

BargainBox project environment setup and execution instructions

Routes:

- | | |
|--------------------------|--|
| • / | -> BargainBox home page |
| • /register | -> Create a BargainBox account |
| • /signin | -> Sign in to a BargainBox account |
| • /signout | -> Sign out of a BargainBox account |
| • /my-profile/view | -> View BargainBox account details |
| • /my-profile/edit | -> Edit BargainBox account details |
| • /my-profile/delete | -> Delete BargainBox account |
| • /post/new | -> Create a new post |
| • /post/view/{Post ID} | -> View a post in detail |
| • /post/edit/{Post ID} | -> Edit a post |
| • /post/delete/{Post ID} | -> Delete a post |
| • /my-posts | -> View posts for the signed in user |
| • /admin | -> Administration page (not accessible to regular users) |

Technologies used:

- Python version 3.8 or above
- Django web framework version 4.2.16
- Pillow imaging library version 10.4.0

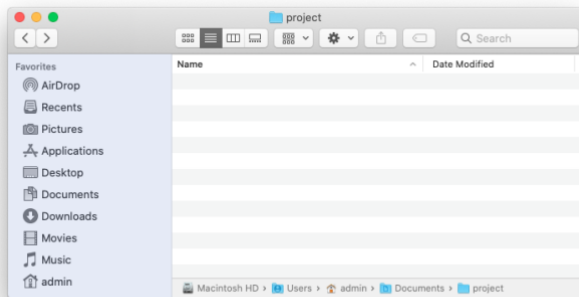
Table of contents:

1. [Setting up the project environment](#)
 - a. [macOS instructions](#)
 - b. [Windows instructions](#)
2. [Running the project](#)
 - a. [macOS instructions](#)
 - b. [Windows instructions](#)

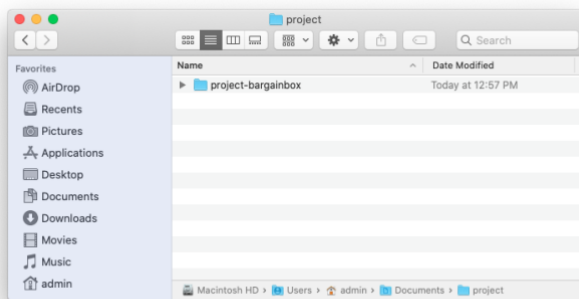
Setting up the project environment:

- **macOS**

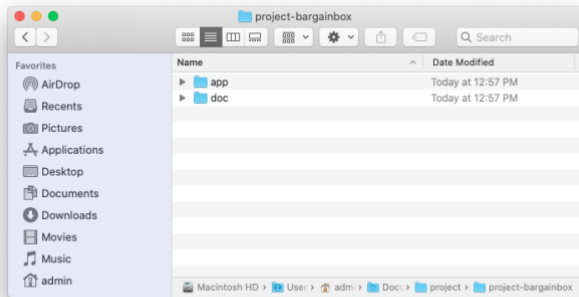
1. Create a new directory anywhere on your system. I will create a new directory called “project”.



2. In the empty directory that was created in the previous step, clone the “project-bargainbox” GitHub repository. After doing this, a new “project-bargainbox” directory will be created.



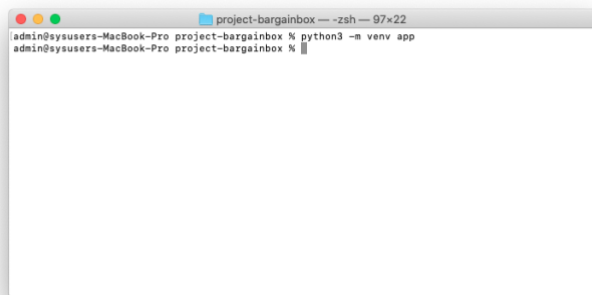
3. Navigate into the newly created “project-bargainbox” directory. You will see two sub-directories:
 - a. “**app**” – contains the project’s code
 - b. “**doc**” – contains the project’s documentation and sprint information



4. It is highly recommended that this project be executed from within a Python virtual environment. Unfortunately, the Python virtual environment files are not included in the GitHub repository as they are platform specific. As such, you need to create a Python virtual environment on your own. To create a Python virtual environment, open the Terminal and navigate to the “project-bargainbox” directory that is shown in the screenshot above.



