

✓ Step-by-Step Guide to Run the Automated Patent Summarizer

1. Install the Required Tools

Before running the project, make sure you have the necessary tools installed on your system:

- Python (preferably version 3.8 or higher)
 - A code editor or development environment (like VS Code or Jupyter Notebook)
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2. Install the Project Dependencies

You'll need several Python libraries to run this project. Use a terminal or command prompt to install the following:

- OpenAI
- Gradio
- Pandas
- Matplotlib
- Seaborn
- Rouge-score
- Transformers
- PyMuPDF

Make sure everything is installed before you proceed.

3. Set Up Your OpenAI API Key

You must have an OpenAI API key to access GPT-based models. Copy your key from the OpenAI dashboard and assign it within your script where prompted. Be sure to **keep it secure** and **never share it publicly**.

4. Run the Script

Once everything is set up, run the Python script in your development environment. This will:

- Load the fine-tuned summarizer model
- Set up a Gradio web interface
- Allow you to interact with the summarizer using either PDF files or plain text input

5. Use the Gradio Interface

After running the script, a Gradio interface will launch (usually in your browser). Here's how to use it:

- **Option 1:** Upload a patent PDF file using the file uploader.
- **Option 2:** Paste the full patent description directly into the textbox.
- Click the button to generate a summary.
- The summary will appear below the inputs.

6. Review and Use the Output

Once the summary is generated, you can:

- Read the summarized version of the patent
- Copy it for documentation or reporting
- Rerun it with another input if needed