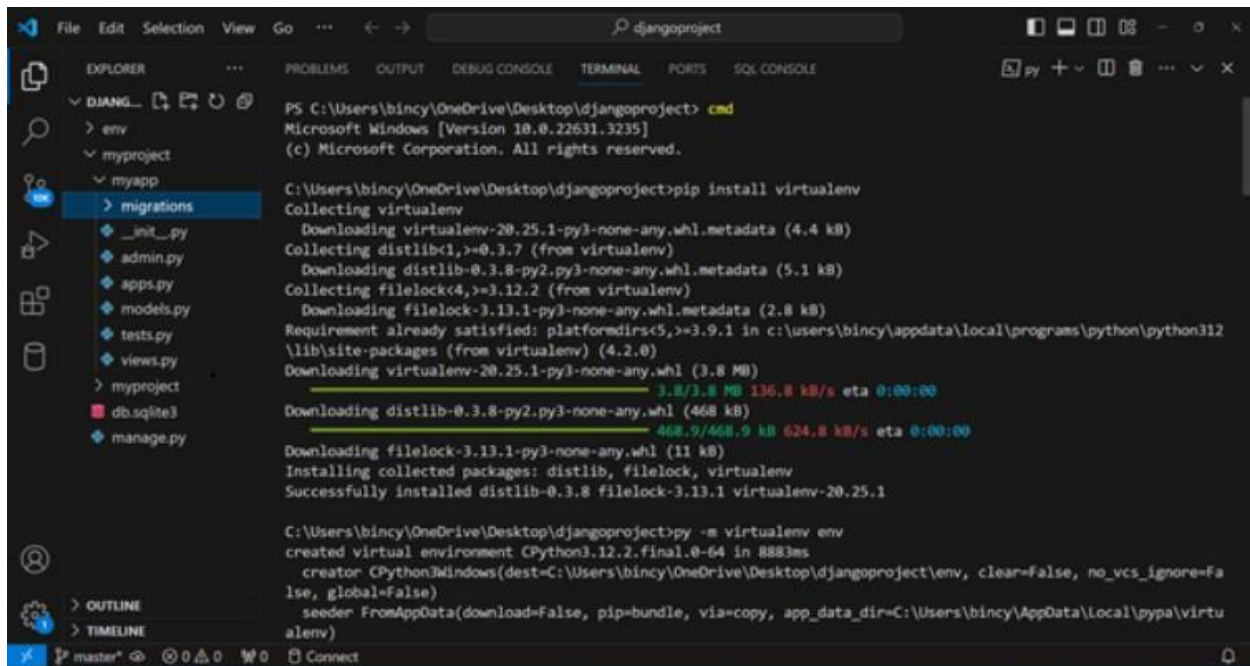


1. Create a virtual environment and install django in it - attach a screen shot



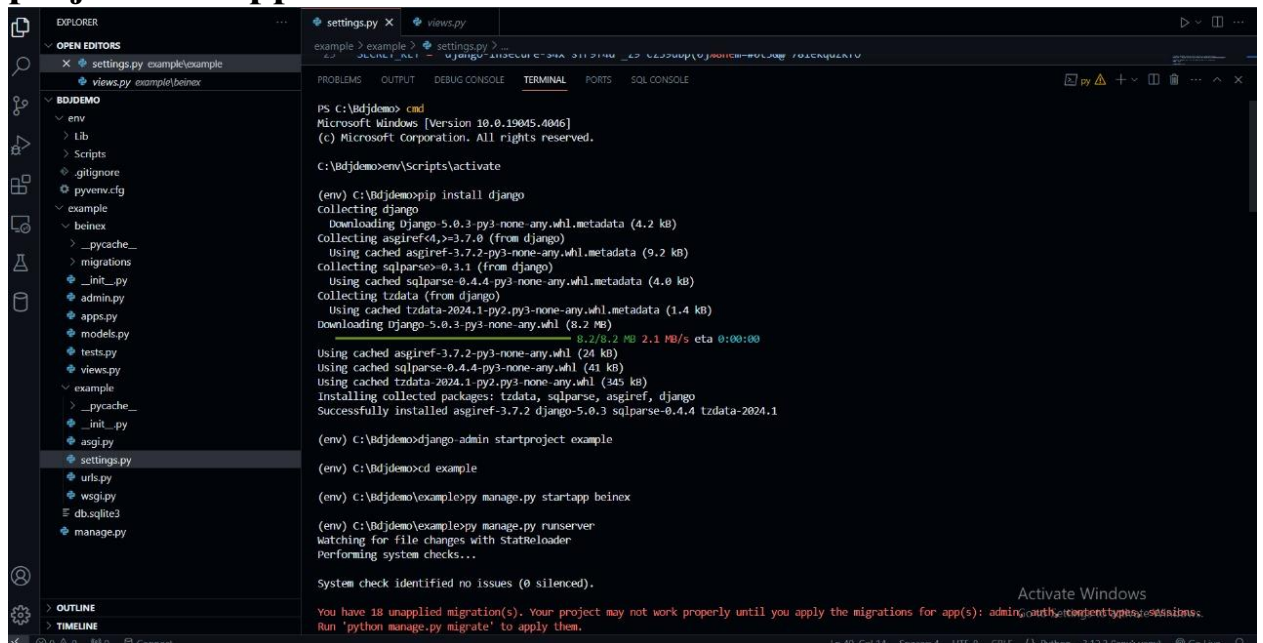
The screenshot shows the Visual Studio Code interface with a project named 'django-project'. The Explorer pane on the left shows a file structure with folders 'env' and 'myproject', and a file 'migrations'. The Terminal pane on the right shows the following commands and output:

```
PS C:\Users\bincy\OneDrive\Desktop\django-project> cmd
Microsoft Windows [Version 10.0.22631.3235]
(c) Microsoft Corporation. All rights reserved.

C:\Users\bincy\OneDrive\Desktop\django-project> pip install virtualenv
Collecting virtualenv
  Downloading virtualenv-20.25.1-py3-none-any.whl.metadata (4.4 kB)
Collecting distlib<1,>=0.3.7 (from virtualenv)
  Downloading distlib-0.3.8-py2.py3-none-any.whl.metadata (5.1 kB)
Collecting filelock<4,>=3.12.2 (from virtualenv)
  Downloading filelock-3.13.1-py3-none-any.whl.metadata (2.8 kB)
Requirement already satisfied: platformdirs<5,>=3.9.1 in c:\users\bincy\appdata\local\programs\python\python312\lib\site-packages (from virtualenv) (4.2.0)
Downloading virtualenv-20.25.1-py3-none-any.whl (3.8 MB)
3.8/3.8 MB 136.8 kB/s eta 0:00:00
Downloading distlib-0.3.8-py2.py3-none-any.whl (468 kB)
468.9/468.9 kB 624.8 kB/s eta 0:00:00
Downloading filelock-3.13.1-py3-none-any.whl (11 kB)
Installing collected packages: distlib, filelock, virtualenv
Successfully installed distlib-0.3.8 filelock-3.13.1 virtualenv-20.25.1

C:\Users\bincy\OneDrive\Desktop\django-project> py -m virtualenv env
created virtual environment CPython3.12.2.final.0-64 in 8883ms
  creator CPythonWindows(dest=C:\Users\bincy\OneDrive\Desktop\django-project\env, clear=False, no_vcs_ignore=False, global=False)
  seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\Users\bincy\AppData\Local\pypa\virtualenv)
  activator BashActivator
```

2. Create a django project and app , explain the files of the project and app folders



The screenshot shows the Visual Studio Code interface with a project named 'example'. The Explorer pane on the left shows a file structure with folders 'env', 'Lib', 'Scripts', and 'example'. The Terminal pane on the right shows the following commands and output:

```
PS C:\Bddemo> cmd
Microsoft Windows [Version 10.0.19045.4046]
(c) Microsoft Corporation. All rights reserved.

C:\Bddemo> env\Scripts\activate
(env) C:\Bddemo> pip install django
Collecting django
  Downloading Django-5.0.3-py3-none-any.whl.metadata (4.2 kB)
Collecting asgiref<4,>=3.7.0 (from django)
  Using cached asgiref-3.7.2-py3-none-any.whl.metadata (9.2 kB)
Collecting sqlparse<0.5.1 (from django)
  Using cached sqlparse-0.4.4-py3-none-any.whl.metadata (4.0 kB)
Collecting tzdata (from django)
  Using cached tzdata-2024.1-py2.py3-none-any.whl.metadata (1.4 kB)
Downloading Django-5.0.3-py3-none-any.whl (8.2 MB)
8.2/8.2 MB 2.1 MB/s eta 0:00:00
Using cached asgiref-3.7.2-py3-none-any.whl (24 kB)
Using cached sqlparse-0.4.4-py3-none-any.whl (41 kB)
Using cached tzdata-2024.1-py2.py3-none-any.whl (345 kB)
Installing collected packages: tzdata, sqlparse, asgiref, django
Successfully installed asgiref-3.7.2 django-5.0.3 sqlparse-0.4.4 tzdata-2024.1

(env) C:\Bddemo> django-admin startproject example
(env) C:\Bddemo> cd example
(env) C:\Bddemo\example> python manage.py startapp beinx
(env) C:\Bddemo\example> python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
```

myproject/: This is the main directory of our Django project. Inside this directory, we can find the following files and directories:

- **manage.py:** This is a command-line utility that allows you to interact with our Django project. We can use it for various tasks like running development server, creating migrations, etc.
- **myproject/:** This is the inner directory with the same name as our project. It contains the settings and configurations for our Django project.

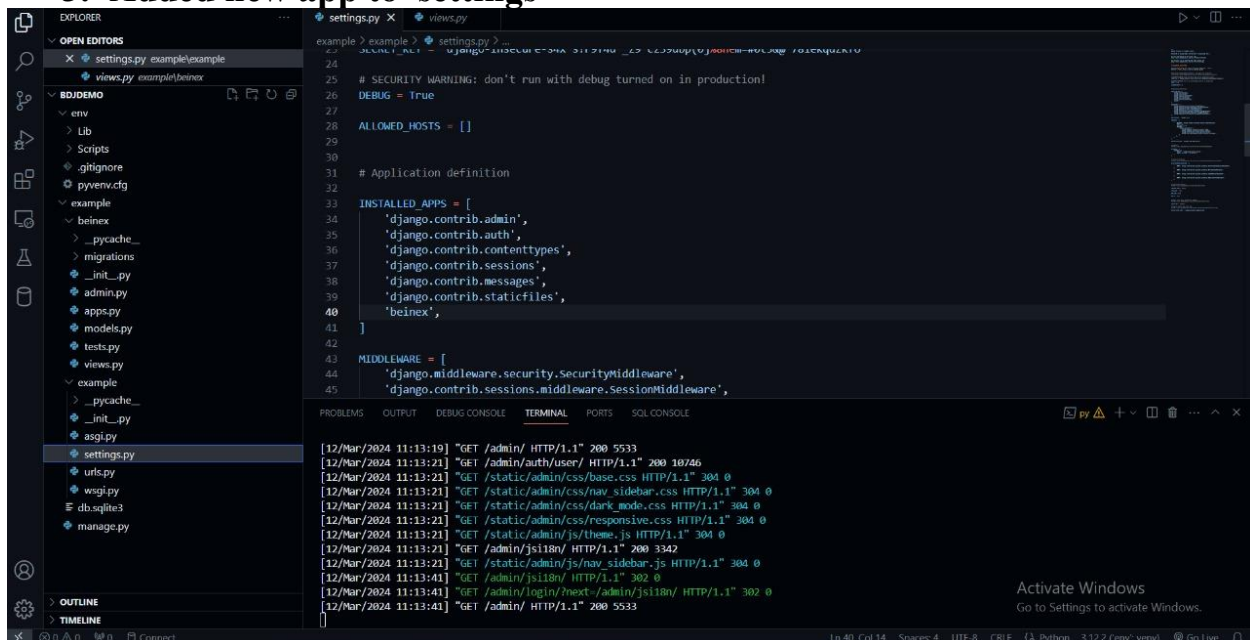
__init__.py: This file tells Python that this directory should be considered a Python package

- **settings.py:** This file contains all the settings for our Django project, such as database configuration, static files, middleware, etc.
- **urls.py:** This file contains the URL patterns for our project.
- **wsgi.py:** This is the entry-point for WSGI-compatible web servers to serve our Django application.
- **asgi.py:** Entry-point for ASGI-compatible servers to serve the project asynchronously.

myapp/: This is the directory of our Django app.

- **__init__.py:** This file tells Python that this directory should be considered a Python package.
- **admin.py:** This file is where we register our models to make them accessible via Django's admin interface.
- **apps.py:** This file contains configuration for the app.
- **models.py:** This is where you define our database models using Django's ORM (Object-Relational Mapper).
- **tests.py:** This file is for writing unit tests for our app.
- **views.py:** This is where you define the views (or controllers) for our app.

