

# User Manual (Setup)

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## Prerequisite

This project backend is based on Python3 and Django. The frontend is based on Nodejs and NPM.

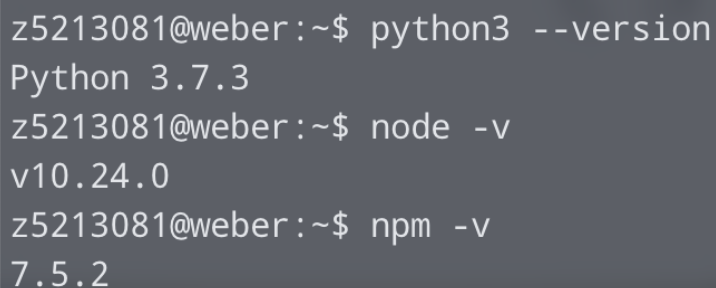
Please ensure your machine has these environments. You can check them via the command:

**\$ python3 --version**

**\$ node -v**

**\$ npm -v**

There is an example in the following picture. This is the result of running these commands in the vlab. If you use these commands and get the versions like the picture (different version is fine), your environment is ready.

A terminal window screenshot showing the execution of three commands to check the versions of Python3, Node.js, and npm. The output shows Python 3.7.3, Node.js v10.24.0, and npm 7.5.2.

```
z5213081@weber:~$ python3 --version
Python 3.7.3
z5213081@weber:~$ node -v
v10.24.0
z5213081@weber:~$ npm -v
7.5.2
```

If you don't have these environment in your machine, please go to <https://www.python.org/downloads/> and <https://nodejs.org/en/> to download and setup the environment of Python3 and NodeJS (npm will come with the NodeJS).

And also, this project's backend needs the VSCode to run. If you don't have this application, please download it via <https://code.visualstudio.com>.

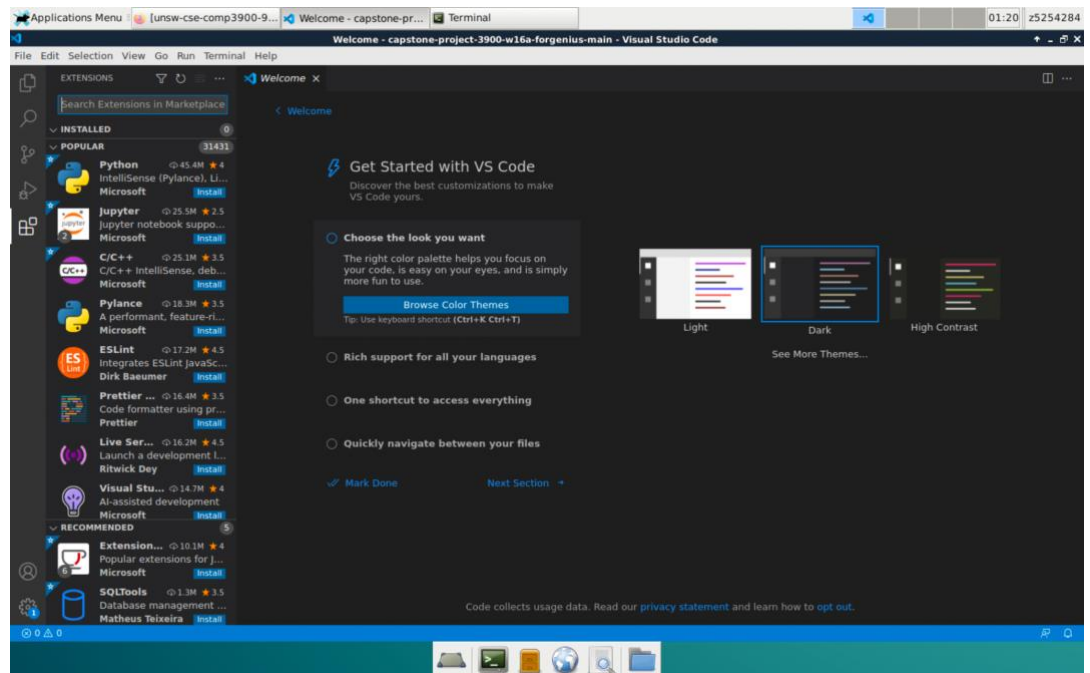
## Setup


**This setup guide is based on the VLAB environment.**

First of all, download the project's zip file and extract it to a folder. Open this folder via VSCode.

