

Streamlit Application Execution Log

```
cd "C:\Users\jutur\Downloads\hybrid_energy_app"
```

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

```
PowerShell 7.4.13

A new PowerShell stable release is available: v7.5.4
Upgrade now, or check out the release page at:
https://aka.ms/PowerShell-Release?tag=v7.5.4

PS C:\Users\jutur> cd "C:\Users\jutur\Downloads\hybrid_energy_app"
PS C:\Users\jutur\Downloads\hybrid_energy_app> python -m streamlit run app.py

You can now view your Streamlit app in your browser.

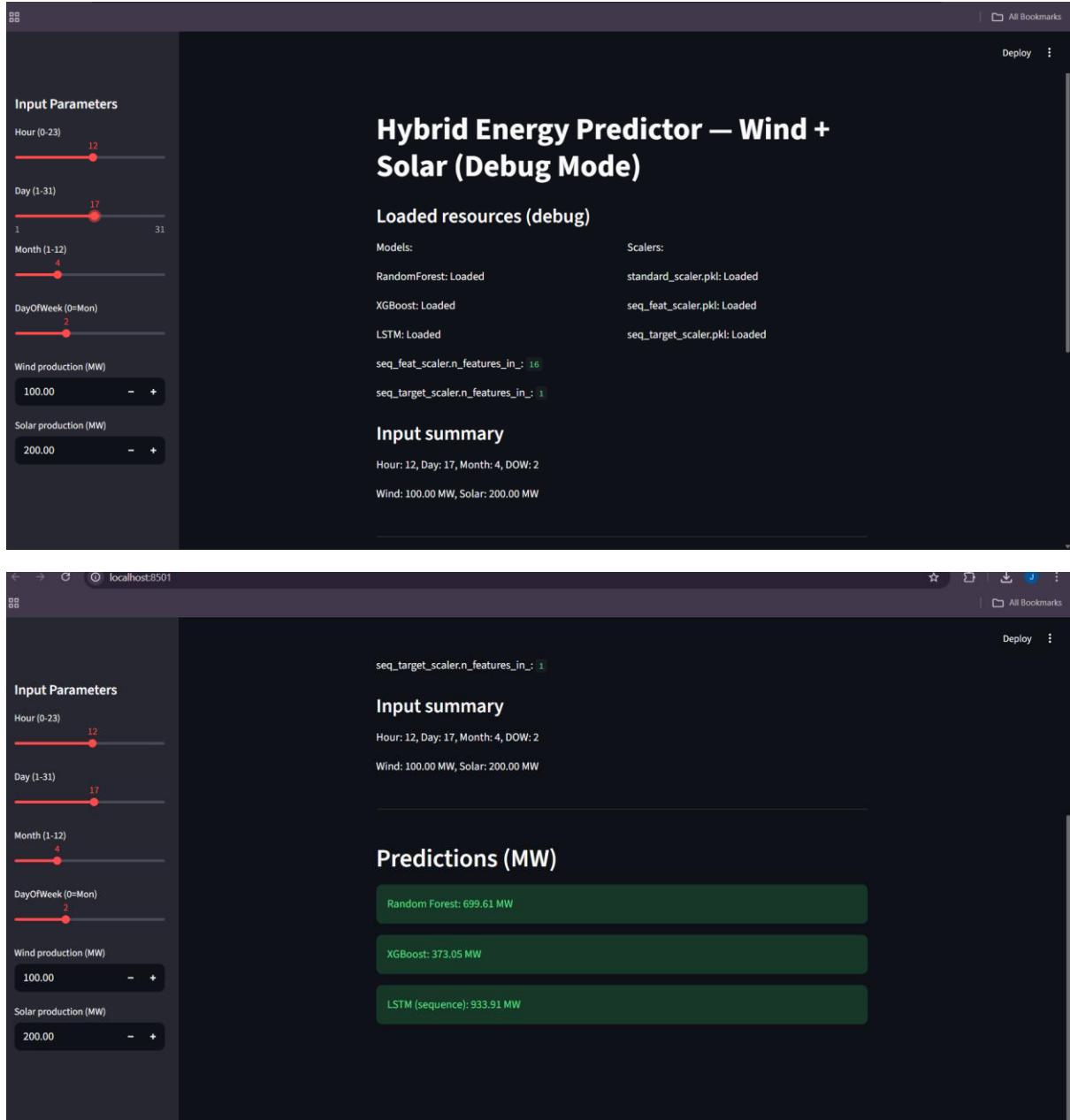
Local URL: http://localhost:8501
Network URL: http://172.16.213.209:8501

2025-11-15 17:23:34.693879: I tensorflow/core/util/port.cc:153] oneDNN custom operations are on. You may see slightly different numerical results due to floating-point round-off errors from different computation orders. To turn them off, set the environment variable 'TF_ENABLE_ONEDNN_OPTS=0'.
2025-11-15 17:23:43.102572: I tensorflow/core/util/port.cc:153] oneDNN custom operations are on. You may see slightly different numerical results due to floating-point round-off errors from different computation orders. To turn them off, set the environment variable 'TF_ENABLE_ONEDNN_OPTS=0'.
C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator DecisionTreeRegressor from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator RandomForestRegressor from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
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```

