Project Setup & Installation Guide

This guide walks you through setting up the project on **Windows** using **Python 3.10.11** and running the Streamlit app.

Prerequisites

- Windows OS (64-bit)
- Python **3.10.11 (64-bit)** `.exe` installer (provided)
- Internet connection
- Basic familiarity with Command Prompt

Step 1: Install Python 3.10.11

1. Double-click the provided **Python 3.10.11** `.exe` **installer**
2. **IMPORTANT:** On the first screen, check
   - ☑ **"Add Python 3.10 to PATH"**
3. Click **Install Now**
4. Wait for installation to complete

Step 2: Navigate to the Project Directory

Open **Command Prompt** and navigate to the project folder:

```
cd C:\path\to\your\project\prototype
```

Step 3: Create a Virtual Environment

Create a virtual environment named `venv` using Python 3.10.11:

```
python -m venv venv
```

Step 4: Activate the Virtual Environment

Activate the virtual environment:

```
venv\Scripts\activate
```

Once activated, your terminal should show `(venv)` at the beginning of the line.

Now confirm the Python version **inside the virtual environment**:

```
python --version
```

Expected output:

```
Python 3.10.11
```

Step 5: Install Dlib (Precompiled Wheel)

Install the provided precompiled **dlib** wheel:

```
pip install dlib-19.24.6-cp310-cp310-win_amd64.whl
```

> Ensure the `.whl` file is located in the project directory or provide its full path.

Step 6: Install Project Dependencies

Install the remaining dependencies:

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

Step 7: Run the Application

Start the Streamlit app:

```
streamlit run app.py
```

Streamlit will open the application automatically in your browser.
If it does not, open the local URL shown in the terminal.

Troubleshooting

- Make sure the virtual environment is activated before installing packages
- Ensure Python version is **3.10.11**, not newer versions
- Run Command Prompt as **Administrator** if permission issues occur

Notes

- Always activate the virtual environment before running the app
- Do **not** delete the venv folder unless reinstalling dependencies
- This setup is optimized for Windows systems