

Instructions

Type	Documentation
Github Repo	https://github.com/Mo-Adel1/Python-Code-Execution-HTTP-Server

Installation Instructions for Python Code Execution HTTP Server

1- Progress Overview

Done:

- **Level 1:** Basic Code Execution
- **Level 2:** Resource Limits
- **Level 3:** Persistent Interpreter Sessions
- **Level 4:** Response Schema Update

2- Prerequisites

- This project requires Python 3.11 or later. To check your Python version, run in CMD or Terminal:

```
python --version
```

or (usually for linux):

```
python3 --version
```

If you need to install Python, download the latest version for your operating system from

[Python Downloads](#).

3- Installation and Running Instructions

After extracting the compressed file:

For Windows

1. Navigate to the extracted project directory:

Open the Command Prompt and change to the directory where you extracted the project files:

```
cd \path\to\extracted\project
```

2. Create a Virtual Environment (make sure you are in the root folder):

```
python -m venv venv
```

3. Activate the Virtual Environment:

```
.\venv\Scripts\activate
```

4. Install Required Dependencies:

```
pip install -r requirements.txt
```

5. **Run the Server:**

```
python main.py
```

For Linux

1. **Navigate to the extracted project directory:**

Open a terminal and change to the directory where you extracted the project files:

```
cd /path/to/extracted/project
```

2. **Create a Virtual Environment (make sure you are in the root folder) use (python3 or python):**

```
python3 -m venv venv
```

3. **Activate the Virtual Environment:**

```
source venv/bin/activate
```

4. **Install Required Dependencies:**

```
pip install -r requirements.txt
```

5. **Run the Server**(python3 or python):

```
python3 main.py
```

4- Testing the Server with Postman

For easy testing, a **Postman Collection** has been provided that contains basic examples and unit tests for the server.

Postman Collection: `HTTP-Server.postman_collection.json`

This collection includes pre-configured requests and tests to help you quickly test the server's functionality. The collection is located in the **root directory** of the project.

How to Import the Collection in Postman:

1. Open **Postman**.
2. Click on the **Import** button (located in the top-left corner).
3. In the import window, select the **File** tab.
4. Click on **Choose Files** and select the `HTTP-Server.postman_collection.json` file from the **root directory** of your project.
5. Click **Open**, and the collection will be imported into Postman.

How to Run the Collection:

Once the collection is imported, you can run it by following these steps:

1. Go to the **Collections** tab in Postman.
2. Select the **HTTP-Server** collection.
3. Click on the **Run** button (located at the top-right of the collection view).
4. Then click **Start Run**.

Postman Tests

The collection includes unit tests in JavaScript that validate the responses from the server, ensuring that the server is working as expected. If any test fails, Postman will provide feedback so you can troubleshoot.