PROJECT DESCRIPTION

TOURISM SEARCH ENGINE

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In an era where travel and exploration have become integral in modern lifestyle, the need for efficient information retrieval in the area of tourism is more pronounced than ever. This project report dives into the design and development of a Tourism Search Engine—a digital gateway poised for individuals to access and discover information related to travel destinations. We've also added cool features like learning from user’s preferences and making the system better over time.

Here's a detailed workflow:

1. **Data Collection and Crawling:**
   * **Objective:** Gathered tourism-related info from the web.
   * **Steps:**
     + Identified relevant websites (Holidify, booking.com and makemytrip).
     + Used web crawlers to collect data.
     + Data Size 1Lakh+.
2. **Data Preprocessing:**
   * **Objective:** Cleaned and structured data for efficient storage.
   * **Steps:**
     + Removed duplicates and irrelevant info.
     + Tokenized and indexed text for quick searching.
3. **Indexing:**
   * **Objective:** Organized data for fast retrieval.
   * **Steps:**
     + Created an inverted index.
4. **Query Processing:**
   * **Objective:** Understood user queries.
   * **Steps:**
     + Tokenized and preprocessed queries.
     + Identified key terms and user intent.
5. **Search Algorithm:**
   * **Objective:** Retrieved relevant results.
   * **Steps:**
     + Employed ranking algorithms.**(Cosine similarity)**
     + Considered keyword relevance and user preferences.

**6.User Interface:**

* + **Objective:** Designed a user-friendly interface.
  + **Steps:**
    - Created a visually appealing layout.

**7.Relevance Feedback:**

* + **Objective:** Improved results based on user feedback.
  + **Steps:**
    - Provided feedback options.
    - Analyzed user behavior.
    - Adjusted the ranking algorithm.

Here are some sample images:

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