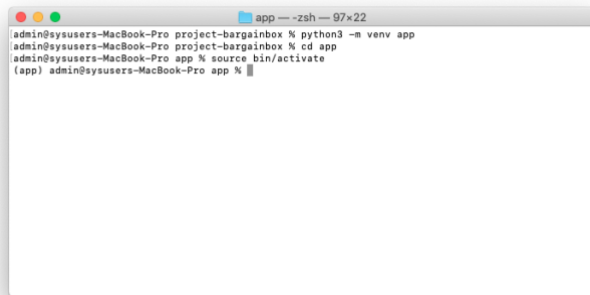
5. Once your current working directory is set to “project-bargainbox”, run the following command: “**python3 -m venv app**”. This will create a Python virtual environment in the “app” sub-directory.



6. Navigate into the “app” directory.

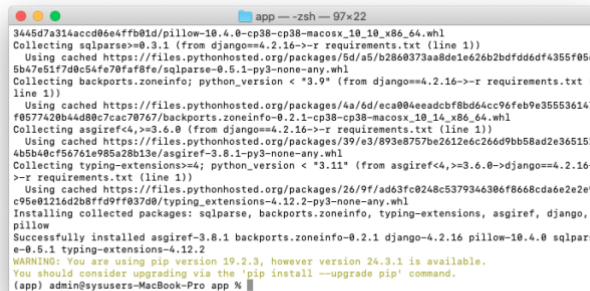


7. We can now activate the newly created Python virtual environment. To do this, run the following command: **“source bin/activate”**.



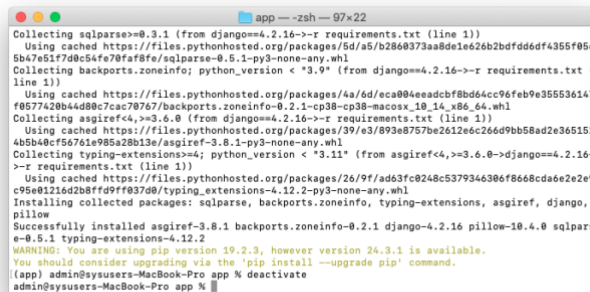
```
admin@sysusers-MacBook-Pro project-bargainbox % python3 -m venv app
admin@sysusers-MacBook-Pro project-bargainbox % cd app
admin@sysusers-MacBook-Pro app % source bin/activate
(app) admin@sysusers-MacBook-Pro app %
```

8. Next, we need to download and install the necessary dependencies in the Python virtual environment. To do this, run the following command: **“pip3 install -r requirements.txt”**. Please note, this step only needs to be performed when running in a newly created Python virtual environment.



```
3445d7a314accd06e4ffb01d/pillow-10.4.0-cp38-cp38-macosx_10_10_x86_64.whl
Collecting sqlparse==0.3.1 (from django==4.2.16->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/5d/a5/b2860373aa8de1e626b2bdfdd6df4355f056
5b47e51f708c54fe70fa78fe/sqlparse-0.5.1-py3-none-any.whl
Collecting backports.zoneinfo; python_version < "3.9" (from django==4.2.16->-r requirements.txt (
line 1))
Using cached https://files.pythonhosted.org/packages/4a/6d/eca004eeadcbf8bd64cc96feb9e35536147
f0877420b44d80c7cac70767/backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_10_x86_64.whl
Collecting asgiref<4,>=3.6.0 (from django==4.2.16->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/39/e3/893e8757be2612e6c266d9bb58ad2e365152
4b5b40cf56761e985a28b13e/asgiref-3.8.1-py3-none-any.whl
Collecting typing-extensions>=4; python_version < "3.11" (from asgiref<4,>=3.6.0->django==4.2.16-
->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/26/9f/ad63fc0248c5379346306f8668cda6e2e2e9
c95e01216d2b8ff9ff837d0/typing_extensions-4.12.2-py3-none-any.whl
Installing collected packages: sqlparse, backports.zoneinfo, typing-extensions, asgiref, django,
pillow
Successfully installed asgiref-3.8.1 backports.zoneinfo-0.2.1 django-4.2.16 pillow-10.4.0 sqlpars
e-0.5.1 typing-extensions-4.12.2
WARNING: You are using pip version 19.2.3, however version 24.3.1 is available.
You should consider upgrading via the 'pip install --upgrade pip' command.
(app) admin@sysusers-MacBook-Pro app %
```

