handouts and assignments online? What is the advantage of this other format over the Microsoft Word and HTML formats?

2. Recall your answer to the preceding question. What software do you need to view this other format? From what URL can you download this software?
3. Suppose that the table below represents records in the IRS’s database.

| First name | Last name | Birthday | Social Security # | Phone # |
|------------|-----------|----------|-------------------|----------------|
| Joe | User | 5/27/68 | 032-48-2384 | (617) 495-1284 |
| Fred | Jackson | 2/16/45 | 023-89-2142 | (203) 323-5463 |
| Jane | User | 4/9/71 | 032-50-2593 | (617) 495-1284 |
| Sarah | Turner | 1/18/65 | 029-20-1203 | (212) 432-2304 |

What is the key field of this table? Why?

4. Recall the IRS’s database described in the preceding question. Does that database appear to be Y2K-compliant? Why or why not?

questions continue on opposite side...

Word processing. (30 points.)

5. Word processing programs today are superior to typewriters, for they provide you with far more functionality. With a word processor, you can create tables, you can design bulleted lists, and you can adjust the font, size, and style of your text.

For this question, you will utilize each of the aforementioned features of word processors. Specifically, your job for this question is to re-create the Star Wars advertisement (located toward the end of this packet) with a word processing program of your choice. (Recall that, in section during the week of 23 March 1999, you used a word processor called Microsoft Word.) You must print out and submit your re-created document as your answer to this question. You will be graded on the basis of how closely your document resembles the advertisement.

When re-creating the ad, keep the following hints in mind.

- The margins of that document are 1 inch on all sides.
- The title of the page “Star Wars...” is bold, centered, and in all caps.
- The main paragraph (“Now in the final stages...”) is centered.
- Certain words in the main paragraph (“Now in the final stages...”) are italicized.
- “Cast members” is bold.
- Each of the cast members’ names is in a different font.
- “Crew members” is bold.
- “Episode history” is bold and centered.
- The “Episode history” table has three columns and four rows.
- The first row in the “Episode history” table has a black background (a.k.a. shading).
- The text in the first row in the “Episode history” table is bold and white.
- The rows in the “Episode history” table are separated by thin horizontal black lines.
- The first column in the “Episode history” table is aligned to the left.
- The middle column in the “Episode history” table is centered.
- The third column in the “Episode history” table is aligned to the right.
- The whole “Episode history” table has a thin black border around it.
- “Web site” is bold and centered.
- The Web site URL is printed in a non-proportional font (*e.g.*, Courier or New Courier).
- All other text is in the Arial font.

Also keep the following guidelines in mind.

- Do not use spaces or tabs to center text.
- Do not use spaces or tabs to create the illusion of a table; use an actual 3×4-cell table.
- You do *not* have to use the exact same fonts as the ones pictured if your computer does not have those fonts. But for the bulleted “Cast members” list, you *must* use a *different* font for each name.

questions continue on next page...

Browsing a store for a new computer. (54 points.)

6. Recall that, in Assignment 5: “Hardware, Part II,” you browsed a catalogue and the Web for a new computer. Now it’s time to browse an actual store!

Your job for this question is to spend up to \$2,200 in “virtual” dollars to “purchase” some computer hardware and software from a computer store according to the following guidelines.

- Your “purchased” hardware must include a computer, a keyboard, a modem, a monitor, a pointing device (*i.e.*, mouse, trackball, trackpad, *etc.*), and a printer. In addition...
 - Your computer can be a desktop or a laptop model.
 - Your computer must have a 233 MHz processor or better.
 - Your computer must have at least three secondary storage devices.
 - Your computer must have at least 32 MB of RAM.
 - Your computer must have at least 128 KB of level-2 cache.
 - Your computer must have sound capabilities.
 - Your modem must have a transfer rate of at least 33.6 Kbps.
 - Your monitor must have a *viewable* area of at least 15". (Recall that a “15-inch” monitor does *not* have a viewable area of 15 inches.)
 - Your printer must be able to print at least 3 pages per minute (3 ppm).
- Your “purchased” software must include a game, an operating system, a word processor, and one other program of your choice. (Many computers come with some software, especially an operating system. If your “purchased” computer comes with one or more pieces of required software, all the better. That is, you needn’t spend any of your virtual dollars on, *e.g.*, an operating system if one comes with your computer.)

Note that you *must* visit a computer store for this question. You may *not* do your shopping on the Web or through a catalogue. Again, we have given you this assignment three weeks in advance of its deadline to allow you sufficient time for a trip to a computer store. Stores that sell computer hardware and software include CompUSA, MicroCenter, and Staples. The locations of these stores can be found in your local yellow pages. However, you need not restrict your “shopping” to these stores; you may visit any store that sells computer hardware and software.

