# 1 Introduction

The document contains the instruction to set up the Petshop Decentralized Application. Below is a list of the additional dependencies and the versions that were utilized for this project. Please read the complete document before starting the process.

- Truffle v5.1.10
- Solidity v0.5.16
- Node.js v12.13.0
- Web3.js v1.2.1
- lite-server v2.3.0
- Ganache v2.7.1

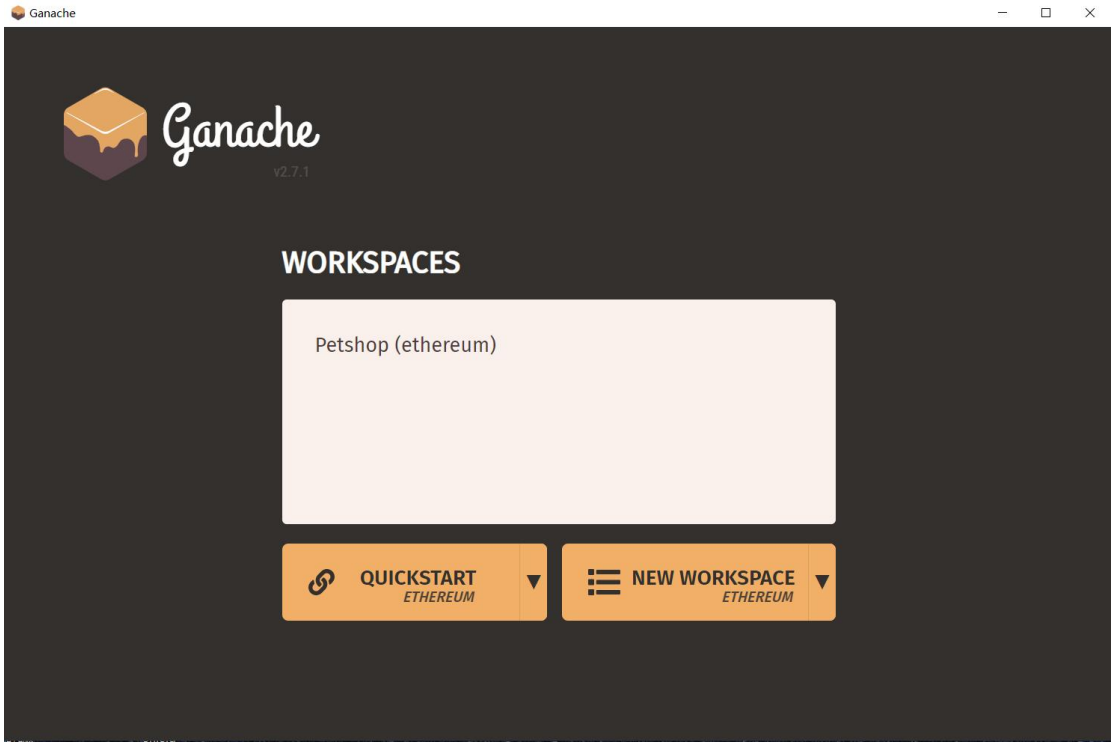
# 2 Installation of Prerequisites

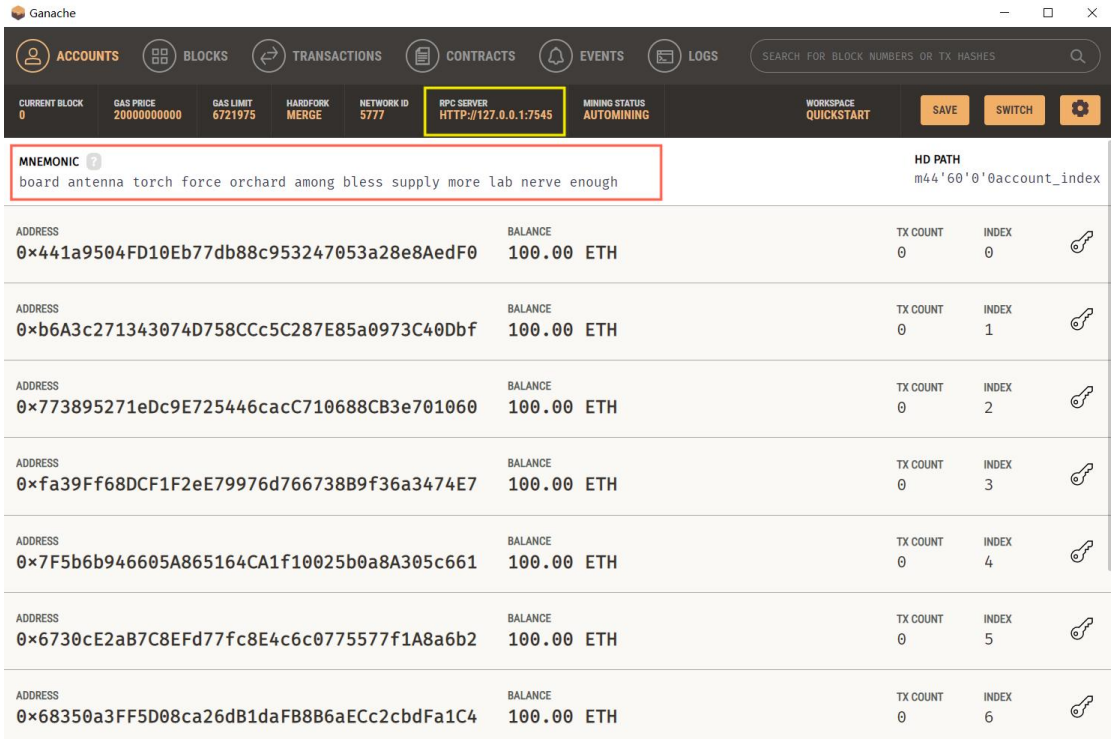
- **Node.js**: a JavaScript runtime environment.
    - Click to install: https://nodejs.org/en/download/
- **Truffle IDE**: a framework for smart contracts on the Ethereum Virtual Machine (EVM). Install the Truffle IDE globally from the windows terminal:
    - npm install -g truffle@v5.1.10
- **Liteserver**: is a lightweight development web server. Install liteserver globally from the windows terminal:
    - npm install -g lite-server
- **Ganache**: is a software tool allows a developer to create an Ethereum blockchain locally for testing and development purposes.
    - Click to install: http://trufflframework.com/ganache
- **Metamask**: is a web browser extension allows you to manage your Ethereum private keys.
    - Click to install: https://metamask.io/download.html

# 3 Instruction for running DApp

## 3.1 Running Ganache

1. Run Ganache, select “QUICKSTART” option.



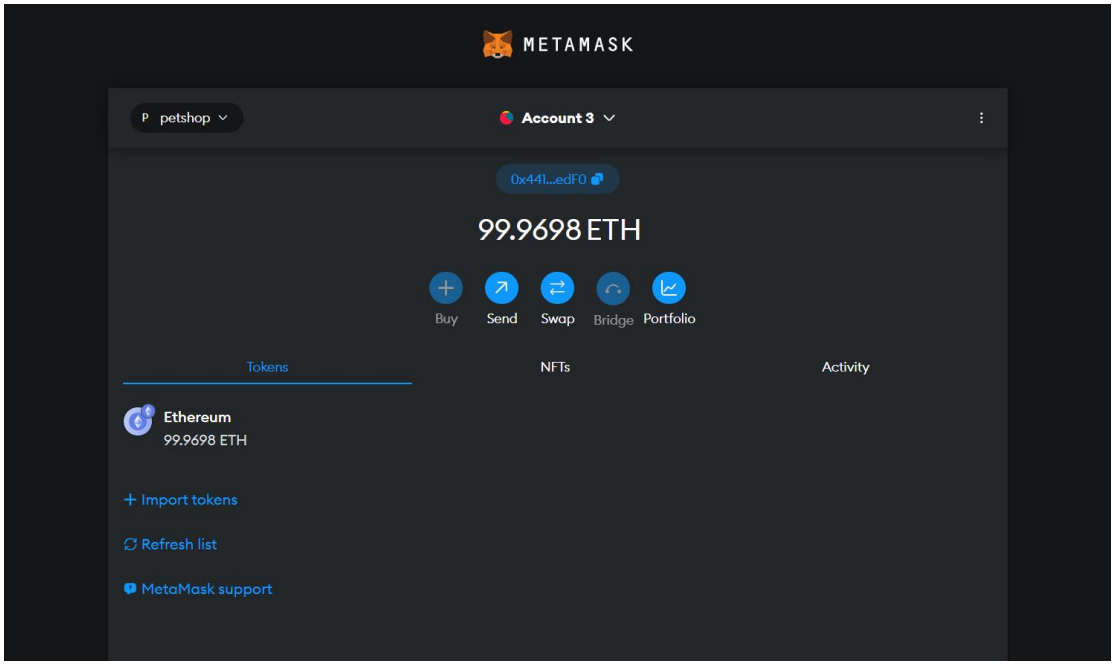




## 3.2 Configure Metamask with Ganache

1. Open Chrome browser or Microsoft Edge, click on the Metamask icon.
2. Select “No, I already have a seed phrase”.
3. Copy MNEMONIC from Ganache (the red box in the image in section 3.1) and paste it into: “Enter your secret twelve word phrase here to restore your vault. Seed phrase”.
4. Select “Provide a password”, then click “Import”