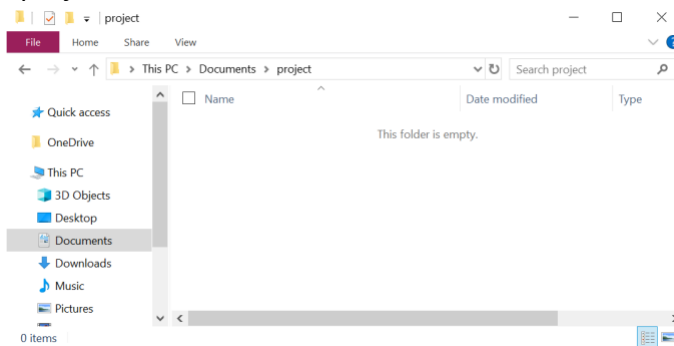
9. The project environment has been successfully setup. Now we can close the Python virtual environment. To do this, run the following command: **“deactivate”**. This concludes the project environment setup.



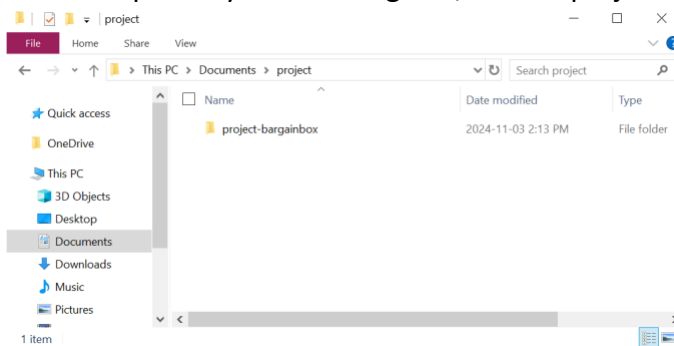
```
Collecting sqlparse==0.3.1 (from django==4.2.16->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/5d/a5/b2860373aa8de1e626b2bdfdd6df4355f056
5b47e51f708c54fe70fa78fe/sqlparse-0.5.1-py3-none-any.whl
Collecting backports.zoneinfo; python_version < "3.9" (from django==4.2.16->-r requirements.txt (
line 1))
Using cached https://files.pythonhosted.org/packages/4a/6d/eca004eeadcbf8bd64cc96feb9e35536147
f0877420b44d80c7cac70767/backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_10_x86_64.whl
Collecting asgiref<4,>=3.6.0 (from django==4.2.16->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/39/e3/893e8757be2612e6c266d9bb58ad2e365152
4b5b40cf56761e985a28b13e/asgiref-3.8.1-py3-none-any.whl
Collecting typing-extensions>=4; python_version < "3.11" (from asgiref<4,>=3.6.0->django==4.2.16-
->-r requirements.txt (line 1))
Using cached https://files.pythonhosted.org/packages/26/9f/ad63fc0248c5379346306f8668cda6e2e2e9
c95e01216d2b8ff9ff837d0/typing_extensions-4.12.2-py3-none-any.whl
Installing collected packages: sqlparse, backports.zoneinfo, typing-extensions, asgiref, django,
pillow
Successfully installed asgiref-3.8.1 backports.zoneinfo-0.2.1 django-4.2.16 pillow-10.4.0 sqlpars
e-0.5.1 typing-extensions-4.12.2
WARNING: You are using pip version 19.2.3, however version 24.3.1 is available.
You should consider upgrading via the 'pip install --upgrade pip' command.
(app) admin@sysusers-MacBook-Pro app % deactivate
admin@sysusers-MacBook-Pro app %
```

- **Windows**

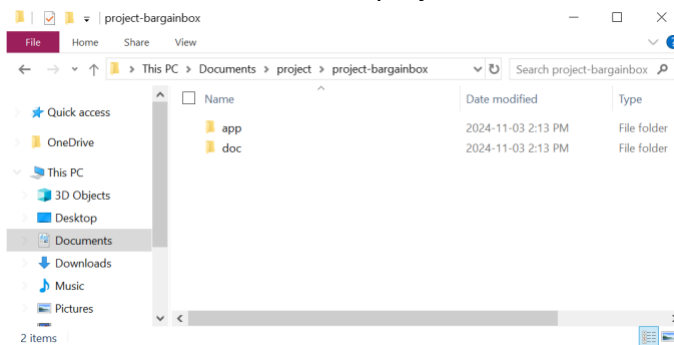
1. Create a new directory anywhere on your system. I will create a new directory called “project”.



