

A PERSONALIZED TRAVEL PLANNING AND TRACKING APP

ABSTRACT

Recently, the Internet has made a lot of services and products appear online provided by many tourism sectors. By this way, many information such as timetables, routes, accommodations, and restaurants are easily available to help travelers plan their travels. However, how to plan the most appropriate travel schedule under simultaneously considering several factors such as tourist attractions visiting, local hotels selecting, and travel budget calculation is a challenge. This gives rise to our interest in exploring the recommendation systems with relation to schedule recommendation. Additionally, the personalized concept is not implemented completely in most of travel recommendation systems. One notable problem is that they simply recommended the most popular travel routes or projects, and cannot plan the travel schedule. Moreover, the existing travel planning systems have limits in their capabilities to adapt to the changes based on users' requirements and planning results.

To tackle these problems, we develop a personalized travel planning system that simultaneously considers all categories of user requirements and provides users with a travel schedule planning service that approximates automation. A novel travel schedule planning algorithm is embedded to plan travel schedules based on users' need. Through the user-adapted interface and adjustable results design, users can replace any unsatisfied travel unit to specific one. The feedback mechanism provides a better accuracy rate for next travel schedule to new users. An experiment was conducted to examine the satisfaction and use intention of the system. The results showed that participants who used the system with schedule planning have statistical significant on user satisfaction and use intention. We also analyzed the validity of applying the proposed algorithm to a user preference travel schedule through a number of practical system tests. In addition, comparing with other travel recommendation systems, our system had better performance on the schedule adjustment, personalization, and feedback giving

INTRODUCTION

The popularization of the Internet has resulted in abundant travel information, enabling travelers to use the Internet to rapidly obtain reliable and accurate travel information and to plan travel schedules or itineraries within a limited amount of time. This method of acquiring information has indirectly stimulated travel motivations and requirements, causing the travel industry to thrive in recent years. Independent travelers personally plan attractions, routes, accommodations and hotels, and time arrangements. As Internet technology develops, numerous travelers are enjoying sharing their travel experiences and photographs using platforms such as forums and blogs, indirectly stimulating potential traveling populations. However, this type of travel is typically associated with various problems. For example, planning factors worth considering include unfamiliarity with travel route or attractions and timing issues and reservations for accommodations and hotels. Travel schedule planning comprises numerous personal or personalized conditions. In addition, previous TRS attractions and route suggestions are limited to recommendations based on set rules and conditions, resulting in identical recommendations, which reduces recommendation effectiveness [2]. The majority of current TRSs focus on recommending attractions or accurate schedules or itineraries and route planning, using .

Travel recommendation techniques

The core recommendation modules of recommendation systems typically use classification techniques from various fields [12,13]. However, the use of these techniques frequently influences the recommendation effectiveness of the system [14]. Numerous factors influence the recommendation effectiveness during the system development. Among the crucial factors are the classification technique and the recommendation framework design. A superior classification technique or framework design must effectively address problems that occur during the recommendation process, including attribute selection, data attribute dimension processing, the data type consistency, identifying user preferences, and establishing feedback learning mechanism, thereby providing accurate recommendation results that satisfy users. Most TRSs use the strategy of establishing user schema to increase recommendation accuracy. Machine learning methods effectively obtain and integrate travel data from various sources to establish user schema without being limited to a single data source [15]. Therefore, machine-learning methods frequently help establish TRSs

Travel recommendation systems

In recent years, the topic of travel recommendations has gradually been recognized and emphasized. Numerous studies have developed corresponding recommendation systems or frameworks by combining various techniques to provide personalized travel routes and attraction recommendations that satisfy users' requirements [16–18]. The necessity of independently planning travel schedules has caused travel planning costs and freedom to become critical factors that influence users' travel willingness. To simultaneously address travel freedom and travel quality and to reduce users' search and travel planning costs, a TRS that only provides personalized travel attractions or route recommendations cannot satisfy users' requirements.

MODULES

Login page

The Login Module is a portal module that allows users to type a user name and password to log in. If you already have an account you can just sign up and in case of forgotten password you can click the option forget password and can recover by getting an OTP.

Register page

The Register Module that allows users to type a user name, e-mail and password to register. If you already have an account you can just log in..

Main page

This module is a main module of this finance system which consists of other three modules Add Expenses, Set Limit and View Records.

Location page

The location module allows real-world geographic location to be associated with drupal nodes, including people, places, and other contact. The location module allows admins and collect addresses, geocode them (translate addresses to latitude/longitude), and associate locations with drupal nodes and users.