5. On the top-right corner, click “Main Ethereum Network” dropdown list, then select Custom RPC.

6. Copy RPC server address from Ganache (by default, should be HTTP://127.0.0.1:7545) and paste it to new RPC URL. In the “Chain ID” field, write Ganache's Chain ID: 1337. Name this network and then click Save. Close it.




## 3.3 Running DApp

1. Clone the GitHub repo. Run command:

```
git clone https://github.com/Rrobinvip/APS1050-Project.git
```

2. Open Terminal, change directory to Project folder.

3. Test the contract functions using unit tests specified in test/ TestAdoption.sol. Run command:

```
truffle test
```

4. Compile the contracts in the contracts folder. Run command:

```
truffle compile
```

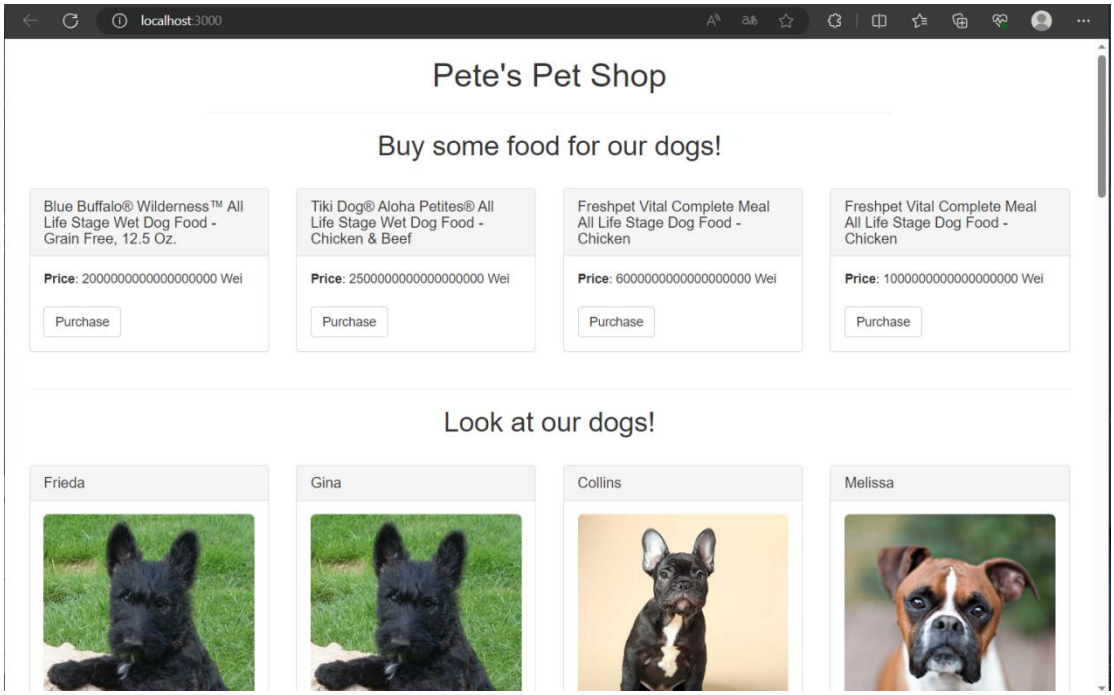
5. Migrate the contract to the local server on Ganache. Run command:

```
truffle migrate
```

6. Start the local web server. Run command:

```
npm run dev
```

The website will be opened automatically in the browser.


localhost:3000
Pete's Pet Shop
Buy some food for our dogs!
Blue Buffalo® Wilderness™ All Life Stage Wet Dog Food - Grain Free, 12.5 Oz.
Price: 2000000000000000000 Wei
Purchase
Tiki Dog® Aloha Petites® All Life Stage Wet Dog Food - Chicken & Beef
Price: 2500000000000000000 Wei
Purchase
Freshpet Vital Complete Meal All Life Stage Dog Food - Chicken
Price: 6000000000000000000 Wei
Purchase
Freshpet Vital Complete Meal All Life Stage Dog Food - Chicken
Price: 1000000000000000000 Wei
Purchase
Look at our dogs!
Frieda
Gina
Collins
Melissa