Take advantage of your chosen store’s sales staff. Ask the staff any and all questions. Treat this question as an opportunity to practice shopping for a personal computer.

However, I suggest that you not inform the sales staff that your funds are virtual. :-)

question continues on opposite side...

You may *not* “spend” more than \$2,200 in “virtual” dollars. (But you *may* pretend that you’re exempt from taxes for this question.) “Spending” even a penny more than \$2,200 will result in point deductions for this question. In restricting you to “shop” on a budget, we hope that you learn how to balance computing needs with financial means. This budget should compel you think carefully about your “purchase” decisions. (E.g., “Do I really need 128 MB of RAM? Because if I only get 64 MB of RAM, I can save some money and buy a bigger monitor.”)

N.B. This question does *not* require you to buy anything. It simply requires that you pretend that you have \$2,200 with which to “purchase” a computer according to the specs I have provided. You are expected to go to a computer store to *find out* exactly what you *could buy* with \$2,200, thereafter reporting your findings to us.

At the end of this assignment, you will find a “shopping list” and an “invoice.” Tear those pages out of this packet, complete the blank fields on each, and submit the completed pages as your answer to this question.

Explaining your “purchases.” (6 points.)

7. In two or more paragraphs (each of five sentences or more), tell us what sort of decisions you had to make while “shopping.” What was your thought process? Did you find yourself strapped by the \$2,200 budget, or were those funds more than enough for your purchase? Did you have to make any compromises? That is, did you have to forego “buying” one item in order to afford another? Was your chosen store’s sales staff helpful? Did they teach you anything or did you feel that you knew more than they did?

In short, explain your purchases. Justify the dollars that you “spent,” using the rhetorical questions above as possible points of departure for your explanation.

Survey. (1 point each.)

Please answer each of the questions below in one or more words.

8. About how long did it take you to complete the seven questions above, shopping and all?
9. What did you like and dislike about this assignment?

Extra credit. (5 points.)

10. Bill Gates certainly has been a driving force behind the computer software industry, putting (forcing?) such operating systems as MS-DOS and Windows into the hands of millions, along with countless other software packages. Yet Mr. Gates, the billionaire, is a college dropout!

What college did Mr. Gates drop out of? In what year?

STAR WARS

EPISODE I

THE PHANTOM MENACE

Now in the final stages of preparation, the new *Star Wars* "prequel" Episode I: *The Phantom Menace* will take audiences on a journey to the beginnings of the *Star Wars* saga. The original *Star Wars* trilogy (Episodes IV, V, and VI) told the story of Luke Skywalker, a young farmboy who became a hero in the struggle to overthrow an evil empire and had to confront one of the Empire's staunchest henchmen, Darth Vader, who held the terrible secret of his father's fate. The new *Star Wars* trilogy will go back in time a full generation to tell the story of Anakin Skywalker, the innocent boy who will one day become the dreaded Darth Vader.

Cast members

- Liam Neeson
- Ewan McGregor
- **Natalie Portman**
- Jake Lloyd

Episode history

| Episode | Title | Released |
|------------|-------------------------|----------|
| Episode IV | Star Wars | 1977 |
| Episode V | The Empire Strikes Back | 1980 |
| Episode VI | Return of the Jedi | 1983 |

Web site

<http://www.starwars.com/>

Shopping list for question 6

Make sure to get answers to each of the questions below to receive full credit for this question.

your name

| Store-related questions | Your answers |
|---|--------------|
| Name of store: | |
| Location of store: | |
| Phone number of store: | |
| Name of salesman who helped you (if any): | |

| Hardware-related questions | Your answers |
|--|--------------|
| Brand of computer: | |
| Desktop or laptop model: | |
| Speed of CPU (in MHz): | |
| Type of CPU (K6-2, Pentium II, PowerPC, <i>etc.</i>): | |
| Secondary storage device #1: | |
| Secondary storage device #2: | |
| Secondary storage device #3: | |
| Amount of RAM: | |
| Type of RAM (EDO, SDRAM, <i>etc.</i>): | |

shopping list continues on opposite side...

| Hardware-related questions continued... | Your answers |
|--|--------------|
| Amount of level-1 cache (if you can find out): | |
| Amount of level-2 cache: | |
| Type of sound card (built-in, SoundBlaster, <i>etc.</i>): | |
| Speed of modem: | |
| Brand/model of modem: | |
| Internal or external modem: | |
| Advertised size of monitor: | |
| <i>Viewable</i> size of monitor: | |
| Dot pitch of monitor: | |
| Brand/model of monitor: | |
| Amount of video RAM (VRAM) in computer: | |
| Speed of printer (ppm): | |
| Brand/model of printer: | |

| Software-related questions | Your answers |
|-------------------------------|--------------|
| Operating system: | |
| Word processing program: | |
| Game: | |
| Other program of your choice: | |

