



## **Laboratory Activity #02b: Custom PC Build**

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### **Introduction**

After being able to experience what it is like to assemble a PC, your next task is to search for components online to assemble your own custom PC build, given a particular budget. Take note that not all computer components are compatible with each other. Therefore, you also have to justify what specifications of a particular component make it compatible with the others. The budgets for the class can be found in the link given at the assignment page of this activity in AnimoSpace.

To guide you with this activity, we have selected a really good instructional video from YouTube for you to watch. Remember to take note of the various specific components that Justin Robey (the guy in the video) chooses, as well as the reasoning and alternatives that he provides for choosing those components. Here is the link below:

[How to Build a PC! Step-by-step \(2021 Edition\) | Robeytech](#)

To complete this activity, you will be using a website called [PCPartPicker](#), which is a website that provides a selection of computer parts, compatibility, and a pricing guide for DIY computer builders using their System Builder. This allows you to simulate different computer builds for every kind of user. Use the System Builder as a platform to select and verify the compatibility of your chosen components. Don't forget to register for a free account, so that you can save your builds.

Although the system builder already includes prices for some of the items, please take note that this activity requires you to choose components that are available from local suppliers. You have to canvas the components from various available information from the suppliers that show their prices (in PHP). Note that components from Lazada or Shopee are not recommended unless it comes from an accredited vendor or store. Here are some local websites that you can use as an example, as well as suppliers that you can use for your reference.

Supplier/Vendor	Website
PC Express	<a href="https://pcx.com.ph/price-lists/"><u>https://pcx.com.ph/price-lists/</u></a>
PC Hub	<a href="http://pchubpricelist.online/"><u>http://pchubpricelist.online/</u></a>

VillMan Computers	<a href="https://villman.com/">https://villman.com/</a>
Asianic	<a href="https://www.asianic.com.ph/">https://www.asianic.com.ph/</a>
PC Gilmore	<a href="https://www.pcgilmore.com.ph/">https://www.pcgilmore.com.ph/</a>
DynaQuest PC	<a href="https://dynaquestpc.com/">https://dynaquestpc.com/</a>
Tipid PC	<a href="https://tipidpc.com/">https://tipidpc.com/</a>

After completing your build in the System Builder, where the components are locally sourced, save your build and place the link in the appropriate box below. Then, complete the table by providing the necessary information about the components. The selected part should include the brand and model name of the component. Make sure that the reference link leads to the supplier page that shows the price of the component. Lastly, explain what specifications make each component compatible with the others.

Note:

PS: "Cheapest" is not necessarily good! An example is the PC's power supply - some of them have totally FAKE power ratings, and can even blow up when pushed anywhere near their specifications:

<http://www.johnnylucky.org/power-supplies/psu-lemon-list.html>

Not all the component fields need to be filled out. It is possible to opt out against including certain components as long as the reasoning behind the decision is justified. For example, a CPU cooler may not be included if it is decided that the stock cooler included in the CPU is to be used instead.

## PC Build

Budget given for the build: 52,665.00

Save your build and put the link here:

<https://ph.pcpartpicker.com/user/DanielClemente/saved/GYt/wP>

Component	Selected Part	Quantity	Price in Php
CPU	AMD RYZEN 5 3600 (3.6GHZ) MPK PROCESSOR	1	5500
Reference Link:	<a href="https://pcx.com.ph/shop/amd-ryzen-5-3600-3-6ghz-mpk-processor/">https://pcx.com.ph/shop/amd-ryzen-5-3600-3-6ghz-mpk-processor/</a>		
Compatibility:	Compatible		
CPU Cooler	COOLER MASTER Hyper 212 ARGB Fan (RR-2V2L-18PA-R1) CPU Cooler (Black)	1	1800
Reference Link:	<a href="https://pcx.com.ph/shop/cooler-master-hyper-212-argb-fan-rr-2v2l-18pa-r1-cpu-cooler-black/">https://pcx.com.ph/shop/cooler-master-hyper-212-argb-fan-rr-2v2l-18pa-r1-cpu-cooler-black/</a>		

