Streamlit\SVM-Model-Socaial-Network-ads-app.py

```python
# frontend_streamlit.py

import streamlit as st
import pickle
import numpy as np
from sklearn.preprocessing import StandardScaler

# Load the pickled SVM model
with open('svm_model.pkl', 'rb') as model_file:
    classifier = pickle.load(model_file)
    scaler = StandardScaler()

# Title of the Web App
st.title("Support Vector Machine (SVM) Prediction Web App")

# Description
st.write("""
This is a simple web app to predict the outcome of the Social Network Ads dataset using a trained Support Vector Machine (SVM) model.
You can input features such as Age and Estimated Salary, and the app will predict whether the person will buy the product (1) or not (0).
""")

# User inputs for Age and Estimated Salary
age = st.number_input("Enter Age", min_value=18, max_value=100, step=1)
salary = st.number_input("Enter Estimated Salary", min_value=10000, max_value=150000, step=100)

# Button to make a prediction
if st.button("Make Prediction"):
    # Prepare the input data
    user_input = np.array([[age, salary]])

    # Feature Scaling (same as in training)
    user_input_scaled = scaler.fit_transform(user_input)

    # Predict the result using the loaded model
```

```
    prediction = classifier.predict(user_input_scaled)

    # Display the prediction
    if prediction == 1:
        st.write("Prediction: The person will buy the product (1).")
    else:
        st.write("Prediction: The person will not buy the product (0).")


```