

EN.540.635 “Software Carpentry”

Weekly Challenge 1 - Design a Computer

Now that you have a background of what a computer is, and how it works, try designing one yourself! Note, this assignment is not to purchase and build one, but simply to find all the parts. As a challenge, try and “defeat” one of the top selling devices on the market (such as the Macbook Pro, Dell XPS, Razer Blade, or even your own laptop). That is, for the same price or less, find parts that would make your machine as, if not more, powerful than the one you’re comparing against. Note, you need the basics listed below, but can add in whatever extras you want! **Your grade will depend on if you’ve found all the required parts for your computer to properly function and if the following criteria are met:**

- Processor Socket on Motherboard?
- Power Source can power everything?
- Graphics Card fits on the board?
- Everything fits in the case?
- Motherboard supports that much RAM? How about the OS?
- Enough ports for peripherals?

You can use the following websites (or others) to find parts for this challenge:

- <https://www.newegg.com/>
- <https://www.amazon.com/>
- <http://www.microcenter.com/>
- <http://www.tigerdirect.com/>

Please submit a PDF file to the appropriate assignment in Canvas. The PDF should contain all the parts for your computer along with working links, similar in format to the example shown below.

EXAMPLE

Compare against this computer: Razer Blade Stealth		
Part	Cost	Link
Case	\$65	link
Power Source	\$78	link
???????????		link
???????????		link
???????????		link
???????????		link
???????????		link
???????????		link
???????????		link
???????????		link
Total Cost: \$????		
Name your computer: My Awesome Machine		