Example Usage

Step-by-Step Instructions

1. **Start the application**:

   streamlit run app.py

2. **Enter your OpenRouter API key**
   You can get a free API key at   https://openrouter.ai/.
3. **Upload a satellite rooftop image**
4. **Click - Analyze Rooftop"**
   The app will:
   - Send the image to OpenRouter using the deepseek/deepseek-chat-v3-0324:free model.
   - Use a structured prompt to request a solar installation assessment.
   - Display the results.

Sample Output

Solar Potential Report

- Rooftop Area Usable: ~55 m²
- Estimated 400W Panels: 30 panels
- Total Energy Output: ~16,000 kWh/year
- Installation Cost Estimate: ₹7.5 lakhs
- ROI Period: 5.2 years
- Recommendation: South-facing tilt, on-grid connection with net metering. Clean every 3–4 months.

   ** Python command please see README.md file