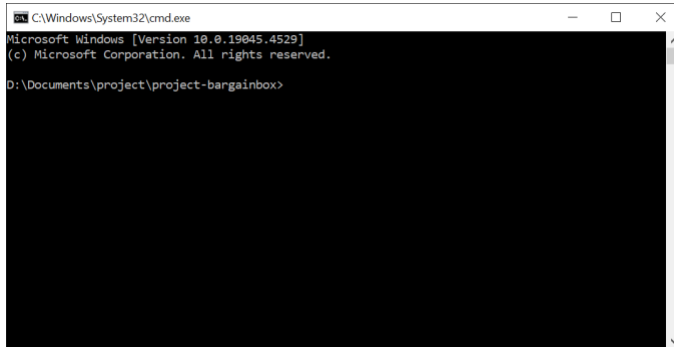
2. In the empty directory that was created in the previous step, clone the “project-bargainbox” GitHub repository. After doing this, a new “project-bargainbox” directory will be created.



3. Navigate into the newly created “project-bargainbox” directory. You will see two sub-directories:
 - a. “app” – contains the project’s code
 - b. “doc” – contains the project’s documentation and sprint information



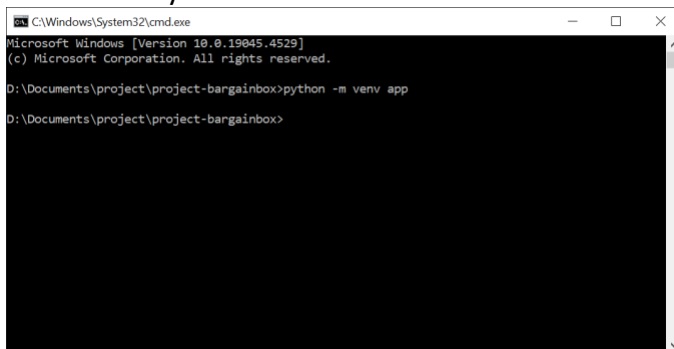
4. It is highly recommended that this project be executed from within a Python virtual environment. Unfortunately, the Python virtual environment files are not included in the GitHub repository as they are platform specific. As such, you need to create a Python virtual environment on your own. To create a Python virtual environment, open the Command Prompt and navigate to the “project-bargainbox” directory that is shown in the screenshot above.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>
```

5. Once your current working directory is set to “project-bargainbox”, run the following command: “**python -m venv app**”. This will create a Python virtual environment in the “app” sub-directory.

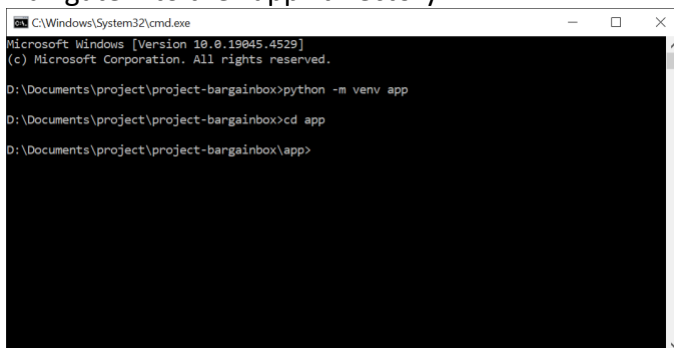


