Smart Travel Assistant Chatbot

Objective: The Smart Travel Assistant Chatbot is designed to assist users in obtaining quick travel-related information through natural conversation. It helps users plan trips efficiently by providing guidance on flights, hotels, destinations, visa requirements, weather, and other essential travel topics. The goal is to simulate an interactive travel assistant that responds intelligently to user queries.

Description: The chatbot is implemented in Java using a simple text-based interface. It uses keyword-based natural language recognition, allowing users to ask questions in various formats such as "Can you suggest some places to visit?" or "Tell me about hotels." The chatbot detects relevant keywords and provides predefined, informative responses. It uses a Scanner class for input and processes the text with conditional logic to match topics dynamically.

Key Features:

1. Multi-topic Support: Covers flights, hotels, destinations, travel tips, weather, currency exchange, and emergencies.
2. Natural Language Understanding: Recognizes keywords within longer sentences.
3. User-Friendly Design: Simple, interactive, and easy to use.
4. Extensible Structure: New travel topics or responses can be added with minimal code changes.
5. Offline Functionality: Works entirely without internet connection.

Applications: Travel agencies and tourism websites can integrate it as a basic virtual assistant. Useful for beginners learning chatbot logic and text processing in Java. Can be enhanced into a full-fledged chatbot using NLP libraries or APIs like Dialogflow.

Future Scope: The chatbot can be upgraded with Graphical User Interface (GUI) using Java Swing or JavaFX for a more engaging experience. Further improvements may include integration with real-time APIs for flight details, weather updates, or hotel availability.

Conclusion: The Smart Travel Assistant Chatbot demonstrates how artificial intelligence concepts can be applied to build an interactive and informative travel assistant. It provides a simple yet effective example of how technology can enhance user convenience in the travel planning process.