

User Manual

1. Project Overview

This is a web-based application called “PC Site”. Users can search, compare and build their custom PC builds by selecting compatible parts. Built with:

- **Frontend:** Vite + React + Typescript
- **Backend:** Django

2. How to run the project:

Requirements:

- Python 3
- Node.js & npm
- Docker
- Git

Backend (Django setup):

```
# 1. Clone the repo
git clone https://github.com/joohneth/pcsite.git
cd backend

# 2. Create and activate virtual environment
python -m venv venv
venv/Scripts/activate # or source venv/bin/activate on Mac

# 3. Install dependencies
pip install -r requirements.txt

# 4. Start the server
python manage.py runserver
```

Frontend:

```
# 1. Navigate to frontend folder
cd frontend

# 2. Install dependencies
```

```
npm install
```

```
# 3. Start development server
```

```
npm run dev
```

Make sure to connect the .env file:

```
MONGODB_CONNECTION_STRING=mongodb+srv://aalassal:ilovedjan3go@pcsite.i1g3eqi  
.mongodb.net/PCSite?retryWrites=true&w=majority&appName=PCSite
```

```
MONGODB_DB_NAME=PCSite
```

```
SECRET_KEY= 2FnIAnlI-5JmeQg:Um89NpP57_7Nw98cKz
```

3. Screenshots of how it should look like:

Running a backend:

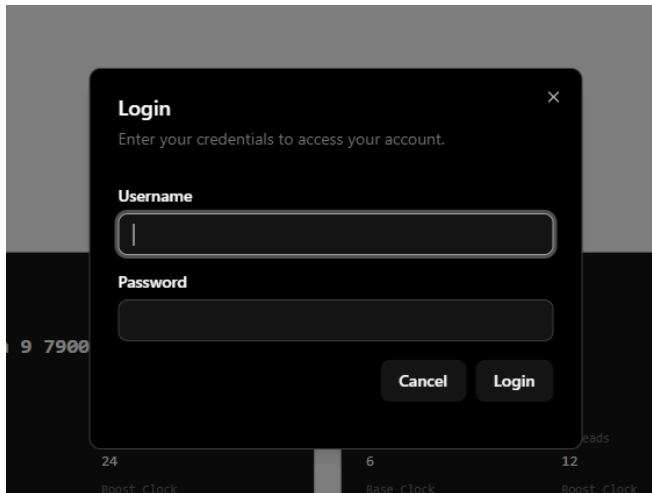
```
○ (venv) PS C:\Users\alikh\Downloads\pcsite-main\pcsite\backend> python manage.py runserver  
Watching for file changes with StatReloader  
Performing system checks...  
  
System check identified no issues (0 silenced).  
April 16, 2025 - 02:07:49  
Django version 4.2.20, using settings 'core.settings'  
Starting development server at http://127.0.0.1:8000/  
Quit the server with CTRL-BREAK.
```

Running a frontend:

```
○ PS C:\Users\alikh\Downloads\pcsite-main\pcsite\frontend> npm run dev  
  
> frontend@0.0.0 dev  
> vite  
  
VITE v6.2.6 ready in 484 ms  
  
→ Local:   http://localhost:5173/  
→ Network: use --host to expose  
→ press h + enter to show help  
□
```

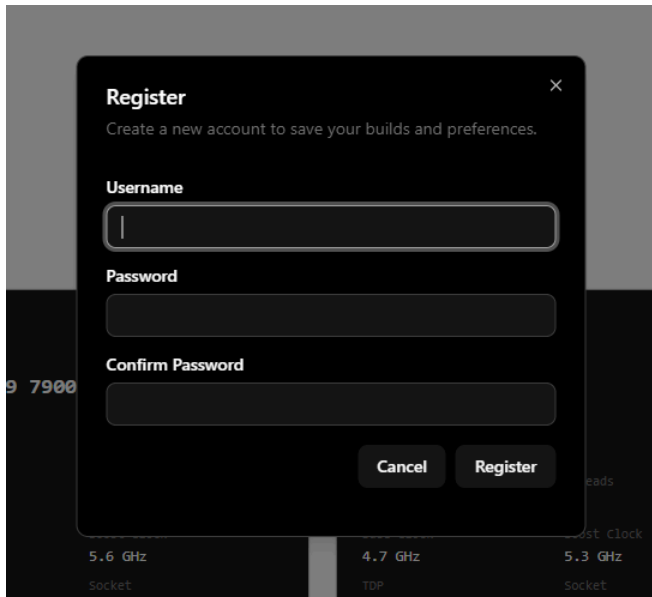
3. User Authentication

- Login



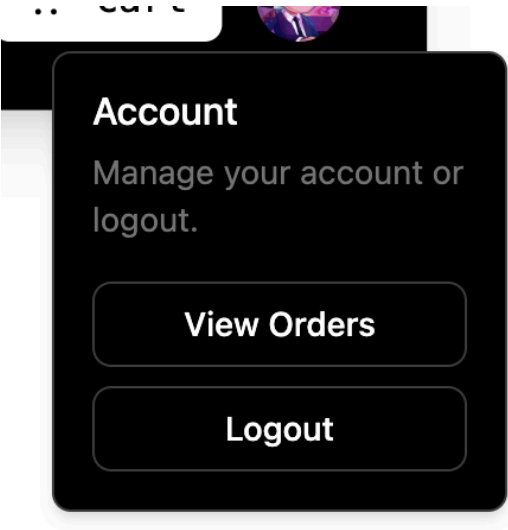
A dark-themed login dialog box with a title bar containing a close button (X). The dialog has a subtitle "Enter your credentials to access your account." Below this are two input fields: "Username" and "Password". At the bottom right are two buttons: "Cancel" and "Login". The background is a blurred screenshot of a system monitor showing various metrics like "9 7900", "24", "6", "12", "Boost Clock", "Base Clock", and "leads".

- Register



A dark-themed register dialog box with a title bar containing a close button (X). The dialog has a subtitle "Create a new account to save your builds and preferences." Below this are three input fields: "Username", "Password", and "Confirm Password". At the bottom right are two buttons: "Cancel" and "Register". The background is a blurred screenshot of a system monitor showing various metrics like "9 7900", "5.6 GHz", "4.7 GHz", "5.3 GHz", "Socket", "TDP", and "Boost Clock".

- Logout



4. Application Features

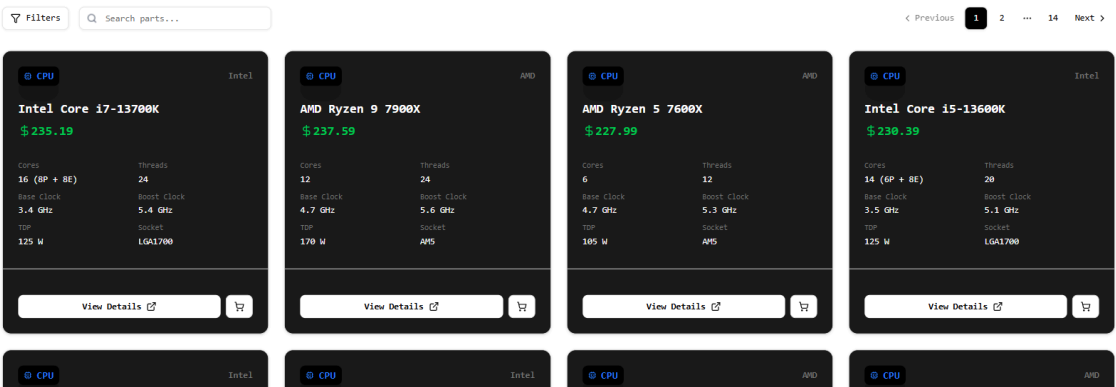
Users can utilize the following features of the website:

- Product Management

- 1. **Browse all parts:** Users can browse for parts of the PC in the main page.



