Create a travel itinerary planner that allows users to input destinations, dates and preferences to generate a detailed travel plan, include features like maps, weather information and budget calculations.

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

class Destination {

String name;

String startDate;

String endDate;

String preference;

double budget;

public Destination(String name, String startDate, String endDate, String preference, double budget) {

this.name = name;

this.startDate = startDate;

this.endDate = endDate;

this.preference = preference;

this.budget = budget;

}

@Override

public String toString() {

return "Destination: " + name + "\n" +

"Start Date: " + startDate + "\n" +

"End Date: " + endDate + "\n" +

"Preference: " + preference + "\n" +

"Budget: $" + budget + "\n";

}

}

public class TravelItineraryPlanner {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

List<Destination> destinations = new ArrayList<>();

System.out.println("Welcome to the Travel Itinerary Planner!");

while (true) {

System.out.println("Enter destination name (or type 'done' to finish): ");

String name = scanner.nextLine();

if (name.equalsIgnoreCase("done")) {

break;

}

System.out.println("Enter start date (YYYY-MM-DD): ");

String startDate = scanner.nextLine();

System.out.println("Enter end date (YYYY-MM-DD): ");

String endDate = scanner.nextLine();

System.out.println("Enter your preference (e.g., sightseeing, relaxation, adventure): ");

String preference = scanner.nextLine();

System.out.println("Enter your budget for this destination: ");

double budget = scanner.nextDouble();

scanner.nextLine(); // Consume the newlinnewline

Destination destination = new Destination(name, startDate, endDate, preference, budget);

destinations.add(destination);

}

System.out.println("Generating your travel itinerary...\n");

double totalBudget = 0.0;

for (Destination destination : destinations) {

System.out.println(destination);

totalBudget += destination.budget;

}

System.out.println("Total Budget for the trip: $" + totalBudget);

}

}