AP Computer Science Principles Summer Assignment: Mrs. Whitlock, G127

Your summer assignment consists of four parts will count as your first test grade. This test will be weighted at 50% of a regular test grade. All work should be hand written and submitted by Friday, August 11, 2017. The in class assessment (part 4) will also be on Friday, August 11th.

Please email me for any questions (whitlock@fultonschools.org**) or post a comment on the discussions section of** www.cswithwhitlock.com

Part I: You will read Chapter 1 from the book, _Blown to Bits,_ by Abelson, Ledeen and Lewis and answer the attached questions. (20 points)

> This book is available as a free download from http://www.bitsbook.com/wp-content/uploads/2008/12/B2B_3.pdf or you can download one chapter at a time from http://www.bitsbook.com/excerpts/
>
> You can also check out a hardcopy of the book from me during the last week of school
>
> The questions are on page 4 of this document.
>
> ****See notes on written responses on page 3**

Part II: Using the APCSP course description, answer the questions on page 5 of this document (15 points)

> The course description can be found at: https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf
>
> ****See notes on written responses on page 3**

Part III: Using the APCSP course description, make a vocabulary list of concepts that we will cover this year. (15 pts)

> The course description can be found at: https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf
>
> **Focus on pages 12 – 38 only**
>
> **Read through the Enduring understandings, objectives and essential knowledge statements that we will cover this year. As you read through, make a list of vocabulary words/phrases that you feel are important for the course. You do NOT have to write definitions of these words. I just want a working list of terms.**

Part IV: In class assessment on 8/11/17 (50 points)

> **On Friday, August 11, 2017, you will have an in class assessment that will be worth 50 points of the test grade. This portion will be a combination of multiple choice questions and short answer questions from Part 1 and Part II.**

Summer Assignment Rubric: AP Computer Science Principles; Due 8/11/17

Name: _____   Score: _____

Task	Due Date	Available points	Earned Points
Part I: Chp 1 questions from Blown to bits	8/11/17	20	
Part II: Course description questions	8/11/17	15	
Part III: Vocabulary list from course description	8/11/17	15	
Part IV: MC and short answer in class assessment on Parts I and II	8/11/17	50	
	Total available	100	
	Total Points earned For Test 1		

Notes on written responses:

Technical writing is a large part of APCSP. I expect all written assignments to be in complete sentences, use correct grammar and use correct punctuation. I also expect well designed, clear, concise answers with supporting details.

Sample prompt: "Give at least one specific example of an aspect or experience in your personal life that is related to the chapter."

Example of a poor response:

I used search engines all the time.

Example of an AP level response:

The authors center this chapter on how search engines are manipulated to serve government and political party's wishes and ideals. They explain how a Google search for "democracy" yields different results in China versus the United States. Obviously both countries have very different connotations of democracy, and they want people to think the way they do. So, the same Google search alters depending on the zone and country we live in. I personally saw this during my trip to India. In the U.S, I had searched up information about Jayalalitha, an Indian central minister. The readings were generally neutral, exposing the good and bad of her life. However, when I opened the same search in India, almost all of the articles listed were highly biased, exposing only the good in her. Thus, country matters, and I learnt that even Google is subject to political strategies.

Part I: Blown to Bits, Chapter 1 questions

Read Chapter One and answer the following questions. Answers must be handwritten and labeled on a separate piece of paper.

1. What happened to Tanya Rider?

2. How can cell phones be used to track your location?

3. What conflicting factors delayed Tanya's rescue?

The authors introduce 7 separate **Koans** – truths- about digital information technology. Describe what each Koan means AND give a specific example of how each concept relates to you personally.

4. Koan #1: "It's All Just Bits."
5. Koan #2: Perfection is Normal
6. Koan #3: There is Want in the Midst of Plenty
7. Koan #4: Processing is Power
8. Koan #5: More of the Same can be a Whole New Thing
9. Koan #6: Nothing Goes Away
10. Koan #7: Bits Move Faster than Thought

11. The authors conclude the chapter with the argument that…
    a. Technology *per se* is neither good nor bad, and
    b. New technologies usually mean new opportunities and new challenges.

    To illustrate these concepts, research and answer these questions…

    What was the Arab Spring?

    Who is Megan Meier?

    Describe the role that social media played in both the Arab Spring and with Megan Meier.

Part III: Course Description questions. Answers must be handwritten and labeled on a separate piece of paper.

Course description can be found at: https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf

1. How is the APCSP course assessed? How many parts are there? Give a brief description of each part and the associated percentage of the overall score that each part represents.

2. Identify and describe each of the computational thinking practices that we will practice in APCSP.

3. Identify and describe the seven Big Ideas of APCSP.

4. Identify and describe the steps involved in the development process. Be sure to discuss the iterative and cyclic nature of this process.

Part IV: Vocabulary list of important terms --- handwritten and labeled on a separate piece of paper.

Use the course description which can be found at: https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf

Focus on pages 12 – 38 only

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