

WEB TECHNOLOGIES – 2

PROJECT DESCRIPTION

TOURISM: THE SEVEN SISTERS OF INDIA

Team Members:

Poorva Tiwari – 01FB16ECS251

Priya Nayak – 01FB16ECS277

Raghav Goel – 01FB16ECS285

Rhythm Girdhar – 01FB16ECS302

Abstract:

Tourism is one of the biggest industries in the world. In the current scenario, any such industry can flourish only with a strong digital presence and that can be achieved through the medium of official websites. Going through multiple websites ourselves, we realised that most of them are still following basic HTML, CSS format with no dynamic content whatsoever.

We decided to focus on one of the most scenic parts of India which is very often not spoken about due to lack of awareness among people, especially in India itself. It is Tourism for the Seven sisters – Assam, Arunachal Pradesh, Mizoram, Manipur, Meghalaya, Nagaland, and Tripura.

Not only making it dynamic, we used multiple AJAX concepts to make the overall user experience better and more efficient in the number of requests sent to the server. There is a feature called recommender that helps in letting you decide all the similar places that you can visit to enhance your entire trip experience with a helpful planning method.

There is no logging in/signing up on the website because tourism does not involve collecting data and filling up the files. Tourism is all about awareness and letting people know about different locations which are generally not exclusively talked about. Our main aim is User Experience and that is perfectly achieved by all the developer content we have used. Trying to implement multiple techniques just for the sake of the course would affect adversely affect the website and deteriorate the quality.

AJAX Patterns Used:

- Multi-Stage Download
 - o Multi-stage download is implemented in the webpages for each single state. It has been used to reduce the network congestion and load certain parts at a time. It first downloads the main skeleton which is the hero image, navigation bar and the planning components. After 2 seconds, the next set loads which is the Hero text and the rest of the code except the images. As we scroll down, the images and the content are dynamically loaded. This uses the principle that you keep

only what you need, as and when the need increases, the content is downloaded and made visible to the user.

- Server Sent Events:
 - Server Sent Events is used to count the number of visits on the home page. The server initiates a network connection from server to client. The content is sent via an event stream as and when the text file is updated. An event is created and server fires an HTTP request to the client and the client updates it for the user.

Architectural style used:

- REST API:
 - The code is done using Python and all the templates are rendered using XHR.
- URL: Localhost/
- Port: 5000

Intelligent component:

Recommender

- The data for the seven sisters is obtained by scraping holidayify.com using BeautifulSoup library in Python.
- The data includes the city name and the description for each state.
- It uses cosine similarity to find the scores for the descriptions given for every city in the state.
- The scores are stored in a dictionary with key as the city and value as the score.
- The scores are sorted into an array and top three cities are chosen.
- This data is sent to the client displaying the top recommended cities in the decreasing order of similarity.
- The entire request and response cycle is done using python and XHR Requests.

A recommender is an excellent choice for a website like ours (Tourism) because this is the one feature that every user craves for, while planning a trip. This enhances user interaction by providing a more personal touch and helping the overall experience.