```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>python -m venv app

D:\Documents\project\project-bargainbox>
```

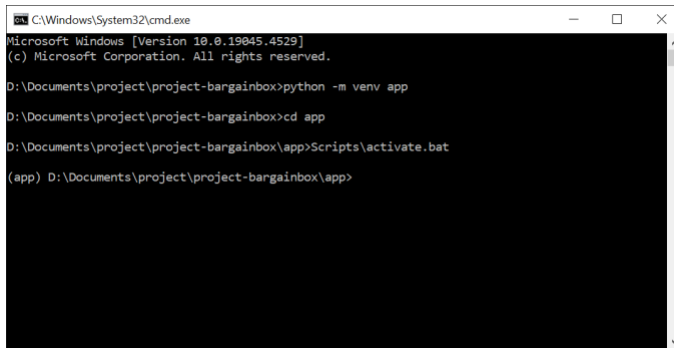
6. Navigate into the “app” directory.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>python -m venv app
D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>
```

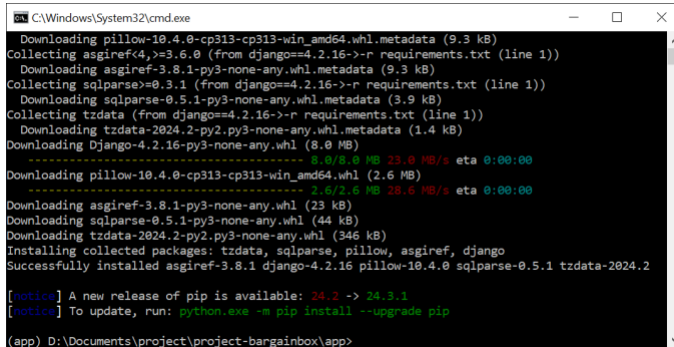
7. We can now activate the newly created Python virtual environment. To do this, run the following command: “Scripts\activate.bat”.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>python -m venv app
D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>Scripts\activate.bat
(app) D:\Documents\project\project-bargainbox\app>
```

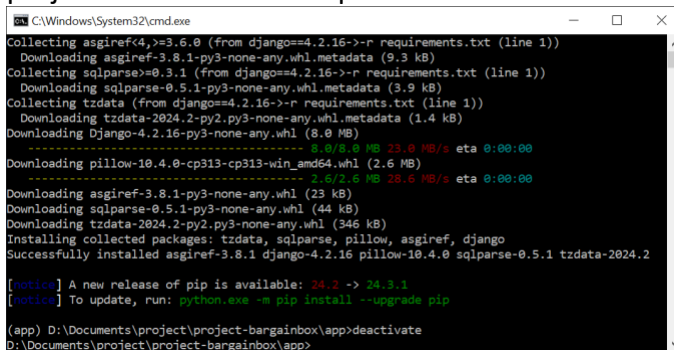
8. Next, we need to download and install the necessary dependencies in the Python virtual environment. To do this, run the following command: “**pip install -r requirements.txt**”. Please note, this step only needs to be performed when running in a newly created Python virtual environment.



```
C:\Windows\System32\cmd.exe
Downloading pillow-10.4.0-cp313-cp313-win_amd64.whl.metadata (9.3 kB)
Collecting asgiref<4,>=3.6.0 (from django==4.2.16->r requirements.txt (line 1))
  Downloading asgiref-3.8.1-py3-none-any.whl.metadata (9.3 kB)
Collecting sqlparse==0.3.1 (from django==4.2.16->r requirements.txt (line 1))
  Downloading sqlparse-0.5.1-py3-none-any.whl.metadata (3.9 kB)
Collecting tzdata (from django==4.2.16->r requirements.txt (line 1))
  Downloading tzdata-2024.2-py2.py3-none-any.whl.metadata (1.4 kB)
Downloading Django-4.2.16-py3-none-any.whl (8.0 MB)
----- 8.0/8.0 MB 23.0 MB/s eta 0:00:00
Downloading pillow-10.4.0-cp313-cp313-win_amd64.whl (2.6 MB)
----- 2.6/2.6 MB 28.6 MB/s eta 0:00:00
Downloading asgiref-3.8.1-py3-none-any.whl (23 kB)
Downloading sqlparse-0.5.1-py3-none-any.whl (44 kB)
Downloading tzdata-2024.2-py2.py3-none-any.whl (346 kB)
Installing collected packages: tzdata, sqlparse, pillow, asgiref, django
Successfully installed asgiref-3.8.1 django-4.2.16 pillow-10.4.0 sqlparse-0.5.1 tzdata-2024.2

[notice] A new release of pip is available: 24.2 -> 24.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
(app) D:\Documents\project\project-bargainbox\app>
```

9. The project environment has been successfully setup. Now we can close the Python virtual environment. To do this, run the following command: “**deactivate**”. This concludes the project environment setup.



