Lesson 4 Demo 05

Implement the Application Using the Streamlit UI

Objective: To demonstrate how the trip planner application uses user inputs (origin, cities, travel dates, and interests) to generate a personalized trip plan

By utilizing CrewAI agents and tasks, the application intelligently creates an itinerary and provides relevant city information, offering an interactive and customized travel experience.

Tools required: VSCode

Prerequisites: Complete the Lesson 4 Prerequisite Demo, Lesson 4 Demo 1, Lesson 4 Demo 2, Lesson 4 Demo 3, and Lesson 4 Demo 4

Steps to be followed:

1. Create a *main.py* file
2. Import dependencies
3. Collect user inputs
4. Initialize TripCrew and run the trip planner
5. Display the results
6. Run the code

Step 1: Create a main.py file

Note: Refer to Lesson 4 Demo 1 to create a *.py* file

Step 2: Import dependencies

```
main.py > ...
1  from textwrap import dedent
2  from crew import TripCrew
3
```

Step 3: Collect user inputs

3.1 Prompt the user to enter details about their travel preferences:

a) Origin of travel
b) Cities they are interested in visiting
c) Travel date range
d) Personal interests or hobbies

```
4  if __name__ == "__main__":
5      print("## Welcome to Trip Planner Crew")
6      print('-------------------------------')
7
8      origin = input(dedent("From where will you be traveling from?\n"))
9      cities = input(dedent("What are the cities options you are interested in visiting?\n"))
10     date_range = input(dedent("What is the date range you are interested in traveling?\n"))
11     interests = input(dedent("What are some of your high-level interests and hobbies?\n"))
12
```

Step 4: Initialize the TripCrew and run the trip planner

4.1 Use the collected input to initialize the TripCrew class, which contains the logic for creating and managing the trip plan

```
13    trip_crew = TripCrew(origin, cities, date_range, interests)
14    result = trip_crew.run()
```

Step 5: Display the results

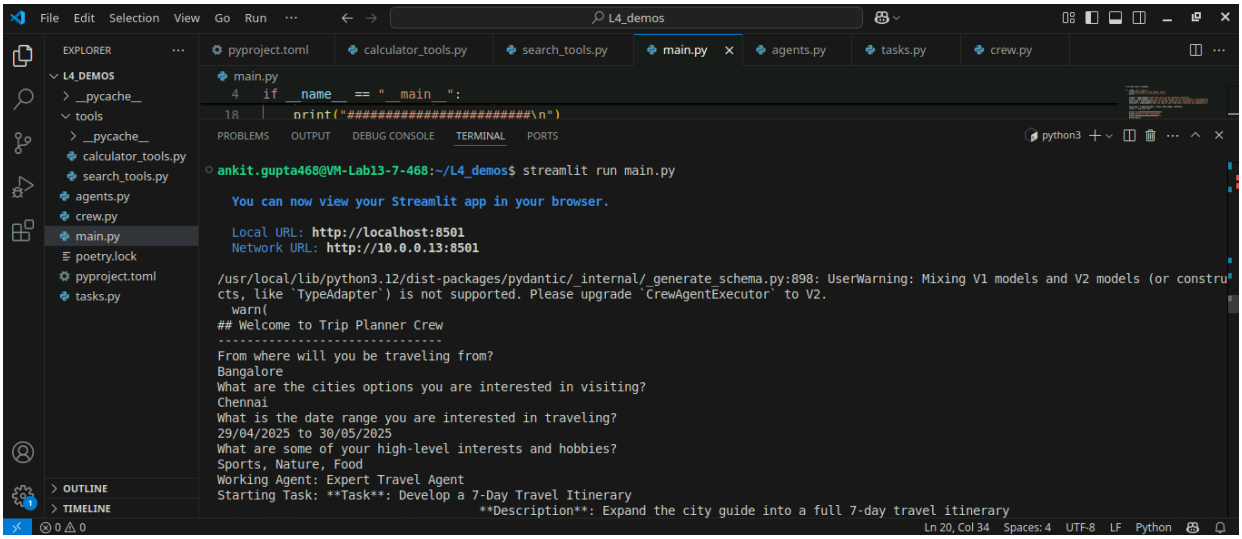
```
16    print("\n\n########################")
17    print("## Here is your Trip Plan")
18    print("########################\n")
19    print(result)
```

