

# Vend.io

Marsdin Davidson

121431159

Department

Rev: 01

Date: April 6<sup>th</sup>, 2021

## **Table of Contents**

<i>Code Checklist</i>	<i>3</i>
<i>Project Overview:</i>	<i>4</i>
<i>Standards:</i>	<i>4</i>
<i>Objectives:</i>	<i>4</i>
<i>Requirements/Task(s):</i>	<i>4</i>
<i>Outline the steps/plan for your project:</i>	<i>4</i>
<i>Summarize what you learned:</i>	<i>4</i>
<i>Reference</i>	<i>5</i>

## Code Checklist

Check list for all files that you will use in your code:

### A. Webpages:

1. addfunds.html
2. balance.html
3. dashboard.html
4. gamelistings.html
5. games.html
6. index.html
7. inventory.html
8. layout.html
9. newlist.html
10. newwallet.html
11. nologin.html
12. register.html
13. result.html
14. resultredir.html

### B. API Files:

1. flask\_main.py (All api calls are in this file)
  - i. btccost & ethcost (requests.get method)
  - ii. index.html ('/') calls btccost and ethcost
  - iii. login.html ('/login') post/get api call. Requesting login.html via get will return nologin.html which is a custom 404 page I made. Requesting login.html via post will call select statements for my sqlite database to validate the username and password. There is a conditional on dashboard.html
  - iv. Dashboard ('/dashboard') Post/Get calls. If website requested by get then return nologin.html, but if not return dashboard.html
  - v. Games ('/games'). Connect to the sqlite database and store it in games and the sql table to games.html to be processed and displayed. Games.html has a for loop which runs via the python interpreter
  - vi. Newlist ('/newlist') page to create a new listing to post an item. Uses the games table to generate radio buttons so the user can select which game he wants.
  - vii. Nologin. Display 404 screen
  - viii. Postregister – form handler to add user to sql table
  - ix. Create wallet ('/createwallet'). Get the uid from the provided login and pass the uid to the wallet table when creating the listing so that it is linked to that user. Any error will be caught and an error message will pop up on the result.html page.

- x. Purchase ('/purchase') if user select an item from the drop down they can add it to the items table which is linked via uid and view on the inventory page.
- xi. Balance ('/balance') view the wallets that a user creates by uid. Uid is passed from the dashboard screen via GET.
- xii. Inventory ('/inventory') select all the data from the inventory table and pass it to inventory.html.
- xiii. Listbygame ('/listbygame') view user submitted listings and sort by game. GID is passed via GET.
- xiv. Addfunds ('/addfunds'). If this page is reached via POST then grab the live price for bitcoin or ethereum and convert user balance to the crypto type in their wallet. There is an if statement to display the balance in bitcoin or ethereum depending on which crypto they chose for that wallet. All data is passed to the html file. If there is an error, display an error message.
- xv. Fundspost ('/fundspost') update the wallet with the dollar amount the user provides using the sql update function. This definition takes the current value and adds the user submitted value to the wallet.
- xvi. Addlist ('/addlist') add a listing with the user submitted price. Subtract the balance from the wallet when submitting the listing then use a sql insert into function.

C. Database:

- 1. wallet
- 2. listing
- 3. users
- 4. game
- 5. items

## **vend.io**

### **Project Overview:**

This project simulates a crypto trading marketplace. Users can register, view listings by game, add simulated bitcoin or ethereum wallets and be able to post listings for items in that game.

### **Standards:**

- Handle basic SQL and python errors.
- Create an SQL database
- Learn how to make python and sql talk to one another

### **Objectives:**

- Create marketplace where users can sign in, create wallets and listings.
- View supported games.
- View live crypto prices.
- Use flask to generate dynamic web pages.

### **Requirements/Task(s):**

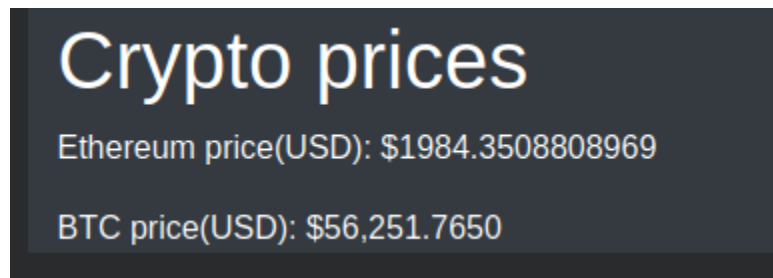
Task 1 - Creating a functional website using python and a sql database.