```
C:\Windows\System32\cmd.exe
Collecting asgiref<4,>=3.6.0 (from django==4.2.16->r requirements.txt (line 1))
  Downloading asgiref-3.8.1-py3-none-any.whl.metadata (9.3 kB)
Collecting sqlparse==0.3.1 (from django==4.2.16->r requirements.txt (line 1))
  Downloading sqlparse-0.5.1-py3-none-any.whl.metadata (3.9 kB)
Collecting tzdata (from django==4.2.16->r requirements.txt (line 1))
  Downloading tzdata-2024.2-py2.py3-none-any.whl.metadata (1.4 kB)
Downloading Django-4.2.16-py3-none-any.whl (8.0 MB)
----- 8.0/8.0 MB 23.0 MB/s eta 0:00:00
Downloading pillow-10.4.0-cp313-cp313-win_amd64.whl (2.6 MB)
----- 2.6/2.6 MB 28.6 MB/s eta 0:00:00
Downloading asgiref-3.8.1-py3-none-any.whl (23 kB)
Downloading sqlparse-0.5.1-py3-none-any.whl (44 kB)
Downloading tzdata-2024.2-py2.py3-none-any.whl (346 kB)
Installing collected packages: tzdata, sqlparse, pillow, asgiref, django
Successfully installed asgiref-3.8.1 django-4.2.16 pillow-10.4.0 sqlparse-0.5.1 tzdata-2024.2

[notice] A new release of pip is available: 24.2 -> 24.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
(app) D:\Documents\project\project-bargainbox\app>deactivate
D:\Documents\project\project-bargainbox\app>
```

Running the project:

- **macOS**
 1. In the Terminal, set the current working directory to the “project-bargainbox” folder that was created during the environment setup process described above.



```
project-bargainbox -- zsh -- 97x22
admin@sysusers-MacBook-Pro project-bargainbox %
```

2. Navigate into the “app” sub-directory.



```
app -- zsh -- 97x22
admin@sysusers-MacBook-Pro project-bargainbox % cd app
admin@sysusers-MacBook-Pro app %
```

3. Activate the Python virtual environment. To do this, run the following command: “**source bin/activate**”.



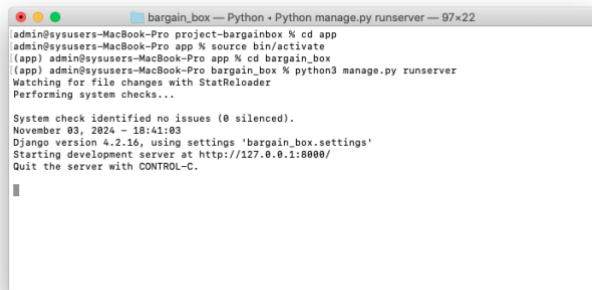
```
app -- zsh -- 97x22
admin@sysusers-MacBook-Pro project-bargainbox % cd app
admin@sysusers-MacBook-Pro app % source bin/activate
(app) admin@sysusers-MacBook-Pro app %
```


4. Navigate into the “bargain_box” sub-directory.



```
admin@sysusers-MacBook-Pro project-bargainbox % cd app
admin@sysusers-MacBook-Pro app % source bin/activate
(app) admin@sysusers-MacBook-Pro app % cd bargain_box
(app) admin@sysusers-MacBook-Pro bargain_box %
```

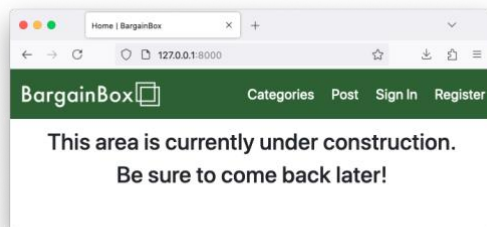
5. Run the server. To do this, run the following command: “python3 manage.py runserver”.