Compatibility:			
Motherboard	MSI B450 TOMAHAWK MAX (AM4) MOTHERBOARD	1	6250
Reference Link:	<a href="https://dynaquestpc.com/products/msi-b450-tomahawk-max">https://dynaquestpc.com/products/msi-b450-tomahawk-max</a>		
Compatibility:	Compatible		
Computer Case	CORSAIR ICUE 220T RGB AIRFLOW TG MID-TOWER SMART CASE — WHITE 3X120MM CC-9011174-WW	1	5980
Reference Link:	<a href="https://dynaquestpc.com/products/corsair-icue-220t-rgb-airflow-tempered-glass-m-white-cs-cc-9011174-ww">https://dynaquestpc.com/products/corsair-icue-220t-rgb-airflow-tempered-glass-m-white-cs-cc-9011174-ww</a>		
Compatibility:	Compatible		
Memory/RAM	Corsair Vengeance RGB RS 16GB (2X8GB) 3600MHZ High-Performance DDR4 DRAM Memory Kit	1	4595
Reference Link:	<a href="https://ecommerce.datablitz.com.ph/products/corsair-vengeance-rgb-rs-16gb-2x8gb-3600mhz-high-performance-ddr4-dram-memory-kit">https://ecommerce.datablitz.com.ph/products/corsair-vengeance-rgb-rs-16gb-2x8gb-3600mhz-high-performance-ddr4-dram-memory-kit</a>		
Compatibility:	Compatible		
Storage 1	Samsung 500GB 970 EVO PLUS PCIE NVME M.2 (MZ-V7S500BW) Solid State Drive	1	4500
Reference Link:	<a href="https://pcx.com.ph/shop/samsung-500gb-970-evo-plus/">https://pcx.com.ph/shop/samsung-500gb-970-evo-plus/</a>		
Compatibility:	Compatible		
Storage 2			
Reference Link:			
Compatibility:			
Power Supply	Corsair RM750 - 750 Watt 80 PLUS Gold Certified Fully Modular PSU	1	7499
Reference Link:	<a href="https://villman.com/Product-Detail/corsair_rm750--750-watt-80-plus-gold-certified-fully-modular-psu">https://villman.com/Product-Detail/corsair_rm750--750-watt-80-plus-gold-certified-fully-modular-psu</a>		
Compatibility:	Compatible		
Graphics Card	MSI GeForce GTX 1660 SUPER™ VENTUS XS OC Graphics Card	1	16400
Reference Link:	<a href="https://pcx.com.ph/shop/msi-geforce-gtx-1660-super-ventus-xs-oc-graphics-card/">https://pcx.com.ph/shop/msi-geforce-gtx-1660-super-ventus-xs-oc-graphics-card/</a>		
Compatibility:	Compatible		
Computer Case Fans			
Reference Link:			
Compatibility:			

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<b>Total Price:</b>	52,524
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Provide a short introduction of your build as well as your justification. Explain how you allocated your budget into the different components. You can also include discussions and information with regards to the components as well.

My pc build is a 52k budget gaming pc that run multiple high-end games. I allocated my budget mostly in the cpu and gpu as I wanted to build a budget gaming pc. I cut down on things like RAM and storage to fit my budget.

Summarize your learnings and findings by providing a conclusion. You may discuss some realizations such as with regards to the prices from various stores, difficulty of canvassing components, understanding what each component does, or determining viable specifications with regards to possible user requirements and so on.

I learned abit more on PC building as it requires a of time and research to build PCs. It took me a while to find the parts I need for my build since I had to use local retailers to build my PC and not through online shopping websites such as Lazada and Shopee. Although, the task was a bit challenging due to the allocated budget given to me, I was able to create a budget gaming pc under 52k pesos.

After completing the activity don't forget to export the PCPartPicker webpages of your builds as a PDF. Then, merge them in this laboratory activity as additional pages after the end of this document.

Have fun!









## Criteria for Grading

Question/Task Location	Possible Points	Earned Points
Selected part: Brand name and model (10 components, 1 point each)	10	
Selected part: Price and Reference Link (10 components, 1 point each)	10	
Selected part: Compatibility (10 components, 2 point each)	20	
Build Introduction and Justification	5	
Conclusion	5	
<b>Total</b>	<b>50</b>	

Note: Not all components need to be included. Some components can be omitted as long as it is justified.

### 50k Budget Gaming PC build

Edit Part List
Edit Details
Delete

Component	Selection	Price
<a>CPU</a>	 <b>AMD Ryzen 5 3600 3.6 GHz 6-Core Processor</b>	<b>P9102.63</b> <a>Buy</a>
<a>CPU Cooler</a>	 <b>Cooler Master Hyper 212 RGB Black Edition 57.3 CFM CPU Cooler</b>	No Prices Available <a>Buy</a>
<a>Motherboard</a>	 <b>MSI B450 TOMAHAWK MAX ATX AM4 Motherboard</b>	No Prices Available <a>Buy</a>
<a>Memory</a>	 <b>Corsair Vengeance RGB RS 16 GB (2 x 8 GB) DDR4-3600 CL18 Memory</b>	<b>P6404.60</b> <a>Buy</a>
<a>Storage</a>	 <b>Samsung 970 Evo Plus 500 GB M.2-2280 PCIe 3.0 X4 NVME Solid State Drive</b>	<b>P6503.40</b> <a>Buy</a>
<a>Video Card</a>	 <b>MSI GAMING X GeForce GTX 1660 SUPER 6 GB Video Card</b>	No Prices Available <a>Buy</a>
<a>Case</a>	 <b>Corsair iCUE 220T RGB Airflow ATX Mid Tower Case</b>	No Prices Available <a>Buy</a>
<a>Power Supply</a>	 <b>Corsair RM750 750 W 80+ Gold Certified Fully Modular ATX Power Supply</b>	No Prices Available <a>Buy</a>