# 1. Backend

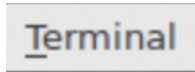
- a. Open the interface of VSCode.



- b. Click the “extension” button  in the left side bar or use Ctrl+Shift+X to get the extension interface.

Search “Python”, “Django” extensions (shown in pictures below) and install them.



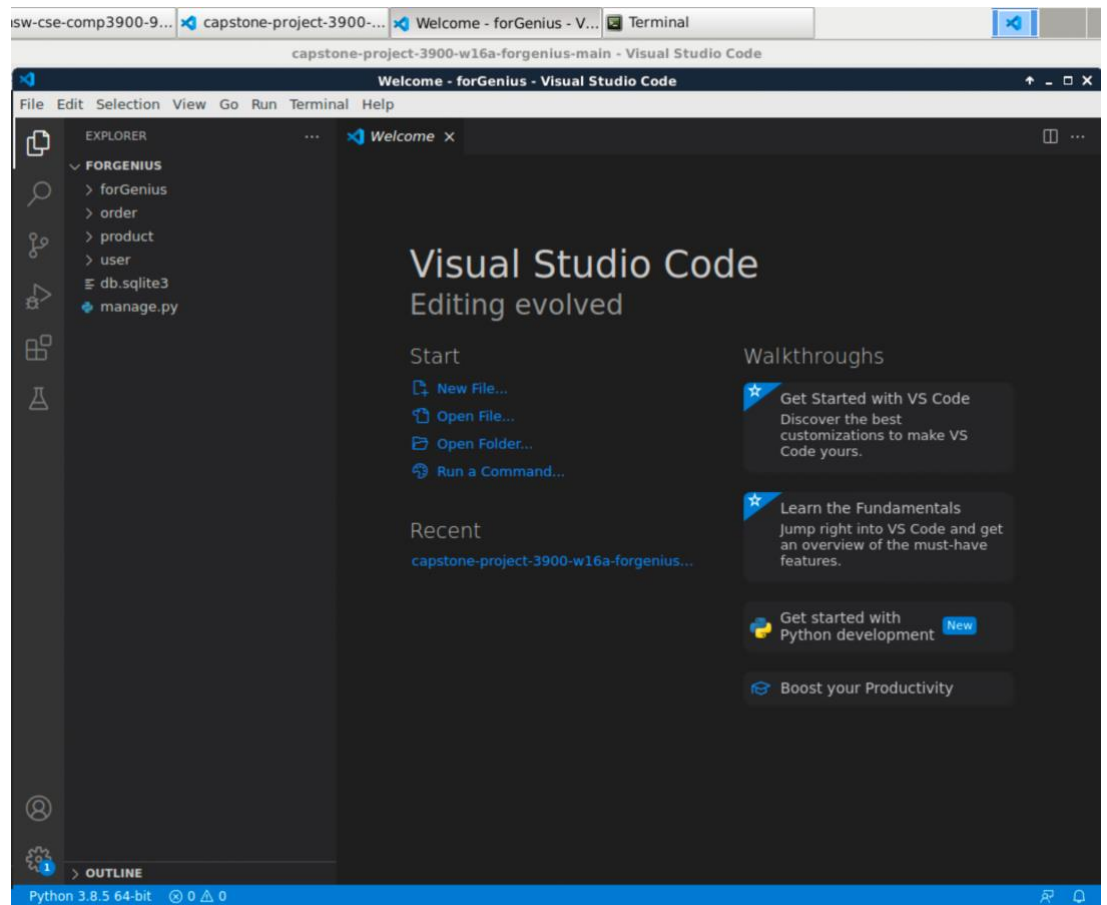
- c. Open the terminal in vscode via the bar in the top  or use Ctrl+Shift+`.