Task 2 – Create an sql database with 5 tables or higher

Task 3 – Use 8 html pages or higher.

### **Project Details:**

- Show the communication protocols between each module and the response page
  - btccost & ethcost (requests.get method)



- index.html ('/') calls btccost and ethcost
- login.html ('/login') post/get api call. Requesting login.html via get will return nologin.html which is a custom 404 page I made. Requesting login.html via post will call select statements for my sqlite database to

validate the username and password. There is a conditional on dashboard.html

The image shows a login interface on a dark background. At the top, it says "Log In" in white, followed by "Please log in to access the site" in a smaller font. There are two input fields: "Username" with the text "user3" and "Password" with the placeholder "Password". Below the password field is a green "Log in" button and a blue "Not a user? Register!" button. Below this, a pink banner contains the text "Info! Login Failed. Please Check Username/Password and try again!". At the bottom, there is a blue "Return Home" button.

- Dashboard (‘/dashboard’) Post/Get calls. If website requested by get then return nologin.html, but if not return dashboard.html

Welcome user3!!

## View listings

[View Listings by Game](#)

## Create wallet

[Show balance](#)

## Show balance

[Show balance](#)

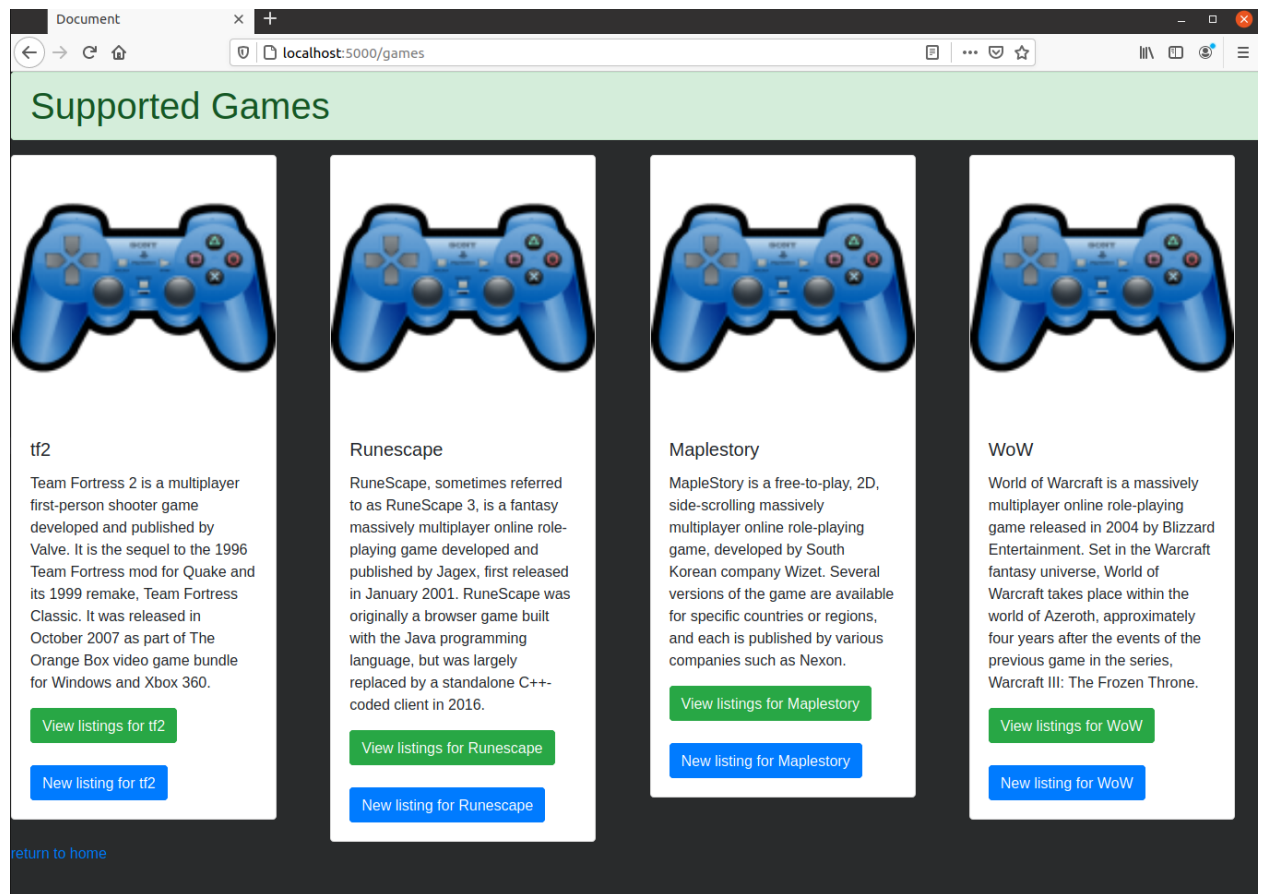
## View Inventory

[View Inventory](#)



- 
- Games ('/games'). Connect to the sqlite database and store it in games and the sql table to games.html to be processed and displayed. Games.html has a for loop which runs via the python interpreter





- Newlist (‘/newlist’) page to create a new listing to post an item. Uses the games table to generate radio buttons so the user can select which game he wants.

Document x +

← → ↻ 🏠 localhost:5000/newlist

# Supported Games

Add listing here

☐ tf2 ☐ Runescape ☐ Maplestory ☐ WoW

username

password

listing name

amount (USD)

wallet id

**Post Listing**

[return to home](#)

- - Nologin. Display 404 screen
- Postregister – form handler to add user to sql table. Takes values from username, password, and email and uses them in an insert into statement on the server.
- Create wallet ('/createwallet'). Get the uid from the provided login and pass the uid to the wallet table when creating the listing so that it is linked to that user. Any error will be caught and an error message will pop up on the result.html page. This route is a POST function