Products



2. Filter by category: Users can filter by categories for specific parts.

- a. When a user
- b. clicks on a “filter” button, he can choose specific “Type”, “Manufacturer”, “Min Price”, “Max Price”.

Filter PC Parts

Set filters to narrow down your PC part search results.

Type

All

Manufacturer

All

Min Price

Min price

Max Price

Max price

Reset

Apply Filters

3. Search by name/specs: Users can search a specific part by its name.

- a. When a user clicks on input bar and finds the part by its name / type.

Filters

Search parts...

4. View part details: Users may view details of the part.

- a. When the user clicks on the button “View Details” on the card, the modal window pops up.

CPU

AMD

AMD Ryzen 5 7600X

\$227.99

AMD introduces the AMD Ryzen 5 7600X, a top-tier cpu engineered for excellence. It features cores of 6. It features threads of 12. It features base clock of 4.7 GHz. It features boost clock of 5.3 GHz. It features thermal design power of 105 W. It features socket of AM5.

Specifications

Cores	Threads
6	12
Base Clock	Boost Clock
4.7 GHz	5.3 GHz
TDP	Socket
105 W	AM5

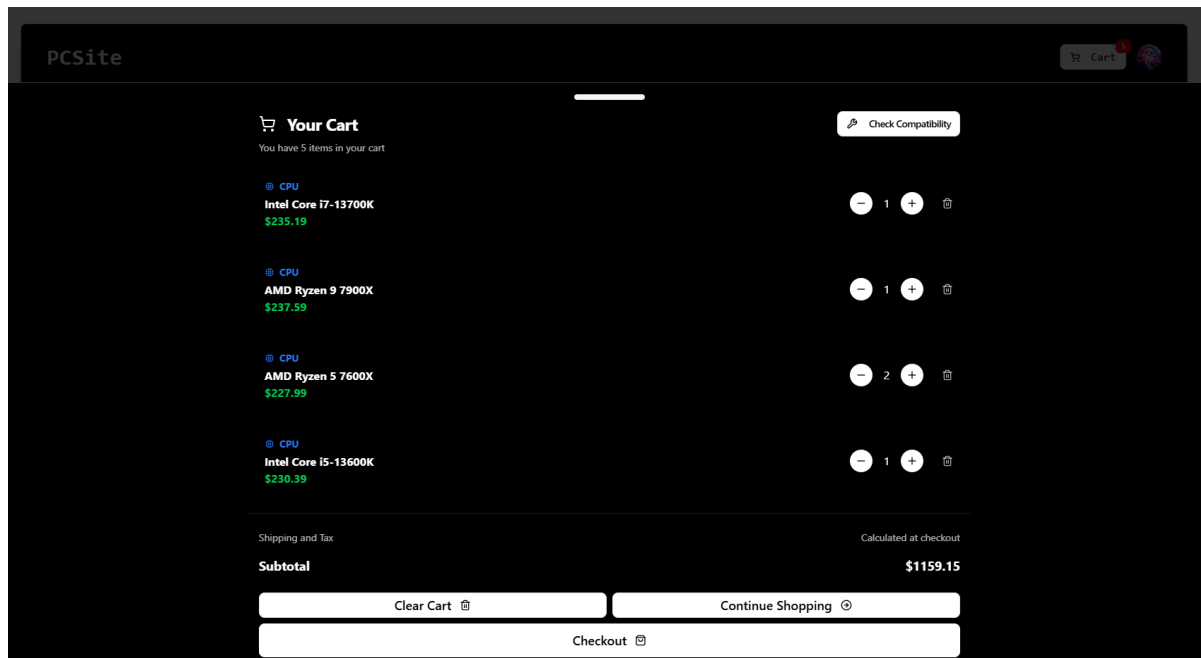
View source

Add to Cart

b.

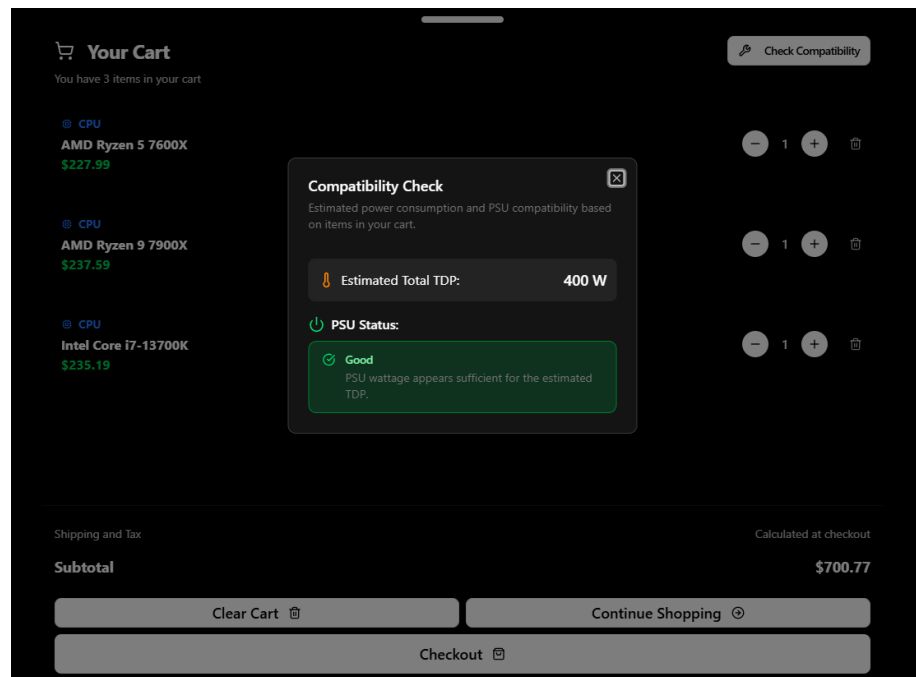
- **Cart System**

1. **Add to cart:** Users are allowed to add to cart any part of the PC.

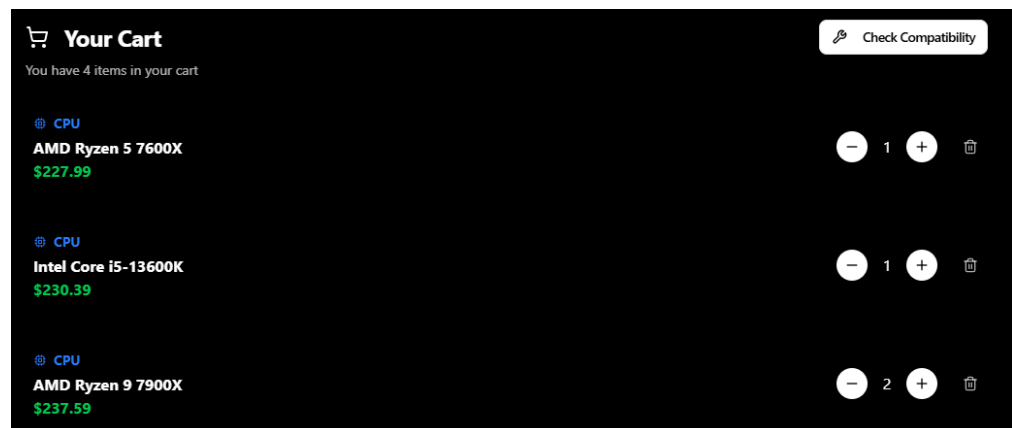


2. **Check compatibility:** Users can check compatibility of the items added based on the wattage and TDP of the items.

