

# How to Clone and Run MCSpectra from GitHub

## **Step 1: Install Prerequisites**

Before you start, ensure you have the following installed:

### **1. Python (3.8 or later)**

- Download and install from [python.org](https://python.org)
- Verify installation:
- `python --version`

### **2. Git**

- Download and install from [git-scm.com](https://git-scm.com)
  - Verify installation:
  - `git --version`
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## **Step 2: Clone the MCSpectra GitHub Repository**

1. Open **Terminal** (macOS/Linux) or **Command Prompt/PowerShell** (Windows).
2. Navigate to the directory where you want to store the project:

```
>> cd path/to/your/directory
```

3. Clone the repository:

```
>> git clone https://github.com/ihsan1990-90/MCSpectra_app
```

4. Move into the project folder:

```
>> cd MCSpectra_app
```

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## **Step 3: Set Up a Virtual Environment (Recommended)**

To avoid dependency conflicts, create a virtual environment:

### **Windows (Command Prompt/PowerShell)**

```
>> python -m venv venv
```

```
>> venv\Scripts\activate
```

### **macOS/Linux (Terminal)**

```
>>python3 -m venv venv  
>>source venv/bin/activate
```

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#### **Step 4: Install Dependencies**

Run the following command to install the required packages:

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

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#### **Step 5: Run MCSpectra**

Execute the following command inside the project directory:

```
>>streamlit run spectra_w_uncertainty_SL.py
```

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#### **Step 6: Open the App in Browser**

Once the app starts, you'll see an output like:

You can now view your Streamlit app in your browser.

Local URL: <http://localhost:8501>

Network URL: <http://192.168.x.x:8501>

Open the **Local URL** in a web browser to view the app.

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