Document x +

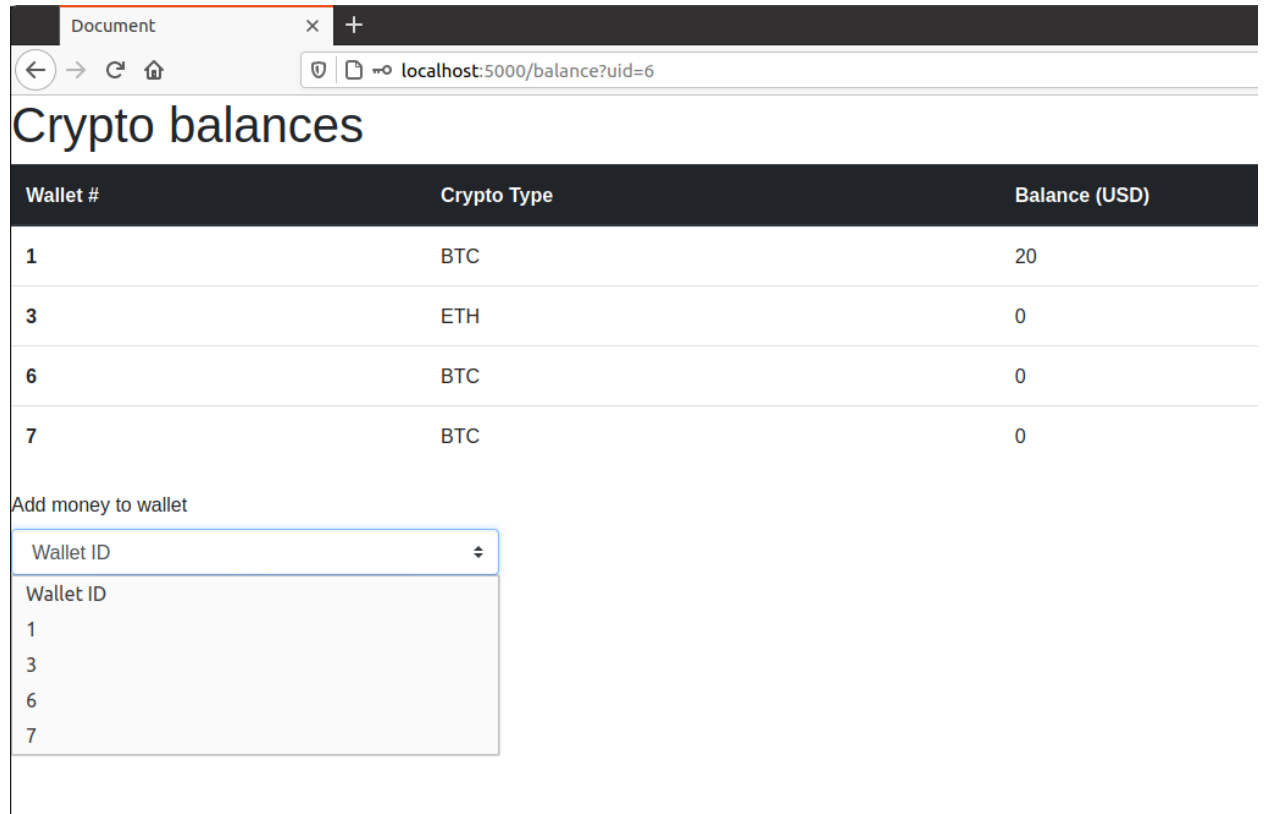
← → ↻ 🏠 localhost:5000/register ... 📄 ☆

## Enter your details here!

user40 ..... user40@hotmail.com **register**

[return to home](#)

- Purchase ('/purchase') if a user selects an item from the drop down they can add it to the items table which is linked via uid and view on the inventory page.
  - Balance ('/balance') view the wallets that a user creates by uid. Uid is passed from the dashboard screen via GET.