- a. The user will receive warnings if the items added to cart are incompatible with each other.



3. **Modify cart:** Users can remove, increase / decrease quantity of the added items based on the compatibility or preference.




- **Checkout System**

- Users can proceed to checkout their items using a secure payment system
- Checkout can be done through credit / debit, also any supported payment provider

Intel Core i7-13700K
CA\$158.00


TEST MODE


Pay with 


Or pay another way

Email

Payment method


☐ Card 

☐  Klarna

☐  Affirm

☐ Securely save my information for 1-click checkout
Pay faster on New business sandbox and everywhere Link is accepted.

Pay


Powered by  | [Terms](#) [Privacy](#)

- Profile

- Users can view and track their order history after successfully checking out.

Products

AMD

 CPU


AMD Ryzen 5 7600X

\$ 227.99

Cores6Threads12


Base Clock4.7 GHzBoost Clock5.3 GHz

TDP105 WSocketAM5

View Details 

AMD

Intel

 CPU

AMD

Orders

View your order history here.

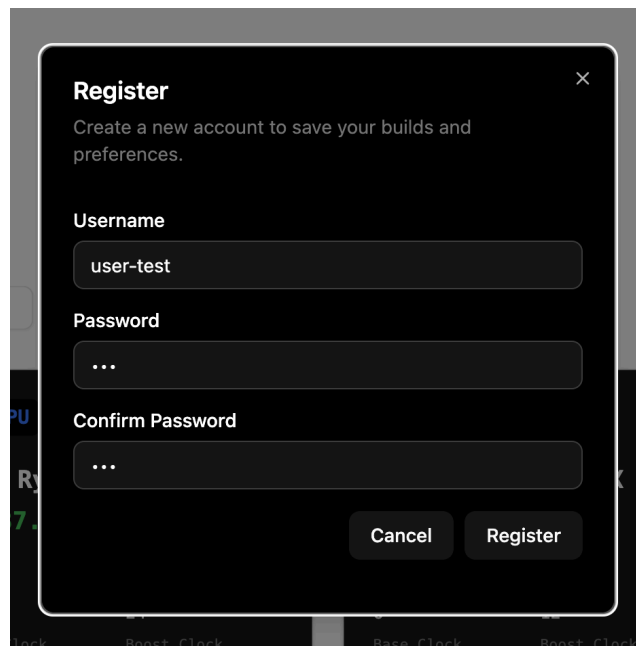
Items	Order ID	Date	Total	
3	ORD-3231	4/16/2025	\$745.75	Details
4	ORD-3042	4/16/2025	\$1214.86	Details

Continue Browsing

5. Testing

After completing step #2, you should be presented with a local web that is expected to run in the following way.

1. Register an account

A dark-themed modal window titled "Register" with a close button (X) in the top right corner. Below the title is a subtitle: "Create a new account to save your builds and preferences." There are three input fields: "Username" containing "user-test", "Password" with three dots, and "Confirm Password" with three dots. At the bottom right are two buttons: "Cancel" and "Register".

Register ×

Create a new account to save your builds and preferences.

Username

user-test

Password

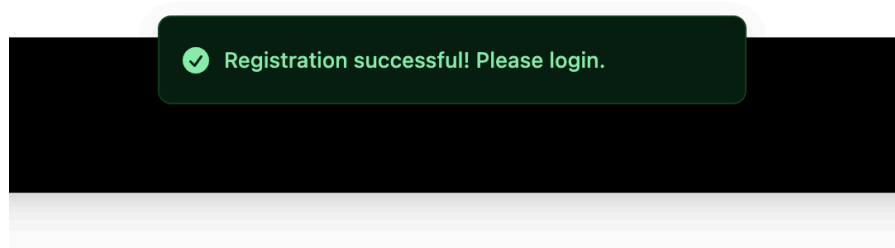
...

Confirm Password

...

Cancel Register

- Once you register an account, the expected outcomes are:
 - Success message will appear

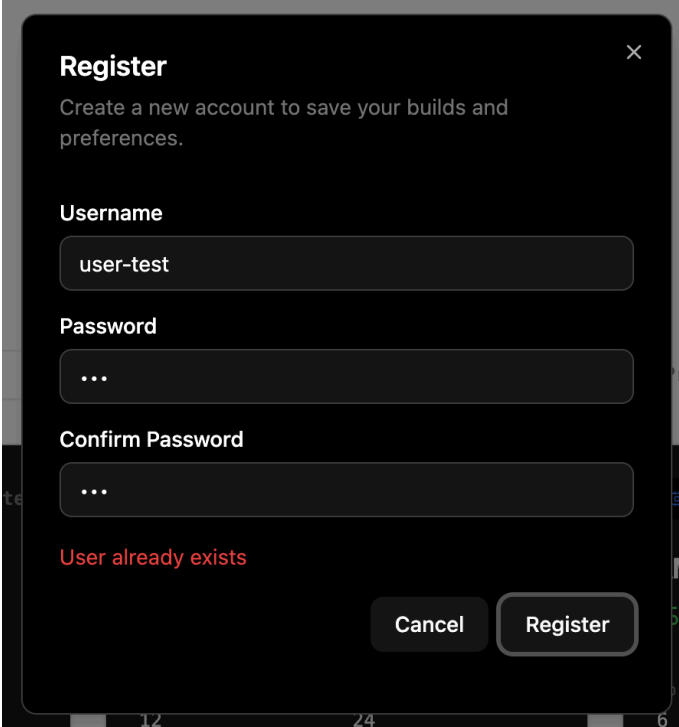


- Your username and an encrypted password will be stored on our database

```

▶ _id: ObjectId('68004a723ebf0d3da71bf312')
  username : "user_test"
  password_hash : "scrypt:32768:8:1$NpbKREpAfryM0gFo$993b4fffc"
✎
```

- You will be navigated to the login section
- Note that if your username is already in our database it will display the following error message:



Register ✕

Create a new account to save your builds and preferences.

Username

user-test

Password

...

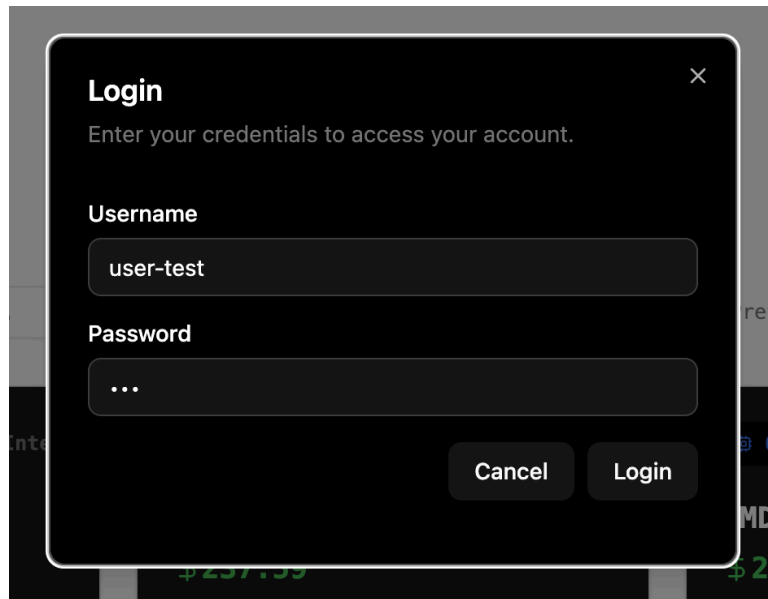
Confirm Password

...

