AP Computer Science Principles Summer Assignment 2017

Dear Future AP Computer Science Principles Student:

Welcome to AP CSP! I am eagerly anticipating a great year of Computer Science Principles. In order to ensure the best start for everyone next year and to give us more time with the programming task, you will have to complete work this summer.

Computing has transformed our lives in so many ways. Mobile computing, where we are constantly connected to others and to the world via our mobile devices, is challenging us right now to come with new norms about privacy, security, the ownership or openness of data and information, and other issues. Like any technology, mobile computing has both positive and negative impacts. We need to reflect on these impacts in general and we also think about the impacts we will create as we build our own mobile apps.

One way we will be addressing these issues in this course is by reading and discussing **Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion.** This book is available entirely online with a separate PDF file for each chapter. You can access the website through the link below. Save it in your phone/tablet or other e-reader device so you can access it anywhere:

http://www.bitsbook.com/excerpts

YOU ONLY NEED TO READ CHAPTERS 1 through 6. Note that throughout the year, you will be given quizzes on the vocabulary and other content from this book. In addition, your midterm will include a significant amount of material from this book. For this reason, while you are reading, I am requiring you to complete the attached vocabulary list and double entry journal sheet for chapters 1 through 6. Define each of the vocabulary term in your own words. Simply looking up a definition and copying and pasting it will not earn you any credit. I HIGHLY recommend that you spread out the reading over the summer. Do not try to complete it all in the final week of summer. CSP takes time to process and grasp at a level necessary for success in AP CSP. Remember, AP CSP is a college level

course. Taking a college level course in high school is difficult, requires dedication, and is a great investment in your education so prepare yourself and arrive ready to learn. This summer assignment is due Sunday August 13th by 11:59 pm. **No late submissions will be accepted for any reason.** Email your completed assignment to AForsman@pasco.k12.fl.us.

Have a great summer and enjoy the CSP.

Mr. Forsman

Vocabulary Terms

Chapter 1:

Bit, Backlist, Character, Cyberspace, Data Center, Data, Data Network, Disk Drive, Intellectual Property, Moore's Law, Network Processor, Social Networking Whitelist

Chapter 2: Ad Hoc, Database, Data Aggregation, Data Mining, Data Repository, Data Sources, Digital Detritus, Dossier, EDR, Encode Encryption, IP Address, Metadata, Query, RFID

Chapter 3:

Algorithm, Analog, ASCII, Cloud Computing, Cryptography, Digital, Digital Signal, Processing, Download, Lossless Compression, Lossy Compression, Megabyte, Megapixels, Modeling, OCR, Pixels, Raster, Render, Spam

Chapter 4:

Background, Binary, Bot, Cache, Firewall, Foreground, HTML, URL

Chapter 5:

AES Certification, Authority, Ciphertext, DES, Decryption, Encryption, Packet

Chapter 6:

Centralized Systems, Commons, DRAM, DRM, Flooding, Gigabyte, Storage, TPM

Double-Entry Journal (Chapter 1)

Directions: As you read, right down four ideas from this part of the chapter that you believe are critically important to this topic. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

The Text (Quote or Summary) Page: 1.

3.

4.

My Reaction to the Text:

Double-Entry Journal (Chapter 2)

The Text (Quote or Summary) Page: 1.

2.

3.

4.

My Reaction to the Text:

Double-Entry Journal (Chapter 3) The Text (Quote or Summary) Page: 1.

2.

3.

4.

My Reaction to the Text:

Double-Entry Journal (Chapter 4) The Text (Quote or Summary) Page:

1.

2.

3.

4.

My Reaction to the Text:

Double-Entry Journal (Chapter 5) The Text (Quote or Summary) Page: 1.

2.

3.

4.

My Reaction to the Text:

Double-Entry Journal (Chapter 6) The Text (Quote or Summary) Page: 1.

2.

3.

4.

My Reaction to the Text: