Computer Histories -- First Year Seminar 420:029:012 -- Fall 2013 Essays - Final Version 09/09/13

Essay 1 - People, Place, or Thing - Due October 21

Choose two of the 100 computing objects - people, places or things - that we studied in class and compare and contrast their historical significance

- 1. What are the objects and what did they do?
- 2. Why do they interest you and / or impress you?
- 3. Currently, which is felt to have had the most historical significance and why? In the future, which do <u>you</u> think will be felt to have the most historical significance and why?

The essay should consist of 5 paragraphs: an introductory paragraph, 3 body paragraphs, and a conclusion paragraph. The topic sentence of each body paragraph should address a question and be followed by 3-4 supporting points / sentences in each paragraph.

Note: I need to approve your two objects before you begin to write, to ensure you are on the right track.

Essay 2 - Computing Visionary Analysis - Due November 18

Choose one of the following computing visionary papers and analyze it through addressing the following questions:

- 1. What was its vision of the future?
- 2. What part of the vision came true?
- 3. What part of the vision did not come true and why not?

The essay should consist of 5 paragraphs: an introductory paragraph, 3 body paragraphs, and a conclusion paragraph. The topic sentence of each body paragraph should address a question and be followed by 3-4 supporting points / sentences in each paragraph.

Papers that can be chosen include the following and will be made available for download on the class private Facebook group:

Sketch of the Analytical Engine Invented by Charles Babbage, With Notes Upon the Memoir by Ada, Countess of Lovelace (1842) – describes what a computer is and what it can do

As We May Think by Vannevar Bush (1945) - describes a world of networked information

Man-Computer Symbiosis by JCR Licklider (1963) – describes how computers could augment human thinking power

Sketchpad: A Man Machine Graphical Communication System by Ivan Sutherland (1963) – first description of computer graphics Towards Augmenting the Human Intellect and Boosting Our Collective IQ by Douglas Engelbart (1960's work summarized in 2005) –

describes how computers can be harnessed to help man

The Computer as a Communications Device by JCR Licklider and Robert Taylor (1969) - describes the vision for the ARPANet, predecessor of the Internet

Personal Dynamic Media by Alan Kay and Adele Goldberg (1977) – describes how computers can be the ultimate educational tool Xanalogical Structure, Needed Now More than Ever: Parallel Documents, Deep Links to Content, Deep Versioning and Deep Re-Use by Thedor Holm Nelson (1970's work summarized in 2000) – describes his design for the Xanadu hypertext system, the predecessor of the World Wide Web

Essay 3 - Startup Simulation Reflections - Due December 9

Answer the following questions:

- 1. What exactly was your job and what did you contribute to the Startup simulation?
- 2. Describe the general principles and concepts you used to design, construct, test, refine and market your app
- 3. What was your opinion of the Startup simulation?
- 4. What surprised you most about the Startup simulation?
- 5. What did you learn from the Startup simulation?

Write a 5 paragraph essay, with each paragraph dedicated to answering one of the questions. The topic sentence of each paragraph should address the question and be followed by 3-4 supporting points / sentences in each paragraph.

Guide to Essay Writing

Essays submitted in the course should be (a) in no larger than a 12 point font, (b) double-spaced, (c) have 1 inch margins all around, (d) no more than 2 pages in length, and (e) submitted in PDF or .doc format to my e-mail address or to myself in class on paper. The essay is due by 11:59 pm on the due date.

Jerry Pournelle on writing:

Once you have learned to write good sentences, sit down and write. When my sons began to write essays -- term papers, originally I suppose -- I told each in turn the same thing. Write everything you can think of about the subject. Everything.

Now go through and list the topic sentence of each paragraph. If you find paragraphs that don't have a topic sentence, you have a problem: fix that. If you don't know what a paragraph is, and have no notion of topic sentences, get that corrected at once. (Just read on.) Once you have that list of topic sentences, decide if that's really the order you want to present the information in. It probably won't be. Organize the way you want it.

Fill in the gaps, expand points that need expanding, and do one final rewrite pass. Voila. If this is a term paper you will probably get an A if you knew anything at all about the subject. If you're writing for sale, you probably need more feel for how such things are organized in the publication you are aiming for. Study your market. But recall the technique: it will serve you well for a long time.

On Paragraphs: I once had to tell a co-author (Not Niven) what a paragraph was. He kept handing me material that was dramatic but paragraphed horribly. Finally I asked what he thought he was doing, and he confessed that no one had ever taught him what a paragraph is.

"A paragraph," I said, "is a group of sentences organized around one complete thought which is stated in the topic sentence."

It was as if a light had appeared his head. He now paragraphs well. Of course in fiction, characters don't always speak in paragraphs, nor do they organize what they are saying very coherently; still, you will find that characters in fiction do and must speak a lot more coherently than people do in real life. Real conversation transcribed is sometimes incomprehensible, usually ungrammatical, and often boring.