User already exists

Cancel Register

2. Log into an account

A dark-themed login modal with a title 'Login' and a close button. Below the title is a subtitle 'Enter your credentials to access your account.' There are two input fields: 'Username' with the value 'user-test' and 'Password' with three dots indicating a masked password. At the bottom right are 'Cancel' and 'Login' buttons.

Login ✕

Enter your credentials to access your account.

Username

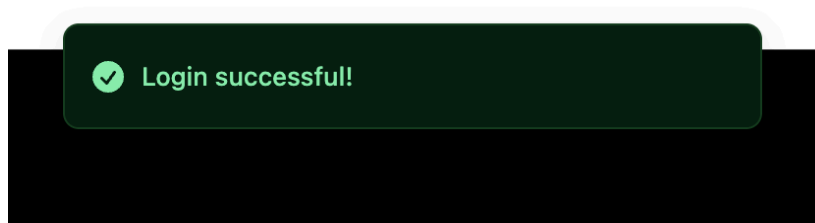
user-test

Password

...

Cancel Login

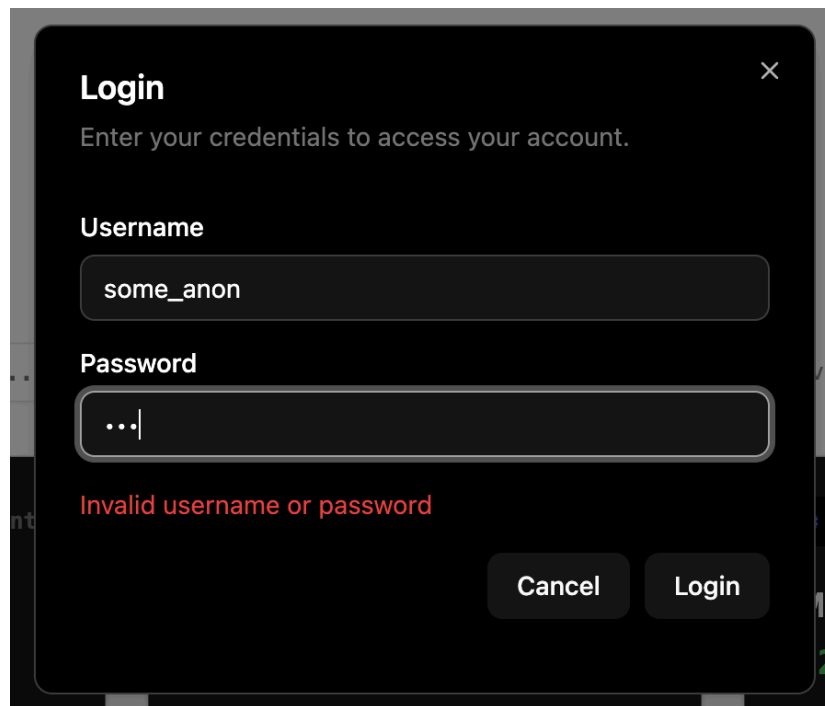
- Once you log into an account, the expected outcomes are:
 - Success message will appear



- A secure JWT Token (encoded with SHA256) will be returned to you and stored locally in your browser.

Key	Value
auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZi...

- Note that if your username or password is not in our database it will display the following error message:

A dark-themed login dialog box with a close button (X) in the top right corner. The title is "Login". Below the title is the instruction "Enter your credentials to access your account." There are two input fields: "Username" containing the text "some_anon" and "Password" containing three dots. Below the password field is a red error message "Invalid username or password". At the bottom right are two buttons: "Cancel" and "Login".

Login ×

Enter your credentials to access your account.

Username

some_anon

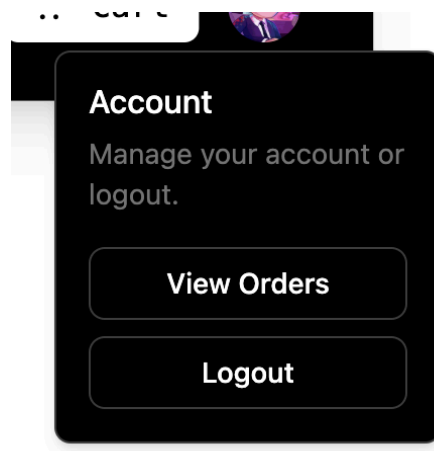
Password

...

Invalid username or password

Cancel Login

3. Log out



- Once you log out:
 - Success message will appear



- A secure JWT Token (encoded with SHA256) will be removed from your local storage in the browser.

4. Browse Catalog

Products

Filters

Search parts...

< Previous 1 2 ... 14 Next >

CPU

Intel

Intel Core i7-13700K

\$235.19

Cores

16 (8P + 8E)

