

Setting Up a Python Environment

Introduction

- This presentation will guide you through setting up a Python environment for development.
- We will cover:
 - Python installation
 - Creating a virtual environment
 - Installing Jupyter Notebook
 - Cloning a GitHub repository
 - Installing dependencies from a `requirements.txt` file
 - Starting a Jupyter Notebook

Installing Python

Windows

1. Download the Python installer from python.org.
2. Run the installer and check “Add Python to PATH”.
3. Click “Install Now”.

macOS

1. Check if Python is already installed:

```
python --version
```

2. If not, install Python using Homebrew: “`bash /bin/bash -c “$(curl -fsSL https://raw.githubusercontent.com/Homebrew/homebrew-core/master/scripts/install_all.sh) brew install python`”

Creating a Virtual Environment

Windows

1. Open Command Prompt.
2. Navigate to your project directory:

```
cd path\to\your\project
```

3. Create a virtual environment:

```
python -m venv myenv
```

macOS

1. Open Terminal.
2. Navigate to your project directory:

```
cd /path/to/your/project
```

3. Create a virtual environment:

```
python3 -m venv myenv
```

Activating the Virtual Environment

Windows

```
myenv\Scripts\activate
```

macOS

```
source myenv/bin/activate
```

Installing Jupyter Notebook

```
pip install notebook
```

Cloning a GitHub Repository

```
git clone https://github.com/abigailhaddad/LMGradingRubric.git
```

Installing Dependencies

Navigate to the cloned repository and install the requirements:

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

Starting Jupyter Notebook

From the Command Line

Activate your virtual environment and start Jupyter Notebook:

```
jupyter notebook
```

Using a File Browser

- Double-clicking an .ipynb file might not open it in the virtual environment.
- To ensure it uses the correct environment, start Jupyter Notebook from the command line and open the file from the Jupyter dashboard.

Changing the Kernel (if needed)

- If your notebook is not using the kernel associated with your virtual environment:
 - Click on “Kernel” > “Change kernel” in the Jupyter Notebook menu.
 - Select the kernel that corresponds to your virtual environment.

Conclusion

- You now have a complete Python environment set up for development.
- You can use this environment to work on projects, run Jupyter Notebooks, and more.