

Travel Planner

Closures

1. Exercise 1: Creating a Travel Planner

- Write a function `createTravelPlanner` that doesn't take any arguments and returns a closure with:
 - `addDestination` method: This method should accept a string (destination name) and add it to an array that represents the travel planner. It should print a message indicating the addition.
 - `removeDestination` method: This method should accept a string (destination name) and remove it from the travel planner if it exists, and print a message indicating the removal. If the destination doesn't exist in the planner, it should print a message stating so.
 - `getDestinations` method: This method should return the list of destinations in the planner.

2. Exercise 2: Adding Details to Destinations

- Write a function `createTravelPlannerWithDetails` that doesn't take any arguments and returns a closure with:
 - `addDestinationWithDetails` method: This method should accept a string (destination name) and an object (destination details), and add them as a new object to an array that represents the travel planner. It should print a message indicating the addition.
 - `removeDestination` method: This method should accept a string (destination name) and remove it along with its details from the travel planner if it exists, and print a message indicating the removal. If the destination doesn't exist in the planner, it should print a message stating so.
 - `getDestinationsWithDetails` method: This method should return the list of destinations with their details in the planner.

3. Exercise 3: Sorting Destinations

- Write a function `createSortableTravelPlanner` that doesn't take any arguments and returns a closure with:

- `addDestinationWithDetails` method: This method should accept a string (destination name) and an object (destination details), and add them as a new object to an array that represents the travel planner. It should print a message indicating the addition.
- `removeDestination` method: This method should accept a string (destination name) and remove it along with its details from the travel planner if it exists, and print a message indicating the removal. If the destination doesn't exist in the planner, it should print a message stating so.
- `getDestinationsWithDetails` method: This method should return the list of destinations with their details in the planner.
- `sortDestinations` method: This method should sort the destinations in the planner alphabetically by name and print a message indicating the sorting.

4. Exercise 4: Searching Destinations

- Write a function `createSearchableTravelPlanner` that doesn't take any arguments and returns a closure with:
 - `addDestinationWithDetails` method: This method should accept a string (destination name) and an object (destination details), and add them as a new object to an array that represents the travel planner. It should print a message indicating the addition.
 - `removeDestination` method: This method should accept a string (destination name) and remove it along with its details from the travel planner if it exists, and print a message indicating the removal. If the destination doesn't exist in the planner, it should print a message stating so.
 - `getDestinationsWithDetails` method: This method should return the list of destinations with their details in the planner.
 - `sortDestinations` method: This method should sort the destinations in the planner alphabetically by name and print a message indicating the sorting.
 - `searchDestination` method: This method should accept a string (destination name) and return the destination object if it exists in the planner, otherwise return null. It should print a message indicating if the destination was found or not.