```
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C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator DecisionTreeRegressor from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
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C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator RandomForestRegressor from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator StandardScaler from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
2025-11-15 17:24:01.018417: I tensorflow/core/platform/cpu_feature_guard.cc:210] This TensorFlow binary is optimized to use available CPU instructions in performance-critical operations.
To enable the following instructions: SSE3 SSE4.1 SSE4.2 AVX AVX2 AVX_VNNI FMA, in other operations, rebuild TensorFlow with the appropriate compiler flags.
C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\keras\src\saving\saving_lib.py:797: UserWarning: Skipping variable loading for optimizer 'rmsprop', because it has 9 variables whereas the saved optimizer has 16 variables.
    saveable.load_own_variables(weights_store.get(inner_path))
C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator MinMaxScaler from version 1.6.1 when using version 1.7.1. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
1/1 ━━━━━━━━ 0s 279ms/step
WARNING:tensorflow:From C:\Users\jutur\AppData\Roaming\Python\Python312\site-packages\keras\src\backend\common\global_state.py:82: The name tf.reset_default_graph is deprecated. Please use tf.compat.v1.reset_default_graph instead.
```

<http://localhost:8501/>



✓ Explanation of Streamlit Terminal Output

When running the command `streamlit run app.py`, the terminal displays the logs that show the setup, execution, and status of the Streamlit dashboard. These logs confirm that the application is successfully launched and accessible through a local web browser.

The terminal output typically includes:

1. Streamlit Initialization

The system loads Streamlit modules, checks configuration settings, and prepares the local development server.

Example lines:

- “Welcome to Streamlit!”
- “You are running Streamlit version ...”

2. File and Code Loading

Streamlit loads the app.py script, identifies widgets, models, and resources defined in the application.

3. Model & Resource Loading

If the app loads models/scalers (RF, XGB, LSTM), the terminal confirms successful or failed loading.

This corresponds to:

- rf_model.pkl
- xgb_model.pkl
- lstm_model.keras
- Scaler files

If any file is missing, the terminal prints warnings.

4. Server Launch

The terminal displays the URL where the app is hosted:

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

Network URL: <http://your-ip:8501>

This means the dashboard is running successfully and can be opened in any browser.

5. Live Logs During Interaction

While you move sliders or use the dashboard:

- The terminal prints updates about widget interaction.
- Cached resources being loaded.

- Any prediction errors or warnings (if inputs are invalid).

These logs indicate that the Streamlit backend is active and responding to user inputs.

6. Graceful Shutdown

When you stop the app with Ctrl + C, the terminal shows:

```
Stopping Streamlit server...
```

This confirms that the app server has been shut down properly.

★ In Simple Words

The terminal output simply shows:

- Streamlit is starting
- Your app is loading
- Models/scalers are being read
- App is running successfully on your browser
- Any warnings or errors related to missing files
- Real-time logs as you interact
- Clean shutdown when stopped