

PC market

# Being a PC connoisseur

## **Why I started to get into PCs?**

I got a free hand me down PC that I refurbished. Then after getting comfortable I went out and bought my own parts for my own.

## **What is the common thing to expect when getting into PCs?**

For the average consumer buying PC parts is to **expensive and complicated** that they settle for a console as it requires no little to no learning curve.

# Experiences as a Buyer and Seller

I wanted to build a PC off refurbished parts to save money and to potentially flip for profit.

Issues faced:

- Overpaying for parts
- Not knowing what to buy for what part
- The difference from current part to latest
- Keeping track of expenses



# Possible solutions with existing software

## Avg. Price Finder

Configure your computer



**\$674.64**  
Average



**\$415.87**  
Lowest



**\$1,000.00**  
Highest

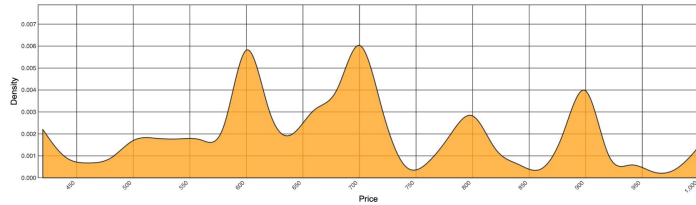


**\$584.13**  
Margin




**\$7.84**  
Postage

Price Distribution Density Plot



## Data table for keeping track of parts

CPU	 AMD Ryzen 7 9800X3D 4.7 GHz 8-Core Processor	\$489.00	Prime	Available soon	\$489.00	amazon.com	Buy
CPU Cooler	+ Choose A CPU Cooler						
Motherboard	+ Choose A Motherboard						
Memory	+ Choose Memory						
Storage	+ Choose Storage						
Video Card	+ Choose A Video Card						
Case	+ Choose A Case						
Power Supply	+ Choose A Power Supply						
Operating System	+ Choose An Operating System						
Monitor	+ Choose A Monitor						
Expansion Cards / Networking	Sound Cards, Wired Network Adapters, Wireless Network Adapters						
Peripherals	Headphones, Keyboards, Mice, Speakers, Webcams						
Accessories / Other	Case Accessories, Case Fans, Fan Controllers, Thermal Compound, External Storage, Optical Drives, UPS Systems						
Total:						<b>\$489.00</b>	Buy From Amazon

# How can it be improved?

- Combine both average price finder and the data chart table.
- For the program to also be able to tell you what's the newest type for the pc part being bought.
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Making it **easier for new PC buyers** to know what to buy without feeling like they have to learn a bunch of new information.

# An example

PC Builds

By Status

All Projects

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New

PC	Status	Cost	Sale	Revenue	Date Sold	
Xtra parts	Overhead	207.42		-207.42		
Micro ATX	In Progress	59.03		-59.03		
Frantec Meshify C	Complete	842.98		-842.98		
	N/A			0.00		
	N/A			0.00		
Antec P183	SOLD	639.23	760	120.77	02/03/2025	
+ New project						
		SUM 1748.66	SUM 760	SUM -988.66		

## Missing Features:

- Average price finder
- Showing what's the latest for the PC part.

# Pseudocode for getting Avg. price using Python

Import files that has data on pc parts and their average price online

Global Variables

```
prompt = 'Enter your PC part: '  
price_prompt = 'How much did you get it for? '  
user_price = 0  
avg_price = 0  
difference = 0
```

FUNCTION Main Function()

```
    Get USER PC item  
    prompt = get_part(prompt, user_price)  
    Printing the Output  
    calculate(prompt, user_price)
```

end FUNCTION

FUNCTION calculate(PROMPT, USER\_PRICE)

```
    prompt, avg_price = find_in_files(prompt, avg_price)  
    difference = user_price - avg_price
```

```
    percentage = calculate the percentage of the increase or decrease of the user_price to the avg_price
```

```
    IF the price is over the avg_price
```

```
        print(difference, percentage)
```

```
        let the user know they're over paying for their item
```

```
    end IF
```

```
    ELIF the price is under the avg_price
```

```
        print(difference, percentage)
```

```
        let the user know their making a good choice
```

```
    end ELIF
```

end FUNCTION

```

FUNCTION get_part(prompt, user_price)
    prompt = get_USER_PART(prompt)
    prompt = get_USER_PRICE(prompt)
end FUNCTION

FUNCTION get_USER_PART(prompt)
    prompt = input(prompt)
    WHILE find_in_files(prompt)
        print 'Item not FOUND!!!'
        repeat question
    end WHILE
    RETURN prompt
end FUNCTION

FUNCTION find_in_files(prompt, avg_price)
    Opening the file in reading
    Look for PC part in file imported and the avgerage price it has
    IF item is found THEN
        RETURN prompt , avg_price
    end IF
    ELIF the item is not found THEN
        Print the ERROR
        RETURN false
    end ELIF
end FUNCTION

FUNCTION get_USER_PRICE(prompt)
    WHILE true DO
        TRY
            prompt = float(input(prompt))
            RETURN prompt
        end TRY
        EXCEPT ValueError
            print 'NOT Readable : Must be a valid Number'
        end EXCEPT
    end WHILE
end FUNCTION

```



# How can this be Achieved?

Having a **front-end Developer** to design the UI with the new added features and also in the form of a table

**Back-end developers** for grabbing the data for the newest parts and the average price for the pc parts. This would need maintenance to update the newest pc parts and average price as the landscape of technology is always growing.



# Further questions to explore

How do you combine front-end and back-end programming?

How do you use servers run your program and for it to be constantly updated?

# Sources

Data table shown in slide 4

<https://pcpartpicker.com/list/>

Graph chart in slide 4

<https://averagefinder.com/averageFinder?Search=Nvidia%20rtx%204070>

Software used to make example in slide 6

<https://www.notion.com/>