

# How to Run the Generative AI Text Summarization Tool

This document provides step-by-step instructions on how to set up and run the Generative AI Text Summarization Tool using a virtual environment in Python.

## Step 1: Create a Virtual Environment

Open a terminal or command prompt and navigate to your project directory. Then run:

```
python -m venv streamlit_env
```

## Step 2: Activate the Virtual Environment

For Windows (Command Prompt):

```
streamlit_env\Scripts\activate.bat
```

For Windows (PowerShell):

```
streamlit_env\Scripts\Activate.ps1
```

For macOS/Linux:

```
source streamlit_env/bin/activate
```

## Step 3: Install Dependencies

Once the virtual environment is activated, install the necessary Python packages:

```
pip install streamlit torch torchvision torchaudio transformers faiss-cpu sentence-transformers
```

## Step 4: Run the Streamlit App

To launch the application, use the following command:

```
streamlit run app.py
```

## Step 5: Open the Application in a Browser

After running the command, you will see output like this:

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

Open this link in your browser to start using the summarization tool.

## **Step 6: Troubleshooting**

If you encounter any errors such as missing modules, install them manually using pip:

```
pip install <module_name>
```

If 'streamlit' is not recognized, try running:

```
python -m streamlit run app.py
```

If you face permission issues in PowerShell, run:

```
Set-ExecutionPolicy Unrestricted -Scope Process
```

## **Conclusion**

This guide provides a quick and easy way to set up and run the Generative AI Text Summarization Tool. If you need further assistance, refer to the official documentation for Streamlit and Hugging Face Transformers.