

# Python & Streamlit Assignment: Smart Travel Assistant

## Assignment Overview

You will build a **Smart Travel Assistant** using **Python** and **Streamlit**. The app will:

- ✓ Let users select a **travel destination**.
  - ✓ Estimate **travel expenses** based on user input.
  - ✓ Suggest a **packing checklist** based on the expected weather.
  - ✓ Display a **travel summary** with all user inputs.
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## Topics Covered

- ✓ **Python Basics** (Functions, Lists, Dictionaries)
  - ✓ **Streamlit** (Building Web Apps)
  - ✓ **User Input Handling** (Text, Dropdowns, Sliders, Buttons)
  - ✓ **File Handling** (Saving travel details for future reference)
  - ✓ **Data Display & Interactivity**
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## Task 1: User Destination Selection

- The user selects a **destination** from a list of famous cities.
  - The user chooses the **expected weather condition** (Sunny, Rainy, Cold).
  - The app stores the user's choice and displays it on the screen.
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## Task 2: Travel Expense Calculator

- The user enters the **number of travel days**.
  - The user enters their **daily budget** (food, transport, sightseeing, etc.).
  - The app calculates the **total estimated travel cost**.
  - The user can add **optional expenses** (e.g., flight cost, hotel booking).
  - The total **trip cost** is displayed in the app.
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### Task 3: Packing Checklist Generator


- Based on the selected **weather condition**, the app suggests a **packing list**.
  - For **Rainy weather**, it suggests **Umbrella, Raincoat, Waterproof Shoes**.
  - For **Cold weather**, it suggests **Jacket, Gloves, Warm Clothes**.
  - For **Sunny weather**, it suggests **Sunglasses, Sunscreen, Hat**.
  - The user can modify the packing list by adding or removing items.
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### Task 4: Travel Summary & File Saving

- The app displays a **final travel summary**, including:
    - **Destination**
    - **Weather Condition**
    - **Total Trip Cost**
    - **Packing List**
  - The user can **save their travel details** to a file for future reference.
  - The app allows users to **view past travel plans**.
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### Bonus Features (Optional)

- 🎯 **Add a Countdown Timer:** Show how many days are left until the trip.
  - 🎯 **Add a Currency Converter:** Convert the budget to another currency.
  - 🎯 **Add a Trip Rating System:** Let users rate past trips.
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 This assignment will help you learn Python, Streamlit, and interactive user interfaces. Try it and have fun building your Smart Travel Assistant! 🎯