Threads

24

Base Clock

3.4 GHz

Boost Clock

5.4 GHz

TDP

125 W

Socket

LGA1700

View Details

CPU

AMD

AMD Ryzen 9 7900X

\$237.59

Cores

12

Threads

24

Base Clock

4.7 GHz

Boost Clock

5.6 GHz

TDP

170 W

Socket

AM5

View Details

CPU

AMD

AMD Ryzen 5 7600X

\$227.99

Cores

6

Threads

12

Base Clock

4.7 GHz

Boost Clock

5.3 GHz

TDP

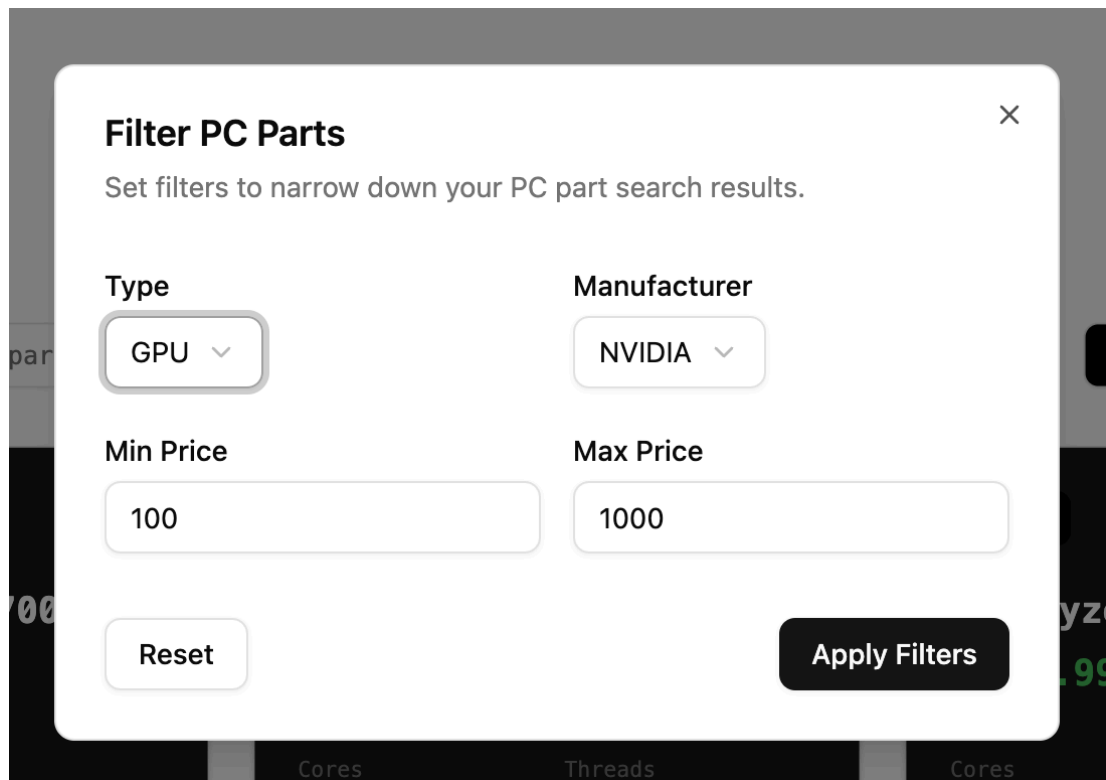
105 W

Socket

AM5

View Details

5. Filter Parts

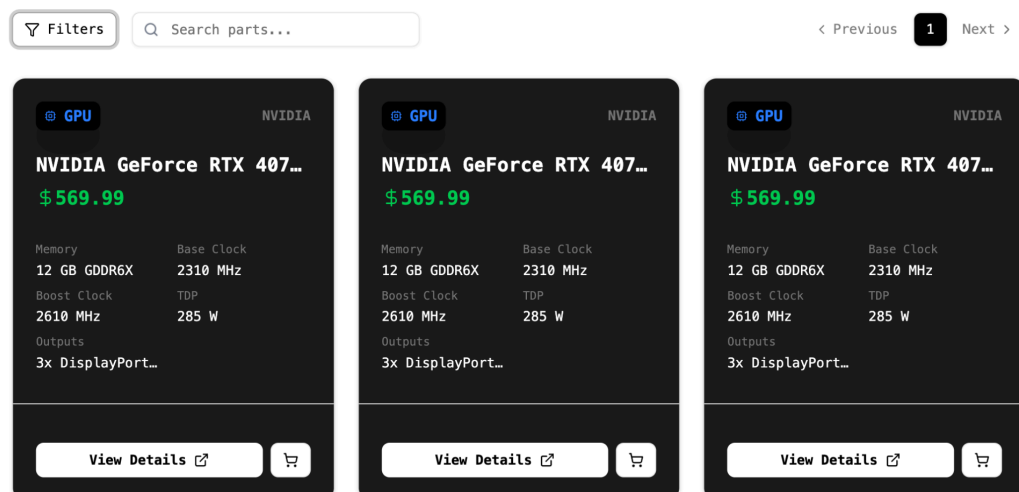


A modal window titled "Filter PC Parts" with a close button (X) in the top right corner. Below the title is the instruction "Set filters to narrow down your PC part search results." The modal contains four filter sections: "Type" with a dropdown menu showing "GPU", "Manufacturer" with a dropdown menu showing "NVIDIA", "Min Price" with a text input field containing "100", and "Max Price" with a text input field containing "1000". At the bottom left is a "Reset" button, and at the bottom right is an "Apply Filters" button.

After you've chosen the type, manufacturer or price range of the parts you'd like to see, click "Apply Filters". The expected outcome would be:

- An updated view of the product catalog, based on your newly specified filter

Products



A product catalog view showing three identical product cards for the "NVIDIA GeForce RTX 407...". Each card displays the price "\$569.99" in green. The specifications listed are: Memory (12 GB GDDR6X), Base Clock (2310 MHz), Boost Clock (2610 MHz), TDP (285 W), and Outputs (3x DisplayPort...). Each card has a "View Details" button with an external link icon and a shopping cart icon. Above the cards is a navigation bar with a "Filters" button, a search input field labeled "Search parts...", and pagination controls showing "< Previous", "1", and "Next >".

6. Search Parts based on Keywords

🔍 Filters

🔍 Search parts...


You can also search parts based on keywords like “I7”, “GeForce”, “RTX”, etc... and it will find the parts that include these keywords in the name. Once you submit your search, the outcome is:

- An updated view of the product catalog, based on your newly specified filter

🔍 Filters

🔍 i7


< Previous 1 Next >


 CPU

Intel

Intel Core i7-13700K
\$235.19

Cores	Threads
16 (8P + 8E)	24
Base Clock	Boost Clock
3.4 GHz	5.4 GHz
TDP	Socket
125 W	LGA1700


[View Details](#) 


 CPU

Intel

Intel Core i7-13700K
\$235.19

Cores	Threads
16 (8P + 8E)	24
Base Clock	Boost Clock
3.4 GHz	5.4 GHz
TDP	Socket
125 W	LGA1700


[View Details](#) 

 CPU

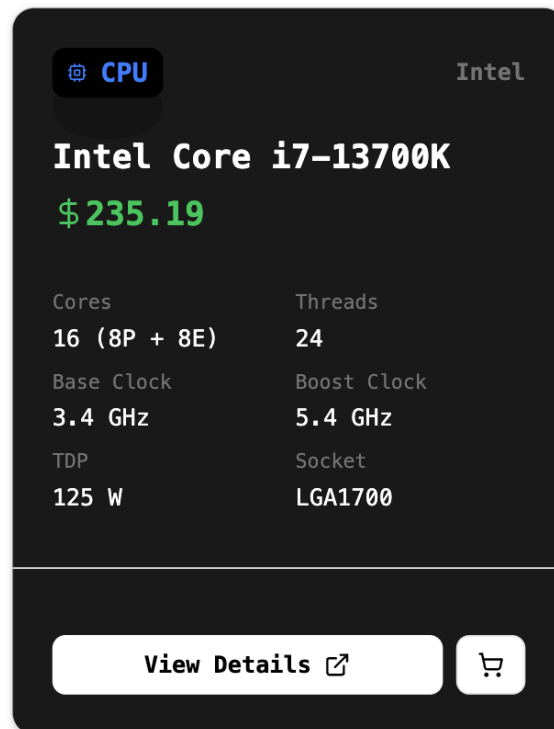
Intel

Intel Core i7-13700K
\$235.19

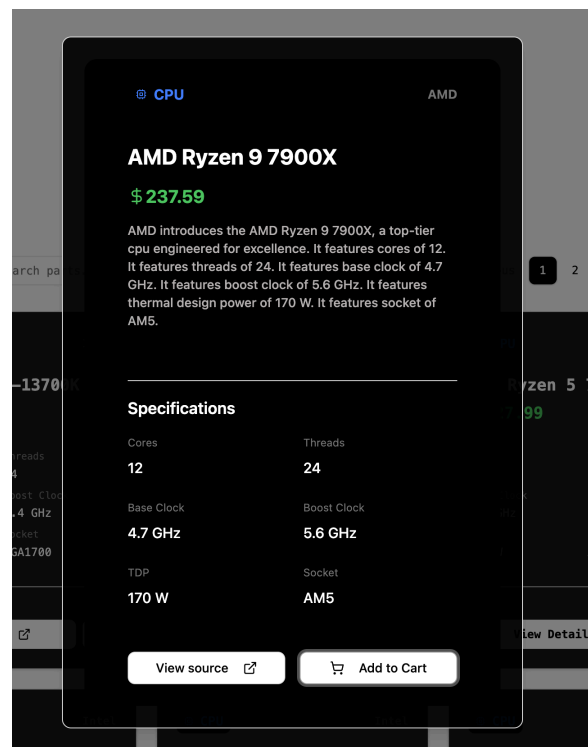
Cores	Threads
16 (8P + 8E)	24
Base Clock	Boost Clock
3.4 GHz	5.4 GHz
TDP	Socket
125 W	LGA1700

