Team: AsianCookingOil

Roster: Ryan Lin, Jonathan Gu, Saif Elmosalami

IntroCs pd 6

i0lab1

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Selections: Tyrone Website more info:

https://design.ncsu.edu/it/kb/architecture-computer-requirements/ttps://design.ncsu.edu/it/kb/architecture-computer-requirements/

Requirements for Autocad 2020 link:

https://knowledge.autodesk.com/support/autocad/learn-explore/caas/sfdcarticles/System-requirements-for-AutoCAD-2020-including-Specialized-Toolsets.html

1. CPU: Intel Core i9-9900K 3.6 GHz 8-Core Processor



Cost: \$504.99

Description: The Cpu stands for the central processing unit, which is basically the brain of the computer. Which is a pretty significant and important part of the computer. We have decided to purchase an Intel core i9 core processor. After some research especially by looking at some of the recommendations that architect schools and other professional architects are recommending we have arrived at the conclusion that a cpu of at least i7 is recommended. And after looking over the price we have decided to spend some more money and invest in an intel i9. Especially since our laptop is supposed to be built to last a long time, thus we want our Cpu to be as up to date and as new as possible.

2. CPU Cooler: Corsair H100i RGB PLATINUM 75 CFM Liquid CPU Cooler



Cost: 159.99

Description: We have allocated a lot of our money for a durable and useful cooler. After reading some of the review for our CPU, a common complaint about the intel core i9 central processing unit is that it tends to overheat very quickly. Due to this we have decided to invest a bit more in a cooler with a high rpm. RPM stands for rotation per minute and compared with other coolers it has a rather high rotation per minute. However we do note that there is a higher noise level when compared to other CPUs with lower rotation per minute.

3. Motherboard: Asus ROG MAXIMUS XI HERO ATX LGA1151 Motherboard



Cost: \$279.99

Description: We choose this motherboard after much consideration of the requirements for running Autocad 2020 smoothly. Its socket for the CPU is LGA1151 which is compatible with our current CPU. Additionally, it has a max memory of 124GB which is more than enough for most softwares including Autocad 2020. It doesn't contain a wireless network but our group got that covered by buying a separate wireless network adapter.

4. Memory: G.Skill Trident Z RGB 32 GB (2 x 16 GB) DDR4-3600 Memory



Cost: 174.99

Description: This RAM contains a total of 32 GB of ram. This is an incredible amount of storage. This might be necessary for the high storage that auto cad may be using. In addition as after looking over some of our leftover money we realized we still have quite a lot to spare so we decide to indulge a bit more on a good ram. As a good ram is necessary for temporary storage of data we feel with graphic designers constantly designing new products, having more temporary would be necessary to make sure the computer does not lag.

5. Storage: Samsung 970 Evo 1 TB M.2-2280 NVME Solid State Drive



Cost: \$179.99

Description: It has one TB amount of storage. One TB is worth 1,000 GB and it is enough to run Autocad 2020 and much more. Additionally, it has a cache of 1024 MB such that it will arrive to search results much faster.

6. Case: Phanteks Eclipse P400 ATX Mid Tower Case



Cost: \$71.98

Description: This case has a volume of 1.621 ft cubed with dimensions 18.504" x 8.268" x 18.307". This amount of space is enough to fit all the key components inside the case. In addition this case has a cool design and you will be able to see it in the dark. Makes traveling in the dark a lot easier. Not to mention this case is relatively cheap compared to some of the other cases which are priced at over 200 dollars. The clear component also allow us to see if any piece or components of the computer are loose or broken so we can fix it.

7.Power Supply Unit: Corsair RM (2019) 750 W 80+ Gold Certified Fully Modular ATX Power Supply



Cost: \$124.99

Description: A good power supply unit is extremely essential. Its purpose is to convert AC into DC. This PSU has an efficiency rating of 80+ Gold. Basically it means there is less energy lost and the speed at which it heats up is slower. This is extremely important because many a good PSU insures less of a chance of random reset, freeze, and harm dealt to the CPU.

8. Operating System: Microsoft Windows 10 Pro OEM 64-bit



Cost: \$139.99

Description: Our group took a while to think about what type of operating system for our Autocad guy and we decided Windows is probably the most familiar brand there is. Additionally, it is of a relatively better price for its purpose compared to other types of operating system. Windows is basic, easy to use and well made. So navigating around it will be simple and less time consuming.

9. Software: Microsoft Office 365 Home (1 Year Subscription) - 6 Users Software



Cost: \$99.99

10. Wired Network Adapter: TP-Link TG-3468 PCle x1 1000 Mbit/s Network Adapter



Cost: \$14.99

This wired network adapter is like any other. It does the job and it is required to plug in ethernet and in addition allow the computer to connect to other servers.

11. Wireless Network Adapter: Gigabyte GC-WB867D-I PCIe x1 802.11a/b/g/n/ac Wi-Fi Adapter



Cost: \$42.90

Description: Have a high speed connection up to 867 mbps.

12.Monitor: Dell S2719DGF 27.0" 2560x1440 155 Hz Monitor



Cost: \$347.70

This monitor has 155 hertz, this means in 1 second the screen refreshes 155 times giving a smooth visuals. In addition it has an adjustable height for the taller folks. The monitor is relatively large which means it will display the product that our architect is designing in great detail. This allows him to make editation easily.

14. Keyboard: Redragon K551-RGB VARA Wired Standard Keyboard



Cost: \$49.99

Description: It has a cherry MX switch giving the keys a more tactile touch. A mouse is not

included.

15. Mouse: Logitech G502 HERO Wired Optical Mouse



Cost: \$46.99

Description: This mouse has that feel a true autocad user would have. In addition this mouse has several buttons which can increase the hot keys and make editing easier. The mouse has a nice feel, and smooth rotation of the roller.

16.External Storage: Seagate Expansion 4 TB External Hard Drive



Cost: \$89.00 Description:

This TB storage is plenty for the person using this computer. This is simply extra space for the architect to back up his files.

The total of our computer comes up to 2324.79 (Note this does not include the price of Autocad2020)