**Project Proposal: Real-Time Search Interface**

**About the Developer**

* **Name:** RITIK KUMAR
* **Role:** Student
* **Objective:** Implementing dynamic real-time search functionality, API integration, and time zone handling using JavaScript. The project will focus on learning and applying real-world web development concepts such as API handling, dynamic filtering, and displaying time based on different time zones.

**Project Overview**

The project is focused on developing a real-time search interface that integrates with an external API to fetch and display data dynamically. The user can search for places and view relevant details such as name, city, country, and time zone information. Additionally, the project will display the current time based on the selected place's time zone. The goal is to implement a fully functional search interface with real-time filtering and time display.

**Key Features:**

1. **Real-Time Search and Filter**:
   * The system will filter travel destinations as the user types (debounced input).
   * It will match the search term against the name, city, or country.
2. **Data Fetching from API**:
   * Use fetch to retrieve travel destination data from a local or remote API (places.json).
3. **Timezone Display**:
   * For each destination, the current local time will be displayed based on the timezone provided in the API.

**Deliverables:**

1. Fully functional **search interface** for real-time filtering.
2. **API Integration** to fetch travel destination data.
3. **Current time** display based on the destination's timezone.
4. Clean, interactive cards to display search results with images, description, city/country details, and time.

**Technology Stack:**

* **Frontend**: HTML, CSS, JavaScript (ES6+)
* **Data Fetching**: fetch API
* **Timezone Handling**: Intl.DateTimeFormat for current time conversion
* **Data Source**: Static JSON file (places.json)

**Timeline**

* **Total Duration:** 3 Days
* **Time Allocation:**
  + **Day 1:** 1 Day
    - Initial Setup and API Integration
    - Fetch and display data from the API
    - Implement real-time search functionality
  + **Day 2:** 1 Day
    - Implement current time display based on time zone
    - Refine the user interface and handle edge cases
  + **Day 3:** 1 Day
    - Final testing and debugging
    - Deployment and project handover