The screenshot shows a web browser window with the address bar displaying 'localhost:5000/balance?uid=6'. The page title is 'Crypto balances'. Below the title is a table with three columns: 'Wallet #', 'Crypto Type', and 'Balance (USD)'. The table contains four rows of data. Below the table, there is a section titled 'Add money to wallet' which includes a dropdown menu labeled 'Wallet ID' with a list of options: 1, 3, 6, and 7.

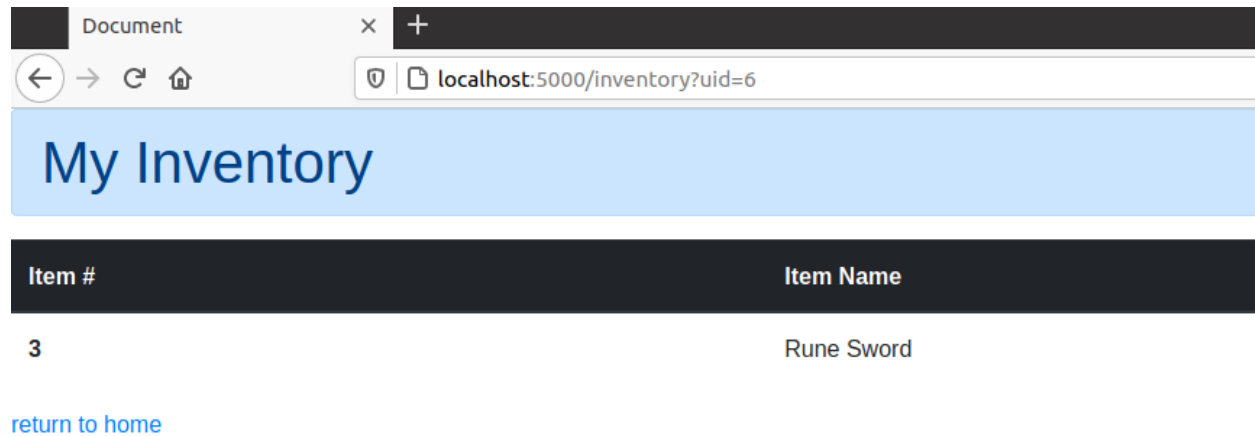
Wallet #	Crypto Type	Balance (USD)
1	BTC	20
3	ETH	0
6	BTC	0
7	BTC	0