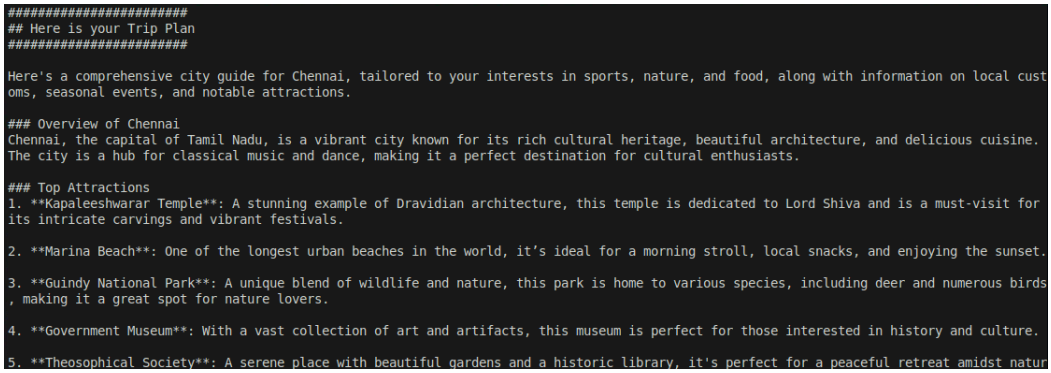
Step 6: Run the code

6.1 Save the file and then run code from VS code terminal using the command given below:
streamlit run main.py

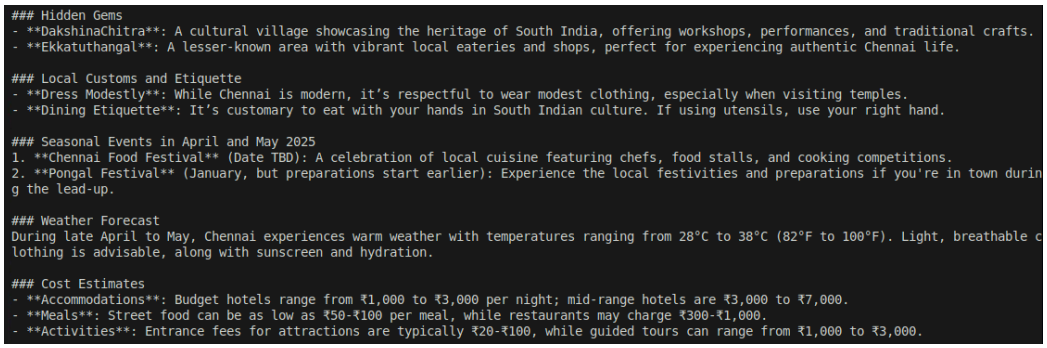
NOTE – if you are getting errors related to crewai and langchain modules, then you can use these commands (in the VS code terminal itself) to resolve the issue (make sure same versions are installed):
pip install crewai==0.1.24 --break-system-packages
pip install langchain-openai==0.0.5 --break-system-packages

Output:

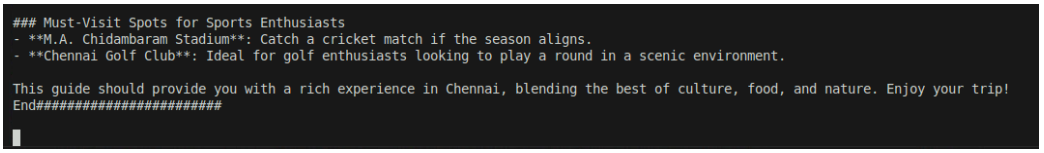




```
######################
## Here is your Trip Plan
######################

Here's a comprehensive city guide for Chennai, tailored to your interests in sports, nature, and food, along with information on local cust
oms, seasonal events, and notable attractions.

### Overview of Chennai
Chennai, the capital of Tamil Nadu, is a vibrant city known for its rich cultural heritage, beautiful architecture, and delicious cuisine.
The city is a hub for classical music and dance, making it a perfect destination for cultural enthusiasts.

### Top Attractions
1. **Kapaleeshwarar Temple**: A stunning example of Dravidian architecture, this temple is dedicated to Lord Shiva and is a must-visit for
its intricate carvings and vibrant festivals.

2. **Marina Beach**: One of the longest urban beaches in the world, it’s ideal for a morning stroll, local snacks, and enjoying the sunset.

3. **Guindy National Park**: A unique blend of wildlife and nature, this park is home to various species, including deer and numerous birds
, making it a great spot for nature lovers.

4. **Government Museum**: With a vast collection of art and artifacts, this museum is perfect for those interested in history and culture.

5. **Theosophical Society**: A serene place with beautiful gardens and a historic library, it's perfect for a peaceful retreat amidst natur
```



```
### Hidden Gems
- **DakshinaChitra**: A cultural village showcasing the heritage of South India, offering workshops, performances, and traditional crafts.
- **Ekkatuthangal**: A lesser-known area with vibrant local eateries and shops, perfect for experiencing authentic Chennai life.

### Local Customs and Etiquette
- **Dress Modestly**: While Chennai is modern, it’s respectful to wear modest clothing, especially when visiting temples.
- **Dining Etiquette**: It’s customary to eat with your hands in South Indian culture. If using utensils, use your right hand.

### Seasonal Events in April and May 2025
1. **Chennai Food Festival** (Date TBD): A celebration of local cuisine featuring chefs, food stalls, and cooking competitions.
2. **Pongal Festival** (January, but preparations start earlier): Experience the local festivities and preparations if you're in town durin
g the lead-up.

### Weather Forecast
During late April to May, Chennai experiences warm weather with temperatures ranging from 28°C to 38°C (82°F to 100°F). Light, breathable c
lothing is advisable, along with sunscreen and hydration.

### Cost Estimates
- **Accommodations**: Budget hotels range from ₹1,000 to ₹3,000 per night; mid-range hotels are ₹3,000 to ₹7,000.
- **Meals**: Street food can be as low as ₹50-₹100 per meal, while restaurants may charge ₹300-₹1,000.
- **Activities**: Entrance fees for attractions are typically ₹20-₹100, while guided tours can range from ₹1,000 to ₹3,000.
```



```
### Must-Visit Spots for Sports Enthusiasts
- **M.A. Chidambaram Stadium**: Catch a cricket match if the season aligns.
- **Chennai Golf Club**: Ideal for golf enthusiasts looking to play a round in a scenic environment.

This guide should provide you with a rich experience in Chennai, blending the best of culture, food, and nature. Enjoy your trip!
End######################
```

By following the above-mentioned steps, you have successfully built an AI-powered trip-planning demo using CrewAI and its intelligent agents. The demo effectively integrates specialized tools and agents to deliver personalized itineraries and real-time local insights. This robust framework streamlines travel planning and paves the way for future enhancements and customizations.