[View Details](#) 

7. View Details



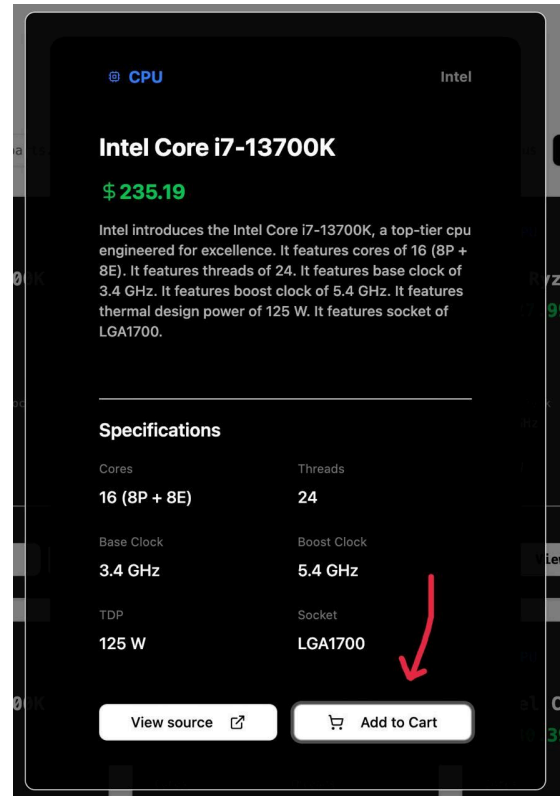
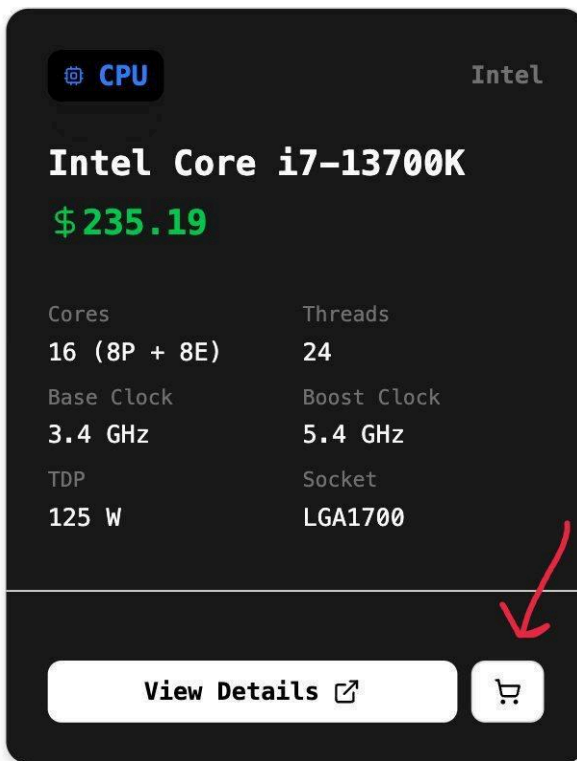
Every PC item's card has an additional “View Details” button that will expand into a modal displaying a more in depth / detailed view of the card.



8. Add to Cart

The user can add an item to cart from two different places:

- The main product catalog
- Inside an individual item's card details

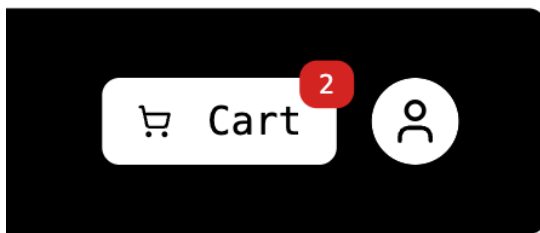


The expected outcome after clicking the add to cart buttons are:

- Items added to the personal cart of the user located in the local storage, ready to be stored in the database after a successful checkout as part of an order.

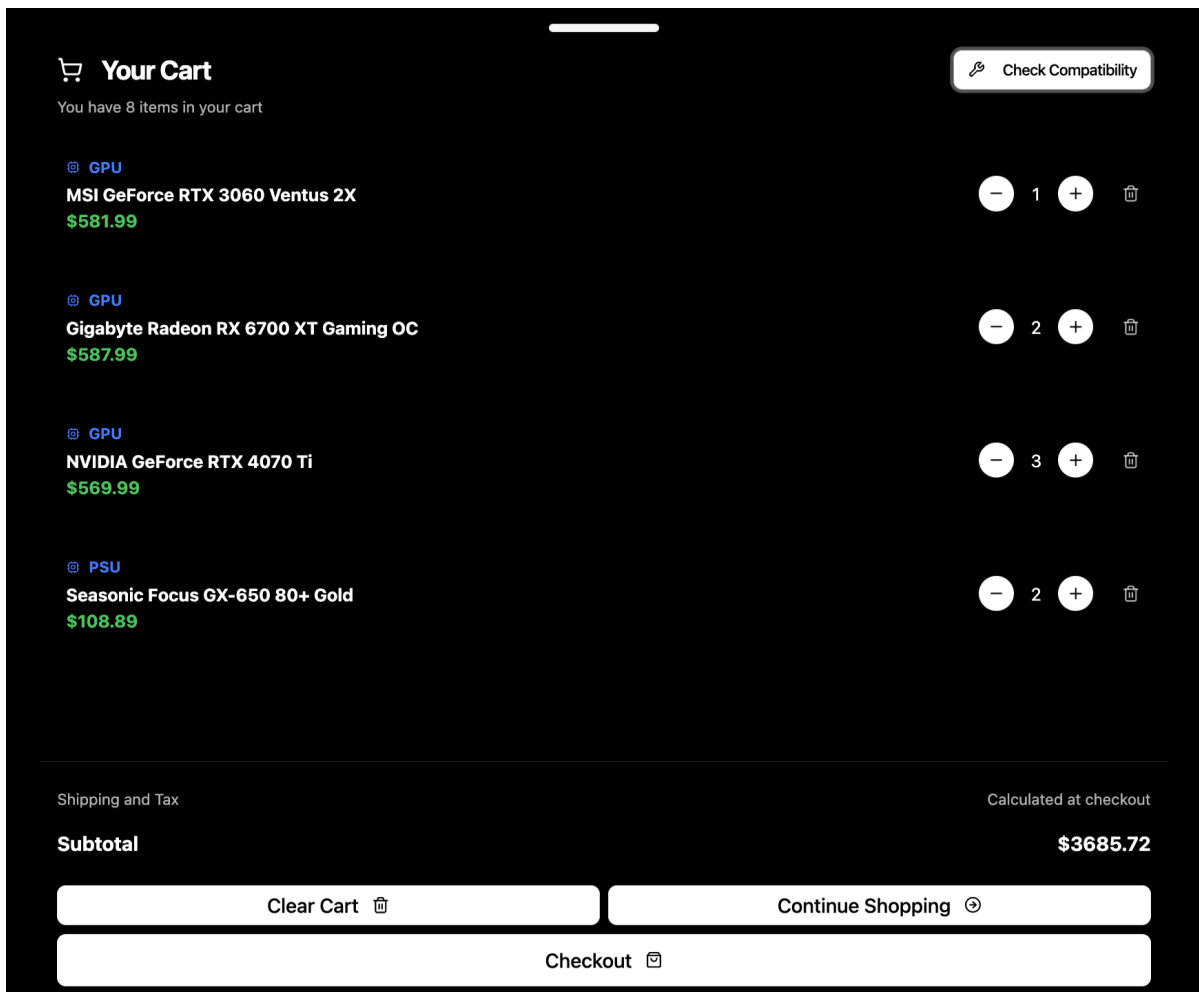
```
▼ [,...]  
▼ 0: {id: "67f293cef11083cbc13100cd",  
  id: "67f293cef11083cbc13100cd"  
  name: "AMD Ryzen 9 7900X"  
  price: "237.59"  
  quantity: 1  
  type: "CPU"  
▼ 1: {id: "67f293cef11083cbc13100cc",  
  id: "67f293cef11083cbc13100cc"  
  name: "Intel Core i7-13700K"  
  price: "235.19"  
  quantity: 1  
  type: "CPU"
```