```
admin@sysusers-MacBook-Pro project-bargainbox % cd app
admin@sysusers-MacBook-Pro app % source bin/activate
(app) admin@sysusers-MacBook-Pro app % cd bargain_box
(app) admin@sysusers-MacBook-Pro bargain_box % python3 manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

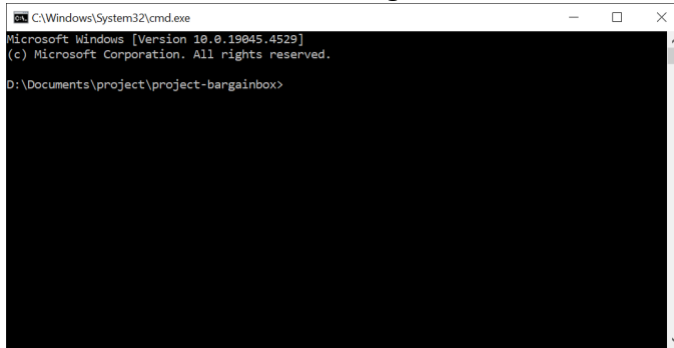
System check identified no issues (0 silenced).
November 03, 2024 - 18:41:03
Django version 4.2.16, using settings 'bargain_box.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

6. To access the application in a web browser, navigate to the URL that is provided by the previous step’s command output. You will now be able to access our application.



- **Windows**

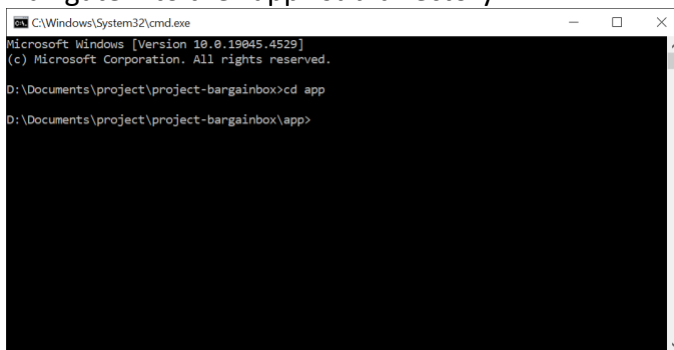
1. In the Command Prompt, set the current working directory to the “project-bargainbox” folder that was created during the environment setup process described above.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>
```

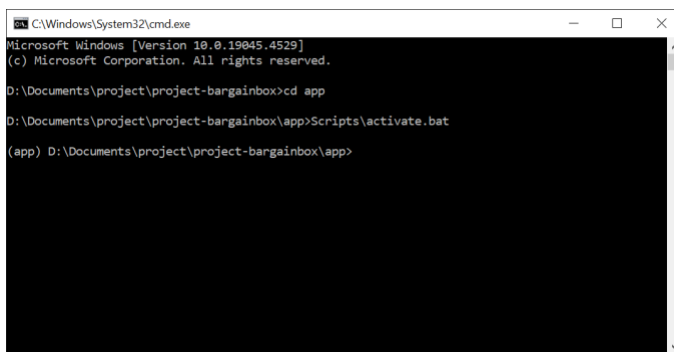
2. Navigate into the “app” sub-directory.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>
```

3. Activate the Python virtual environment. To do this, run the following command:
“Scripts\activate.bat”.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>Scripts\activate.bat
(app) D:\Documents\project\project-bargainbox\app>
```

4. Navigate into the “bargain_box” sub-directory.

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>Scripts\activate.bat
(app) D:\Documents\project\project-bargainbox\app>cd bargain_box
(app) D:\Documents\project\project-bargainbox\app\bargain_box>
```

5. Run the server. To do this, run the following command: “**python manage.py runserver**”.

```
C:\Windows\System32\cmd.exe - python manage.py runserver
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

D:\Documents\project\project-bargainbox>cd app
D:\Documents\project\project-bargainbox\app>Scripts\activate.bat
(app) D:\Documents\project\project-bargainbox\app>cd bargain_box
(app) D:\Documents\project\project-bargainbox\app\bargain_box>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
November 03, 2024 - 14:41:43
Django version 4.2.16, using settings 'bargain_box.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

6. To access the application in a web browser, navigate to the URL that is provided by the previous step’s command output. You will now be able to access our application.

