Practical 1: Creating a Private Server

1. **Using Node JS**

Step 1

```
Your environment has been set up for using Node.js 18.17.0 (x64) and npm.

C:\Users\Admin>mkdir myapp

C:\Users\Admin>cd myapp
```

Step 2

```
C:\Users\Admin\myapp>npm install express

added 64 packages in 2s

12 packages are looking for funding
  run `npm fund` for details
```

Step 3

Create a server.js file in the same directory with the following code:

```
const express = require('express');
const app = express();
const PORT = 8080;

app.get('/', (req, res) => {
   res.send(`<h1 style="color: green;">Hello Gfg!</h1>`);
});

app.listen(PORT, () => {
   console.log(`Server is listening at http://localhost:${PORT}`);
});
```

Step 4:

And the server is created using JavaScript

```
C:\Users\Admin\myapp>node server.js
Server is listening at http://localhost:3000
```

```
Microsoft Windows [Version 10.0.22631.3880]
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C:\Users\Admin>pip install pipenv
Collecting pipenv
  Downloading pipenv-2024.0.1-py3-none-any.whl.metadata (19 kB)
Collecting certifi (from pipenv)
  Downloading certifi-2024.7.4-py3-none-any.whl.metadata (2.2 kB)
Collecting setuptools>=67 (from pipenv)
  Downloading setuptools-71.1.0-py3-none-any.whl.metadata (6.6 kB)
Collecting virtualenv>=20.24.2 (from pipenv)
  Downloading virtualenv-20.26.3-py3-none-any.whl.metadata (4.5 kB)
Collecting distlib<1,>=0.3.7 (from virtualenv>=20.24.2->pipenv)
  Downloading distlib-0.3.8-py2.py3-none-any.whl.metadata (5.1 kB)
Collecting filelock<4,>=3.12.2 (from virtualenv>=20.24.2->pipenv)
  Downloading filelock-3.15.4-py3-none-any.whl.metadata (2.9 kB)
Collecting platformdirs<5,>=3.9.1 (from virtualenv>=20.24.2->pipenv)
  Downloading platformdirs-4.2.2-py3-none-any.whl.metadata (11 kB)
Downloading pipenv-2024.0.1-py3-none-any.whl (3.2 MB)
  ──────────────────────────────────── 3.2/3.2 MB 8.5 MB/s eta 0:00:00
Downloading setuptools-71.1.0-py3-none-any.whl (2.3 MB)
  ──────────────────────────────────── 2.3/2.3 MB 10.6 MB/s eta 0:00:00
Downloading virtualenv-20.26.3-py3-none-any.whl (5.7 MB)
  ──────────────────────────────────── 5.7/5.7 MB 9.1 MB/s eta 0:00:00
Downloading certifi-2024.7.4-py3-none-any.whl (162 kB)
  ──────────────────────────────────── 163.0/163.0 kB 10.2 MB/s eta 0:00:00
Downloading distlib-0.3.8-py2.py3-none-any.whl (468 kB)
  ──────────────────────────────────── 468.9/468.9 kB 5.9 MB/s eta 0:00:00
Downloading filelock-3.15.4-py3-none-any.whl (16 kB)
Downloading platformdirs-4.2.2-py3-none-any.whl (18 kB)
Installing collected packages: distlib, setuptools, platformdirs, filelock, certifi, virtualenv, pipenv
  Attempting uninstall: setuptools
    Found existing installation: setuptools 65.5.0
    Uninstalling setuptools-65.5.0:
      Successfully uninstalled setuptools-65.5.0
Successfully installed certifi-2024.7.4 distlib-0.3.8 filelock-3.15.4 pipenv-2024.0.1 platformdirs-4.2.2 setuptools-71.1.0 virtualenv-20.26.3

[notice] A new release of pip is available: 24.0 -> 24.1.2
[notice] To update, run: python.exe -m pip install --upgrade pip
```

```
C:\Users\Admin>mkdir prac1b

C:\Users\Admin>cd prac1b

C:\Users\Admin\prac1b>pipenv install django
Creating a virtualenv for this project...
Pipfile: C:\Users\Admin\prac1b\Pipfile
Using default python from C:\Users\Admin\AppData\Local\Programs\Python\Python311\python.exe (3.11.5) to create virtualenv...
[ ===] Creating virtual environment...created virtual environment CPython3.11.5.final.0-64 in 1459ms
  creator CPython3Windows(dest=C:\Users\Admin\.virtualenvs\prac1b-qqu_h3nv, clear=False, no_vcs_ignore=False, global=False)
  seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_dir=C:\Users\Admin\AppData\Local\pypa\virtualenv)
    added seed packages: pip==24.1, setuptools==70.1.0, wheel==0.43.0
  activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator

Successfully created virtual environment!
Virtualenv location: C:\Users\Admin\.virtualenvs\prac1b-qqu_h3nv
Creating a Pipfile for this project...
Installing django...
Resolving django...
Added django to Pipfile's [packages] ...
Installation Succeeded
Pipfile.lock not found, creating...
Locking [packages] dependencies...
Building requirements...
Resolving dependencies...
Success!
Locking [dev-packages] dependencies...
Updated Pipfile.lock (af42abefb766e975f7680f10368735353569fb4fe0114e59496a7202658362fc)!
To activate this project's virtualenv, run pipenv shell.
Alternatively, run a command inside the virtualenv with pipenv run.
Installing dependencies from Pipfile.lock (8362fc)...

C:\Users\Admin\prac1b>pipenv shell
Launching subshell in virtual environment...
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(prac1b-qqu_h3nv) C:\Users\Admin\prac1b>django-admin startproject prac1b .
```

```
C:\Users\Admin\prac1b>pipenv shell
Launching subshell in virtual environment...
Microsoft Windows [Version 10.0.22631.3880]
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(prac1b-qqu_h3nv) C:\Users\Admin\prac1b>django-admin startproject prac1b .

(prac1b-qqu_h3nv) C:\Users\Admin\prac1b>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.
July 24, 2024 - 18:09:03
Django version 5.0.7, using settings 'prac1b.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.

[24/Jul/2024 18:09:19] "GET / HTTP/1.1" 200 10629
Not Found: /favicon.ico
[24/Jul/2024 18:09:19] "GET /favicon.ico HTTP/1.1" 404 2110
```

```
(prac1b-qqu_h3nv) C:\Users\Admin\prac1b>django-admin startproject prac1b .

(prac1b-qqu_h3nv) C:\Users\Admin\prac1b>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

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```


django

View release notes for Django 5.0

You can open bookmarks, reading mode, and more from the Chrome menu

The install worked successfully! Congratulations!
You are seeing this page because DEBUG=True is in your
settings file and you have not configured any URLs.

Django Documentation
Topics, references, & how-to's

Tutorial: A Polling App
Get started with Django

Django Community
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