

# Streamlit Deployment Report

## 1. Streamlit Deployment

The machine learning model was successfully deployed using Streamlit. The model file was saved using joblib and loaded in the Streamlit application. Streamlit allows the web-based interface to run the model and display results interactively.

## 2. User Interface for Input

The interface allows users to input features such as Order Weight, Delivery Distance, Traffic Level, and Weather Conditions. These inputs are used to make a delivery time prediction.

## 3. User-Friendly Design

The UI is designed to be clean and simple, making it easy for users to interact with. Dropdown menus and input fields are clearly labeled, and prediction results are displayed clearly.

## 4. Example Screenshot

## Streamlit Deployment Report

# Delivery Time Predictor

Order Weight (kg)

Delivery Distance (km)

Traffic Level

Weather

Predict Delivery Time

## 5. Streamlit App Code

```
import streamlit as st
import joblib

# Load model
model = joblib.load('delivery_time_model.pkl')

st.title("Delivery Time Predictor ")

# Input fields
order_weight = st.number_input("Order Weight (kg)", min_value=0.1)
delivery_distance = st.number_input("Delivery Distance (km)", min_value=0.1)
traffic_level = st.selectbox("Traffic Level", ["Low", "Medium", "High"])
weather_condition = st.selectbox("Weather", ["Clear", "Rainy", "Stormy"])

# Prediction
if st.button("Predict Delivery Time"):
    # Encode categorical data if needed
    input_data = [[order_weight, delivery_distance, traffic_level, weather_condition]]
    prediction = model.predict(input_data)
```

# Streamlit Deployment Report

```
st.success(f"Estimated Delivery Time: {prediction[0]:.2f} minutes")
```