- ## Internal Logical Files (ILF): 0

Internal Logical Files are user-identifiable data maintained within the application itself.

- ## External Interface Files (EIF): 2

External Interface Files are user-identifiable data referenced by the system but maintained in another application.

1. **External hotel/restaurant data**:
   - Data retrieved from APIs or web scraping of hotel and restaurant websites.
   - Dynamic data that changes frequently (e.g., hotel availability, restaurant listings).
2. **OpenAI API**:
   - Potentially used to generate extra insights or dynamic content that's not stored locally (e.g., constant events like long-standing attractions: museums, parks).
   - Helpful in reducing load from web scraping each individual website, as the model can provide information on long-standing attractions but not live event updates (e.g., concerts, time-specific festivals) since it's not continuously updated with real-time data.

- ## External Input (EI): 2

External Input processes data coming from outside the system, such as **user input** or new entries.

1. **Register new traveler**:
   - The system processes the input when a new traveler registers, typically by entering details like username and password, and stores this in the traveler's table.
2. **Change the traveler's username**:
   - The traveler enters a new username, and the system updates and saves it in the database.

- ## External Output (EO): 3

External Output involves processes that send data outside the system boundary and usually require calculations or data transformations.

1. **Display 3 lists of hotels, restaurants, and activities based on locations**:

- The system queries and processes data from external APIs (like Google, hotel platforms, etc.).
2. **Displaying lists of activities after applying filters**:
   - If a user applies filters (e.g., by category, location), the system processes the data and sends back a refined list. This involves some level of computation.
3. **Displaying a list of chosen activities for a specific traveler based on location**:
   - A report or list of activities (hotels, restaurants, entertainment) for a given traveler over a specified period, combining data from both the chosen activities and the calendar. The system must perform computations, such as joining different tables and filtering data based on the traveler's ID and location.
   - Displaying on both the search page and calendar page because the sidebar appears on both pages.
- **External Inquiry (EQ): 0**

External Inquiry involves reading data from the system without modifying it or performing complex calculations. It's usually a simple data retrieval process without significant transformation.

Individual FPA Software Metrics Table:

Information Domain Value	Count		Weighting factor simple	average	complex		
External Inputs (EIs)	2	3	3	4	6	=	8
External Outputs (EOs)	3	3	4	5	7	=	15
External Inquiries (EQs)	0	3	3	4	6	=	0
Internal Logical Files (ILFs)	0	3	7	10	15	=	0
External Interface Files (EIFs)	2	3	5	7	10	=	14
Count total							37