Input the following command to the terminal.

```
$ cd forGenius
```

```
$ code .
```

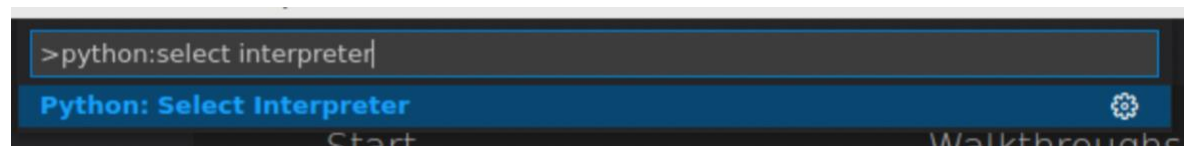
- d. Then, you will get another new VSCode interface, which shows the forGenius folder.  
Like the screenshot below:



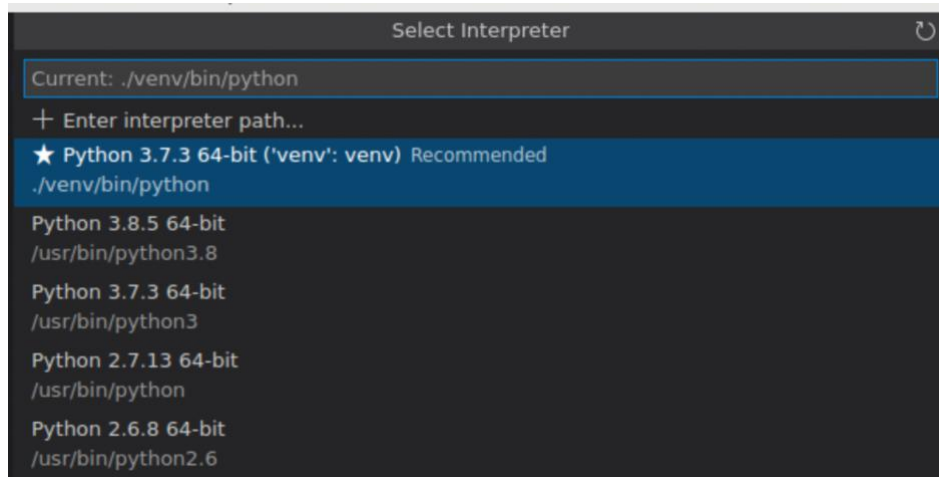
Open the terminal and Input the following command to the terminal.

**\$ python3 -m venv venv**

- e. Use Ctrl+Shift+P to open the command palette.  
Search and get the “Python: Select Interpreter” command.



Click it and choose the one with 'venv' and Python3.



- f. Open a new terminal. And now there should be a "(venv)" in your terminal input line, shown in the picture below.



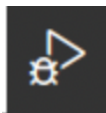
Then, input the following command to the terminal and download the useful packages.