CODING

```
<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<link rel="stylesheet" href="style.css" />

<title>Go Trip</title>

</head>

<body>

<body>

<section class="nav-bar">

<div class="logo">Go Trip</div>

<ul class="menu">

<li><a href="#">home</a></li>

<li><a href="#">tours</a></li>

<li><a href="#">package</a></li>

<li><a href="#">blog</a></li>

<li><a href="#">about us</a></li>

<li><a href="#">contact us</a></li>

</ul>

</div>

</section>

<section class="banner">
```

```
<div class="banner-text-item">

<div class="banner-heading">

<h1>Find your Next tour!</h1>

</div>

<form class="form">

<input type="text" list="mylist" placeholder="Where would you like to go?">

<datalist id="mylist">

<option>London</option>

<option>Canada</option>

<option>Monaco</option>

<option>France</option>

<option>Japan</option>

<option>Switzerland</option>

<option>Seoul</option>

</datalist>

<input type="date" class="date">

<a href="#" class="book">book</a>

</form>

</div>

</section>

</div>

<div class="cards">

<div class="card">

<div class="zoom-img">
```

```
<div class="img-card">



</div>

</div>

<div class="text">

<span class="rating">★ ★ ★ ★ ★</span>

<h2>The Dark Forest Adventure</h2>

<p class="cost">$1870 / Per Person</p>

<div class="card-box">

<p class="time">🕒 3 Days</p>

<p class="location">✈ Vancouver, Canada</p>

</div>

</div>

</div>

<div class="card">

<div class="zoom-img">

<div class="img-card">



</div>

</div>

</ul>

</div>
```

```
<div class="links">
```

```
<h3>New Products</h3>
```

```
<ul>
```

```
<li>Woman Cloth</li>
```

```
<li>Fashion Accessories</li>
```

```
<li>Man Accessories</li>
```

```
<li>Rubber made Toys</li>
```

```
</ul>
```

```
</div>
```

```
<div class="links">
```

```
<h3>Support</h3>
```

```
<ul>
```

```
<li>Frequently Asked Questions</li>
```

```
<li>Report a Payment Issue</li>
```

```
<li>Terms & Conditions</li>
```

```
<li>Privacy Policy</li>
```

```
</ul>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

```
</body>
```

```
</html>
```

OUTPUT: LOGIN PAGE



Login

[Register](#) [Forget password?](#)

REGISTER PAGE



Register

[Have an account?](#) [Log in](#)

MAIN PAGE

Bali



Day 1: Arrival and Relaxation

Arrive in Bali and check into your hotel or accommodation.

Spend the day relaxing and getting acclimated to the island.

If you have time, explore the nearby area or head to the beach.

Day 2: Ubud Tour

Start your day early and head to Ubud, a cultural and artistic hub in Bali.

Visit the Monkey Forest and the Ubud Palace.

Take a tour of the Tegalalang Rice Terrace, a beautiful UNESCO World Heritage Site.

End your day with a traditional Balinese dance performance.

Day 3: Temple Hopping

Visit some of Bali's most famous temples, such as Tanah Lot and Uluwatu.

Take in the stunning views of the ocean and cliffs.

Enjoy a sunset dinner at one of the many restaurants near the temples.

LOCATION PAGE

Bali



Day 1: Arrival and Relaxation

Arrive in Bali and check into your hotel or accommodation.

Spend the day relaxing and getting acclimated to the island.

If you have time, explore the nearby area or head to the beach.

Day 2: Ubud Tour

Start your day early and head to Ubud, a cultural and artistic hub in Bali.

Visit the Monkey Forest and the Ubud Palace.

Take a tour of the Tegalalang Rice Terrace, a beautiful UNESCO World Heritage Site.

End your day with a traditional Balinese dance performance.

Day 3: Temple Hopping

Visit some of Bali's most famous temples, such as Tanah Lot and Uluwatu.

Take in the stunning views of the ocean and cliffs.

Enjoy a sunset dinner at one of the many restaurants near the temples.

CONCLUTION

Most TRSs focus on recommending the most popular travel attractions or routes without considering users' overall travel requirements when arranging travel schedules. In addition, recommendation results cannot be adjusted. This results in difficulty in satisfying users' personal requirements. In addition, fixed user input conditions typically cause similar recommendation results, reducing recommendation effectiveness. The PTPS system plans an adjustable travel schedule by resolving dynamic multi-criteria decision making problem, which demonstrates the dynamic nature of travel planning. The practicality of the system is illustrated by using a concrete example.

This study employed the novel concepts of travel schedule planning and adjustable results. This concept employed the feedback mechanism, adjustable interface, time framework, and schedule reasoning method to address factors that are not given priority by most TRSs. From the experimental results, greater usage willingness and user satisfaction were observed among the participants who used the travel planning function design. In addition, the results of performance and system evaluations show that the system can increase recommendation accuracy and satisfy user demands, and enhance the effectiveness of the feedback mechanism.