- Success notification and increased cart items



9. View Cart

After clicking the “Cart” button, a user is presented with a comprehensive cart that is stored in local storage and is state persisted.

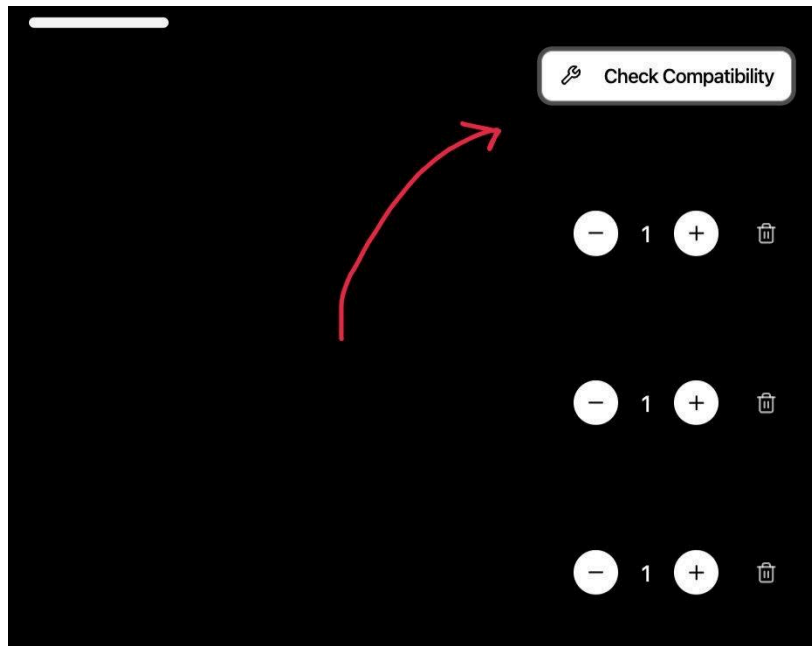


```
▶ 0: {id: "67f293cef11083cbc13100ce", name: "AMD Ryzen 5 7600X", type: "CPU", price: "227.99", quantity: 1}
▶ 1: {id: "67f293cef11083cbc13100cd", name: "AMD Ryzen 9 7900X", type: "CPU", price: "237.59", quantity: 1}
▶ 2: {id: "67f293cef11083cbc131012c", name: "Seasonic Focus GX-650 80+ Gold", type: "PSU", price: "108.89",
▶ 3: {id: "67f293cef11083cbc13100e3", name: "AMD Radeon RX 7900 XTX", type: "GPU", price: "575.99",...}
▶ 4: {id: "67f293cef11083cbc13100e4", name: "MSI GeForce RTX 3060 Ventus 2X", type: "GPU", price: "581.99",
▶ 5: {id: "67f293cef11083cbc13100e9", name: "MSI GeForce RTX 3060 Ventus 2X", type: "GPU", price: "581.99",
▶ 6: {id: "67f293cef11083cbc13100ef", name: "Gigabyte Radeon RX 6700 XT Gaming OC", type: "GPU",...}
▶ 7: {id: "67f293cef11083cbc13100de", name: "AMD Radeon RX 7900 XTX", type: "GPU", price: "575.99",...}
▶ 8: {id: "67f293cef11083cbc13100e5", name: "Gigabyte Radeon RX 6700 XT Gaming OC", type: "GPU",...}
▶ 9: {id: "67f293cef11083cbc13100e8", name: "AMD Radeon RX 7900 XTX", type: "GPU", price: "575.99",...}
▶ 10: {id: "67f293cef11083cbc13100e6", name: "ASUS TUF Gaming RTX 4080", type: "GPU", price: "593.99",...}
▶ 11: {id: "67f293cef11083cbc13100f0", name: "ASUS TUF Gaming RTX 4080", type: "GPU", price: "593.99",...}
```

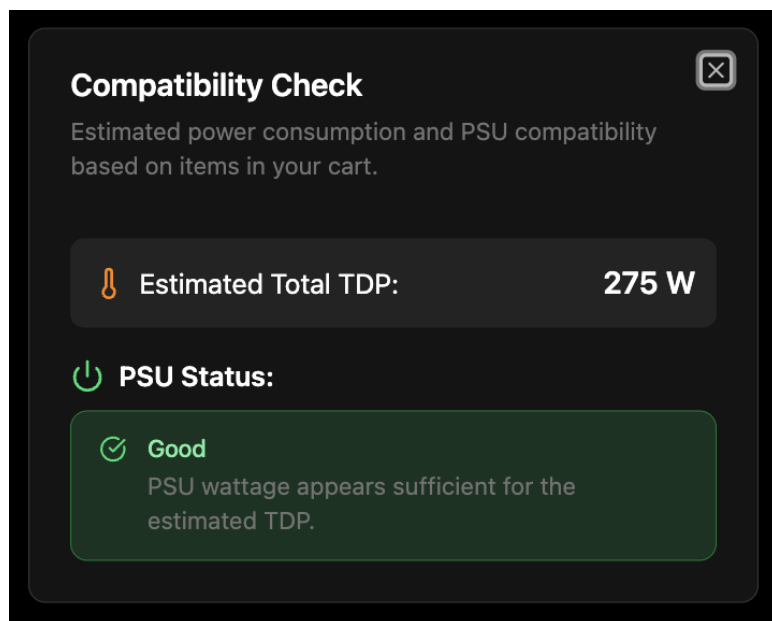
10. Cart Actions

The user has the ability to perform numerous tasks in the cart section, including:

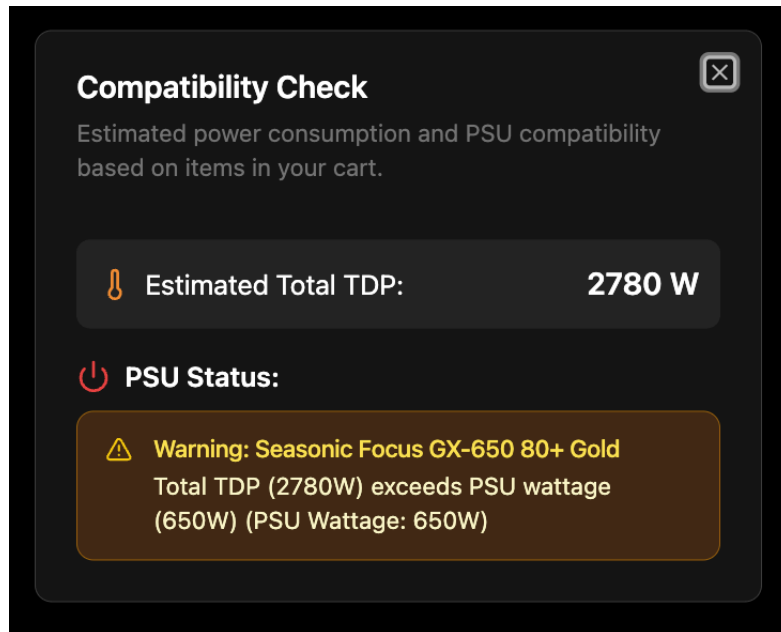
- Check Compatibility
 - After clicking the “Check Compatibility” button, a modal would popup describing the compatibility of different item parts in your cart. Our algorithm is doing all the math in the background to generate an accurate and appropriate message.



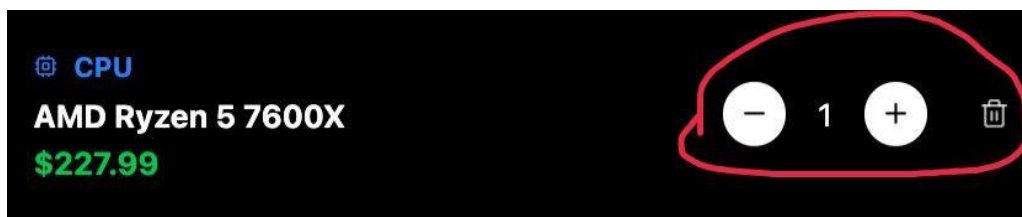
- *All good, no warnings*



- *Warnings were identified*



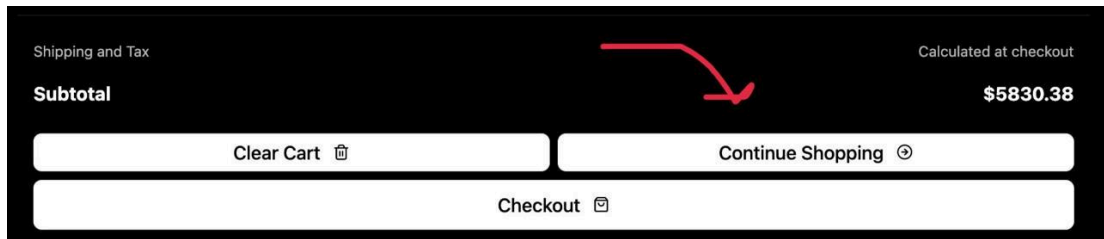
- Increase / Decrease an item quantity OR Remove the item completely. Updates the cart's state in local storage.



- Clear Cart. Remove the whole cart from local storage.



- Continue Shopping. Closes the cart section and navigates back to the catalog page.



11. Checkout

Note: The current Stripe setup is in “Test mode”, so the fullest most accurate set of feature is not currently present.

- Payments

- Payments can be made via a few different payment methods (these would be adjusted based on region in the future)
 - Card (Debit / Credit)
 - Other (Link, Klarna, Affirm)
- A form with the billing and shipping addresses will be displayed to the user to be filled as well.

Intel Core i7-13700K
CA\$158.00

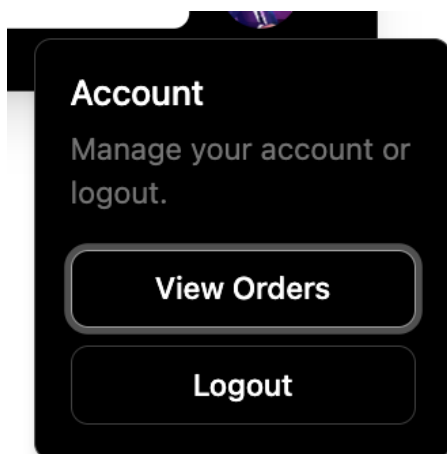
- Order Storage

- The checked out cart / order is being synced between our local storage and the database for order history and tracking purposes.

```
▶ _id: ObjectId('67fed390e895aebae0dfe3b2')
order_number: "ORD-20250415214552-6cd0"
user: ObjectId('67f740f9fb9bd9c9eb506cd0')
▼ items: Array (4)
  ▼ 0: Object
    product: ObjectId('67f293cef11083cbc13100cd')
    quantity: 2
    ▶ 1: Object
    ▶ 2: Object
    ▶ 3: Object
    subtotal: 1655.93
    shipping_cost: 0
    taxes: 215.2709
    total_amount: 1871.2009
    created_at: 2025-04-15T21:45:52.098+00:00
    updated_at: 2025-04-15T21:45:52.098+00:00
```

12. View Order History

After successfully checking out an order (prev. step). The order will be stored in our database. We can access the order history through our Account modal.



- If you had any orders previously, we'd fetch it from our database all the orders associated to the user logged in and display them in this format.

Products

AMD

00X

Lock

Z

CPU

AMD Ryze

\$227.99

Cores
6

Base Clock
4.7 GHz

TDP
105 W

View De

Intel

Lock

CPU

AMD Ryze

\$227.99

Cores
6

Base Clock

Orders

View your order history here.

Items	Order ID	Date	Total	
3	ORD-0830	4/16/2025	\$761.72	Details
2	ORD-0721	4/16/2025	\$727.51	Details
1	ORD-0730	4/16/2025	\$272.26	Details
9	ORD-0649	4/16/2025	\$4798.89	Details
8	ORD-3554	4/16/2025	\$892.41	Details
2	ORD-3023	4/16/2025	\$521.64	Details
7	ORD-3950	4/15/2025	\$2427.87	Details
5	ORD-5818	4/15/2025	\$1212.68	Details
2	ORD-5800	4/15/2025	\$947.18	Details
1	ORD-5553	4/15/2025	\$285.16	Details
12	ORD-5315	4/15/2025	\$4242.39	Details
6	ORD-5239	4/15/2025	\$1918.48	Details
1	ORD-0659	4/15/2025	\$294.28	Details
4	ORD-1216	4/15/2025	\$1200.73	Details
3	ORD-4755	4/15/2025	\$2159.15	Details
4	ORD-4552	4/15/2025	\$1871.20	Details
1	ORD-5233	4/15/2025	\$268.49	Details

Continue Browsing

- Beside the order metadata, we also store and display the PC parts ordered.

Items

All PC Parts ordered in ORD-20250416140649-6cd0, by maui

AMD Radeon RX 7900 XTX

AMD

GPU

\$575.99

MSI GeForce RTX 3060 Ventus 2X

MSI

GPU

\$581.99

MSI GeForce RTX 3060 Ventus 2X

MSI

GPU

\$581.99

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