**\$ pip3 install setuptools\_rust**

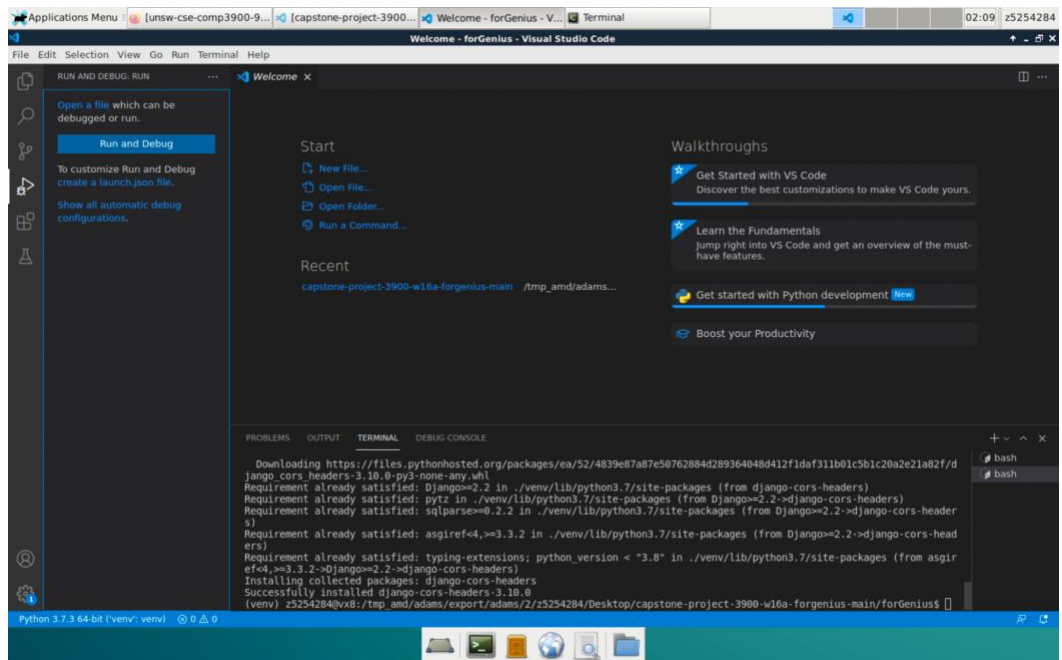
**\$ pip3 install pyjwt**

**\$ pip3 install django**

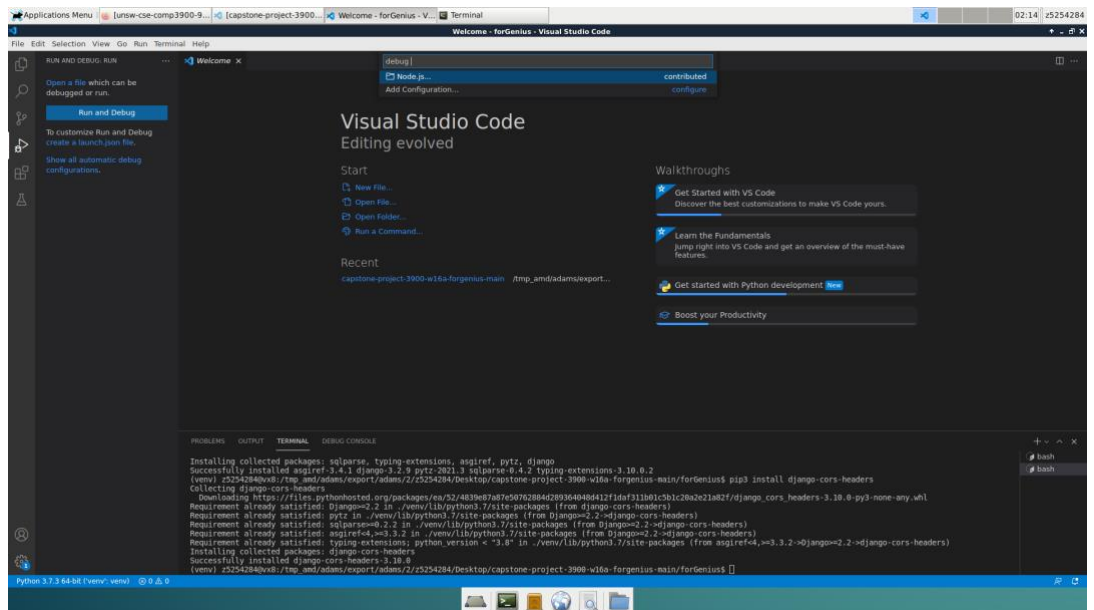
**\$ pip3 install django-cors-headers**



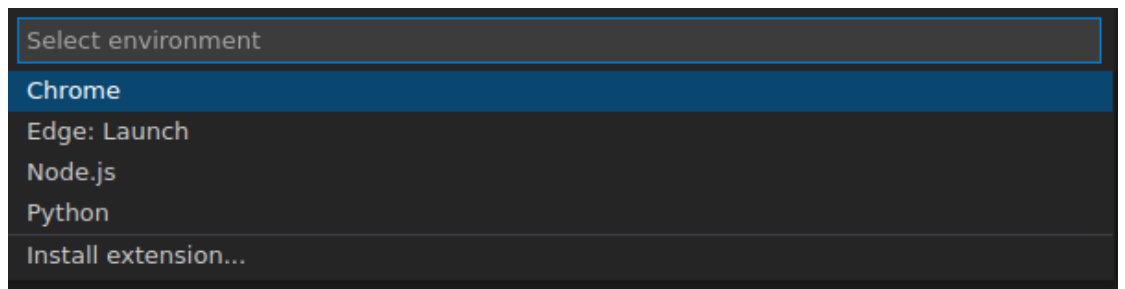
- g. Click the "run and debug" button in the left side bar or use Ctrl+Shift+D to get the "run and debug" interface.



