**SRS Document**

**1. Introduction**

**1.1 Purpose**:  
The purpose of this project is to provide an interactive travel search system where users can dynamically search for destinations and see information like city, country, and the current time for that location based on its timezone.

**1.2 Scope**:  
The system will provide real-time search functionality with filtered results based on a search term. The time zone for each destination will be considered to display the accurate local time.

**1.3 Definitions**:

* **Debouncing**: A technique used to delay the execution of a function until a certain amount of idle time has passed since the last invocation.
* **Timezone**: A region where the same standard time is used, which will be displayed for each destination.

**2. System Overview**

This system allows users to:

1. Input a search term (name of a place, city, or country).
2. View results based on the search term, dynamically filtered in real-time.
3. See current local time for each destination based on its timezone.

**3. Functional Requirements**

* **FR1**: The system will fetch data from a local or remote places.json file.
* **FR2**: The system will filter data based on user input (name, city, or country).
* **FR3**: The system will display the filtered results as interactive cards with information about each destination and its current local time.
* **FR4**: The system will use debouncing to prevent unnecessary API calls during user input.
* **FR5**: The system will provide a **clear button** to reset the search input and results.

**4. Non-Functional Requirements**

* **NFR1**: The search results must update in real-time with minimal delay.
* **NFR2**: The user interface should be simple, focusing only on the search functionality.
* **NFR3**: The application must handle a reasonable amount of data without performance degradation.

**5. Data Requirements**

The data source (places.json) will contain the following fields:

[

{

"name": "Eiffel Tower",

"city": "Paris",

"country": "France",

"img": "eiffel\_tower",

"about": "A wrought-iron lattice tower on the Champ de Mars.",

"timeZone": "Europe/Paris"

}

]

**6. User Interface Requirements**

* **Search Bar**: A field where users can type a search term.
* **Clear Button**: A button to reset the search input and results.
* **Result Cards**: Each card will display the name, city, country, image, description, and the current time based on the destination’s timezone.

**7. Assumptions**

* The data file (places.json) is valid and contains all required information (name, city, country, etc.).
* Timezone data is accurate.

**8. Constraints**

* Currently, the system will only fetch data from a static file (places.json), with future plans to connect to a backend API.
* The current time is displayed using the Intl.DateTimeFormat API.