3. Added new app to settings



The screenshot shows the Visual Studio Code editor with the Django project structure on the left. The `settings.py` file is open in the center, showing the `INSTALLED_APPS` list. The `'beinex'` app has been added to the list. The `MIDDLEWARE` list also includes `'django.contrib.sessions.middleware.SessionMiddleware'`. At the bottom, the terminal window displays a series of successful HTTP GET requests to the development server, confirming that the application is running correctly.

```
example > settings.py > ...
24
25 # SECURITY WARNING: don't run with debug turned on in production!
26 DEBUG = True
27
28 ALLOWED_HOSTS = []
29
30
31 # Application definition
32
33 INSTALLED_APPS = [
34     'django.contrib.admin',
35     'django.contrib.auth',
36     'django.contrib.contenttypes',
37     'django.contrib.sessions',
38     'django.contrib.messages',
39     'django.contrib.staticfiles',
40     'beinex',
41 ]
42
43 MIDDLEWARE = [
44     'django.middleware.security.SecurityMiddleware',
45     'django.contrib.sessions.middleware.SessionMiddleware',
46 ]
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

```
[12/Mar/2024 11:13:19] "GET /admin/ HTTP/1.1" 200 5533
[12/Mar/2024 11:13:21] "GET /admin/auth/user/ HTTP/1.1" 200 10746
[12/Mar/2024 11:13:21] "GET /static/admin/css/base.css HTTP/1.1" 304 0
[12/Mar/2024 11:13:21] "GET /static/admin/css/nav_sidebar.css HTTP/1.1" 304 0
[12/Mar/2024 11:13:21] "GET /static/admin/css/dark_mode.css HTTP/1.1" 304 0
[12/Mar/2024 11:13:21] "GET /static/admin/css/responsive.css HTTP/1.1" 304 0
[12/Mar/2024 11:13:21] "GET /static/admin/js/theme.js HTTP/1.1" 304 0
[12/Mar/2024 11:13:21] "GET /admin/jsi18n/ HTTP/1.1" 200 3342
[12/Mar/2024 11:13:21] "GET /static/admin/js/nav_sidebar.js HTTP/1.1" 304 0
[12/Mar/2024 11:13:41] "GET /admin/jsi18n/ HTTP/1.1" 302 0
[12/Mar/2024 11:13:41] "GET /admin/login/next-/admin/jsi18n/ HTTP/1.1" 302 0
[12/Mar/2024 11:13:41] "GET /admin/ HTTP/1.1" 200 5533
```

Activate Windows
Go to Settings to activate Windows.

Ln 40, Col 14, Spaces: 4, UTF-8, CRLF, Python 3.12.2 (env: venv), Go Live

4. Run the django project - attach screen shots of the django admin panel and SITE

The image shows a VS Code editor with a Django project. The Explorer sidebar on the left shows the project structure, including files like `settings.py`, `views.py`, `urls.py`, `models.py`, `tests.py`, `manage.py`, and `db.sqlite3`. The main editor area displays the `settings.py` file, which includes the `INSTALLED_APPS` list with Django's built-in apps and the project's app. The Terminal at the bottom shows the output of running `python manage.py runserver`, indicating that the development server is running on `http://127.0.0.1:8000/`.

Below the editor, a screenshot of the Django administration site is shown. The page title is "Django administration". The navigation bar includes links for "WELCOME: ADMIN", "VIEW SITE", "CHANGE PASSWORD", and "LOG OUT". The main content area is titled "Site administration" and contains a section for "AUTHENTICATION AND AUTHORIZATION". This section has two rows: "Groups" and "Users", each with "Add" and "Change" links. To the right of this section is a "Recent actions" box, which currently shows "My actions" and "None available".

At the bottom right of the Django admin page, there is a message: "Activate Windows. Go to Settings to activate Windows."

Start typing to filter...

AUTHENTICATION AND
AUTHORIZATION[Groups](#)[+ Add](#)[Users](#)[+ Add](#)

Select user to change

 Action: 0 of 1 selected

<input type="checkbox"/>	USERNAME	EMAIL ADDRESS	FIRST NAME	LAST NAME	STAFF STATUS
<input type="checkbox"/>	Admin	admin@gmail.com			

1 user

[ADD USER](#)

FILTER

[Show counts](#)

1 By staff status

[All](#)
[Yes](#)
[No](#)

1 By superuser status

[All](#)
[Yes](#)
[No](#)

1 By active

[All](#)
[Yes](#)
[No](#)

Activate Windows

[Go to Settings to activate Windows.](#)