**System Use Case Diagram Description**

The use case diagram for the Personalized Travel Plan Generator system in **figure 1** illustrates the key interactions between the user, the system, and external Web APIs.

**Actors**

* **User**: Interacts with the system via login, input preferences, and views travel plans.
* **System**: Processes user inputs, integrates with APIs, and generates personalized travel plans.
* **Web APIs**: Provide data for flights, accommodations, and activities in real-time.

**Use Cases**

1. **Login/Register**: User signs in to manage their travel preferences.
2. **Input Preferences**: User provides destination, budget, duration, and activity preferences.
3. **Generate Plan**: System generates a personalized plan using real-time data.
4. **Fetch API Data**: System sends requests to APIs and parses results.
5. **Display Plan**: Plan is shown to the user in a structured format.

Refer to **Figure 1** for the visual representation.

A diagram of a user

AI-generated content may be incorrect.

**Figure 1: use case diagram for** Personalized Travel Plan Generator