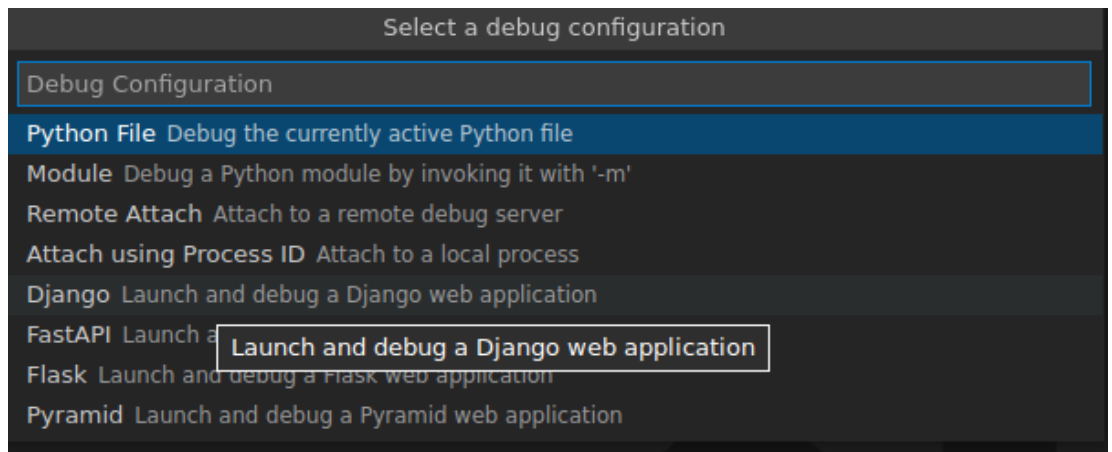
Click “Show all automatic debug configurations” on the left side. Then, the command palette will pop up.



Click “Add Configuration” in the command palette.

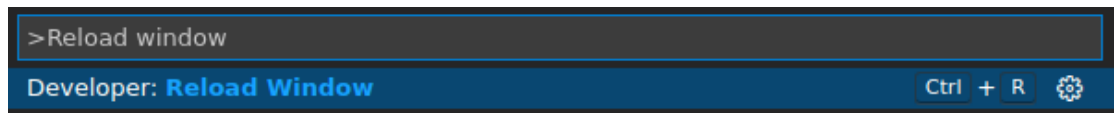


Choose “Python”. Then, choose “Django”.