Add money to wallet

Wallet ID

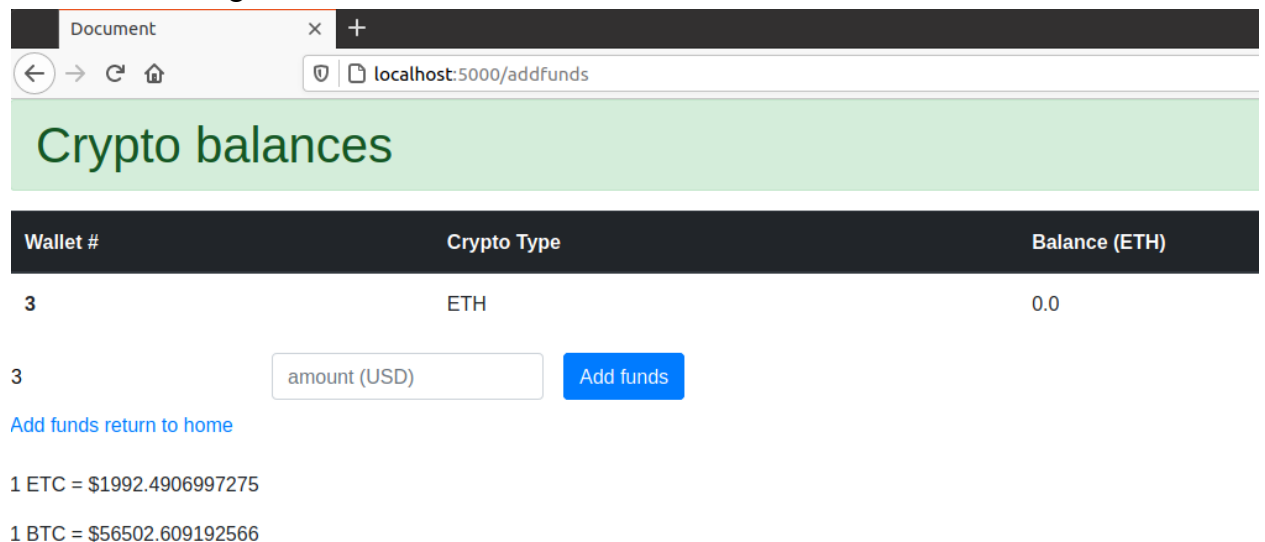
1  
3  
6  
7

- Inventory ('/inventory') select all the data from the inventory table and pass it to inventory.html.
  - Listbygame ('/listbygame') view user submitted listings and sort by game. GID is passed via GET.



○

- Addfunds ('/addfunds'). If this page is reached via POST then grab the live price for bitcoin or ethereum and convert user balance to the crypto type in their wallet. There is an if statement to display the balance in bitcoin or ethereum depending on which crypto they chose for that wallet. All data is passed to the html file. If there is an error, display an error message.



- Fundspost ('/fundspost') update the wallet with the dollar amount the user provides using the sql update function. This definition takes the current value and adds the user submitted value to the wallet.

Wallet #	Crypto Type	Balance (ETH)
3	ETH	0.0

3  Add funds

[Add funds return to home](#)

1 ETC = \$1992.4906997275  
1 BTC = \$56502.609192566

▪

## Crypto balances

Wallet #	Crypto Type	Balance (ETH)
3	ETH	0.010056195709706114

3  Add funds

[Add funds return to home](#)

1 ETC = \$1988.8236642706  
1 BTC = \$56357.5509245761

▪

- Addlist ('/addlist') add a listing with the user submitted price. Subtract the balance from the wallet when submitting the listing then use a sql insert into function.

- Support the illustration with a screenshot from the webpage for your project
- Show the prevented error and how you handle the project.

### Outline the steps/plan for your project:

1. Illustrate database connections
2. Create database connections

3. Create sqlite database then create project.

**Summarize what you learned:**

I learned how to use flask to create html websites. I also learned how to use a sqlite database and learned that it was much easier than making a regular database.

**Reference**

<https://www.youtube.com/watch?v=mqhxxeeTbu0>