The Types of Software

The goal of this assignment is to ensure you have a clear understanding of the 4 types of software:

* Operating System
* Applications
* Utilities
* Malicious programs

Part 1: Operating Systems

1. The top 4 Operating Systems for Personal Computers are a Windows OS, a Mac OS, Chrome OS and a Linux OS. Search the Internet and fill in the following chart:

| Operating System | Company that Makes It | Latest Version Number or Name |
| --- | --- | --- |
| Windows |  |  |
| Mac |  |  |
| Chrome |  |  |
| Linux | Linux is made and sold by many companies. Name one: |  |

2. Find a recent statistic that shows the Operating System market share of each company for Personal Computers. (Market share is the percentage of all operating systems for each company).:

Year of statistic: Source site:

Microsoft Windows (all versions combined):

Mac:

Chrome OS:

Others combined:

3. a) Find the market share statistics for the top 3 Smartphone operating systems. Make sure the stats are from within the last 2 year as Smartphone percentages change quickly.

1st:

2nd:

3rd:

b) Do any of the stats from question 2 or 3 surprise you? Why or why not?

4. Find a website that discusses the *roles or the jobs* of the Operating System in language that you understand. Copy and paste 1 sentence each describing 3 of those roles below. The sentences you paste must be in plain English so that you understand them.

Source:

Role 1:

Role 2:

Role 3:

Part 2: Applications

5. What are the 3 *local* applications or utilities you use most often on a PC? (Local means the program is downloaded/installed on your hard drive.) Use your home computer or the school computers if you do not use a computer at home.

6. Find the top 3 *downloaded* apps from either Apple or Android stores in 2016.

Which did you look up, Apple or Android:

1st:

2nd:

3rd:

7. **If you have a smartphone**: What is one realistic improvement you would make to any of the apps you use on your phone. State the name of the app, what you would improve and why.  **If you do not have one**: Describe one app that you think people use too much. State the name of the app and why you think so.

8. Define the term ALGORITHM as it relates to computer software.

Part 3: Malicious Software

9. Explain two ways unauthorized access to computing resources could be gained using examples of Malicious Software.

10. If your computing resource is compromised, what are 2-3 ways it can be misused?

11. Find a famous virus from computer history. Then fill in the following:

* Name:
* Year:
* How it was spread:
* Effect on victims:

12. Create a subject line and a few lines of body text that you think would fool someone (if you were a bad guy) into falling for a phishing scam.

| To: you@share.epsb.ca |
| --- |
| Subject: |
| Body: |

13. Based on your own Internet useage, which type of malware would you most likely fall victim too if you were not careful? Explain something you do that makes you susceptible.

14. What are 3 things you can do to help protect your Computing Resources?

Part 4: Utilities

15. Utilities are programs that are needed but run either without you being an active participant or only when you need to do repairs. Define what each of the following utilities do. Copying and pasting is allowed.

a. Disk Defragmenter

b. Disk Cleanup

c. Virus Scanner

D. Zipping software