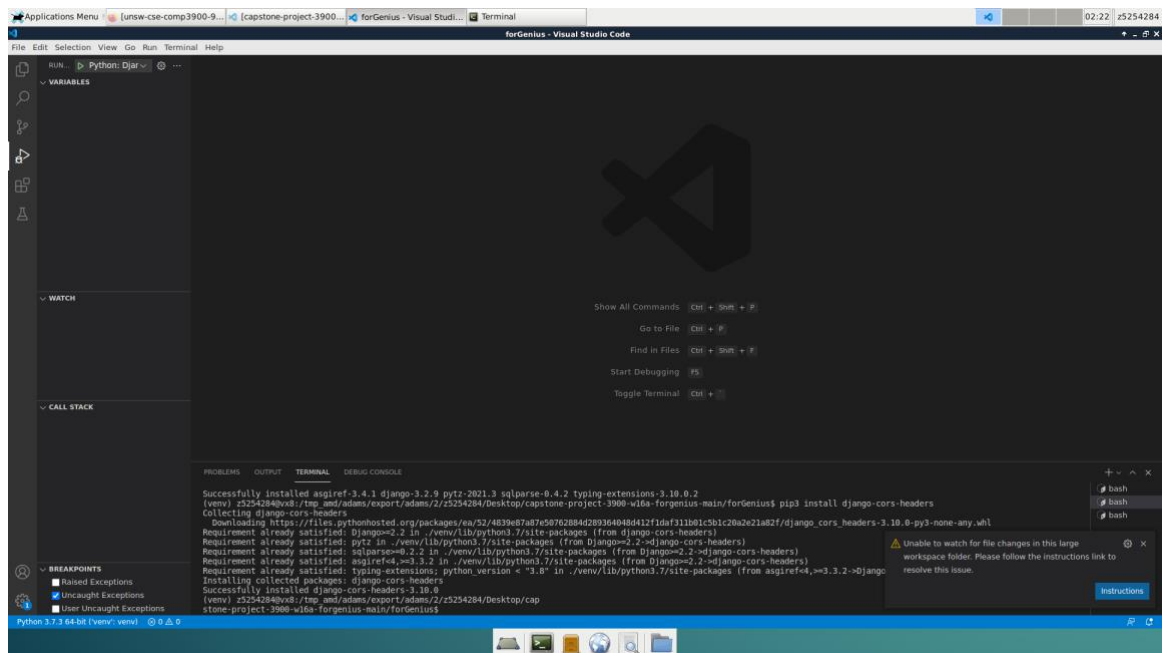



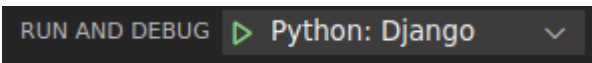
Then, use Ctrl+Shift+P to open the command palette.

Search and get the “Developer: Reload Window” command. Click it.



Then, you will get the new “run and debug” interface like in the following picture.



- h. Click the green  button of  in the “run and debug” interface.

Then, your terminal should show like the following picture.

```
(venv) 252.../Desktop/capstone-project-3900-w16a-forgenius-main/forGenius$ /usr/bin/env /tmp_and/adams/export/adams/2/z5254284/Desktop/capstone-project-3900-w16a-forgenius-main/forGenius/venv/bin/python /tmp_and/adams/export/adams/2/z5254284/.vscode/extensions/ms-python.python-2021.10.1365161279/pythonFiles/lib/python/debugpy/launcher 45161 -- /tmp_and/adams/export/adams/2/z5254284/Desktop/capstone-project-3900-w16a-forgenius-main/forGenius/manage.py run server
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
November 14, 2021 - 15:24:38
Django version 3.2.9, using settings 'forGenius.settings'
Starting development server at http://127.0.0.1:8080/
Quit the server with CONTROL-C.
```

Congratulations! You successfully run the backend now!

## 2. Frontend

Use the terminal to open the project's folder.

Then, input the following command in the terminal.

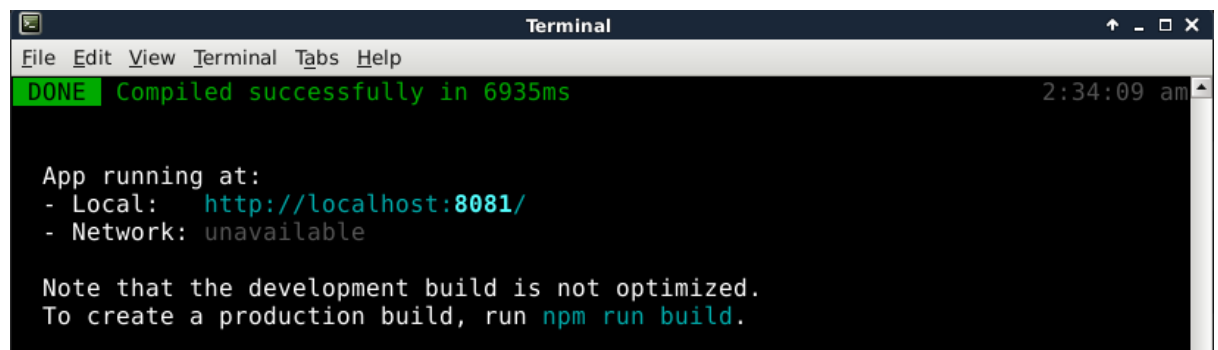
```
$ cd ui
```

```
$ npm install --force
```

```
$ npm run serve
```

After that and wait a second, your terminal should show the following picture.

( The number after localhost may be different, like 8080 or something else.)



```
Terminal
File Edit View Terminal Tabs Help
DONE Compiled successfully in 6935ms 2:34:09 am

App running at:
- Local: http://localhost:8081/
- Network: unavailable

Note that the development build is not optimized.
To create a production build, run npm run build.
```

Congratulations! You successfully run the frontend now!

(Note: The reason why we use “npm install --force” is because in this project, “less border” package’s version is too low; there may be some useless errors here if you use the command without “--force”).

## 3. Open the project’s website

Make sure you finish all steps of backend and frontend, and both of them are running like the last picture in the last step of their instructions.

Open the URL <http://localhost:xxxx/> (the local one, the last 4 numbers may be different) provided by the “npm run serve”.

Then, you will successfully open the project’s website.

