

Online Tourism Management System

ITP 21_S2_MT_07

PROPOSAL DOCUMENT



**Sri Lanka Institute of
Information Technology**

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Introduction

Online Travel Management System is a web application that travellers and service providers can use to cover all aspects of the tourism industry.

This system will give tourists the best experience and value for their travels. Therefore, the Tourism Management System provides a superior service to facilitate travellers' travel needs and instantly share the best experience. Instead, this system offers value and trusted offers to customers who connect through this system at the best prices.

Client/Company Background

The use of the site we have three client types. Travellers, Service providing clients and advertiser.

Travellers can visit to our site and search hotels, vehicles, and leisure activities and such a things and book them earlier or during the trip to success their journey in proper way.

Service providers can add their services and such a thing through our site. And advertiser can publish their any kind of tourism related advertisements through our site by paying relevant payment to our site.

Problem Statement

Many tourists from all over the world come to a place and they are strangers to that place. Therefore, tourists and workplaces also face a lot of problems as there is no source to get every service. There,

As a tourist,

- The possibility of getting lost in new names for the area you are visiting
- Fraudulent people or places can get caught.
- It is also possible to miss some special places in the area.

As a service provider,

- They fail to identify a competitive market because some service providers do not share their experience and other details manually.
- Also, before making a transaction, problems sometimes arise due to not being able to know the customer's details.

Solutions

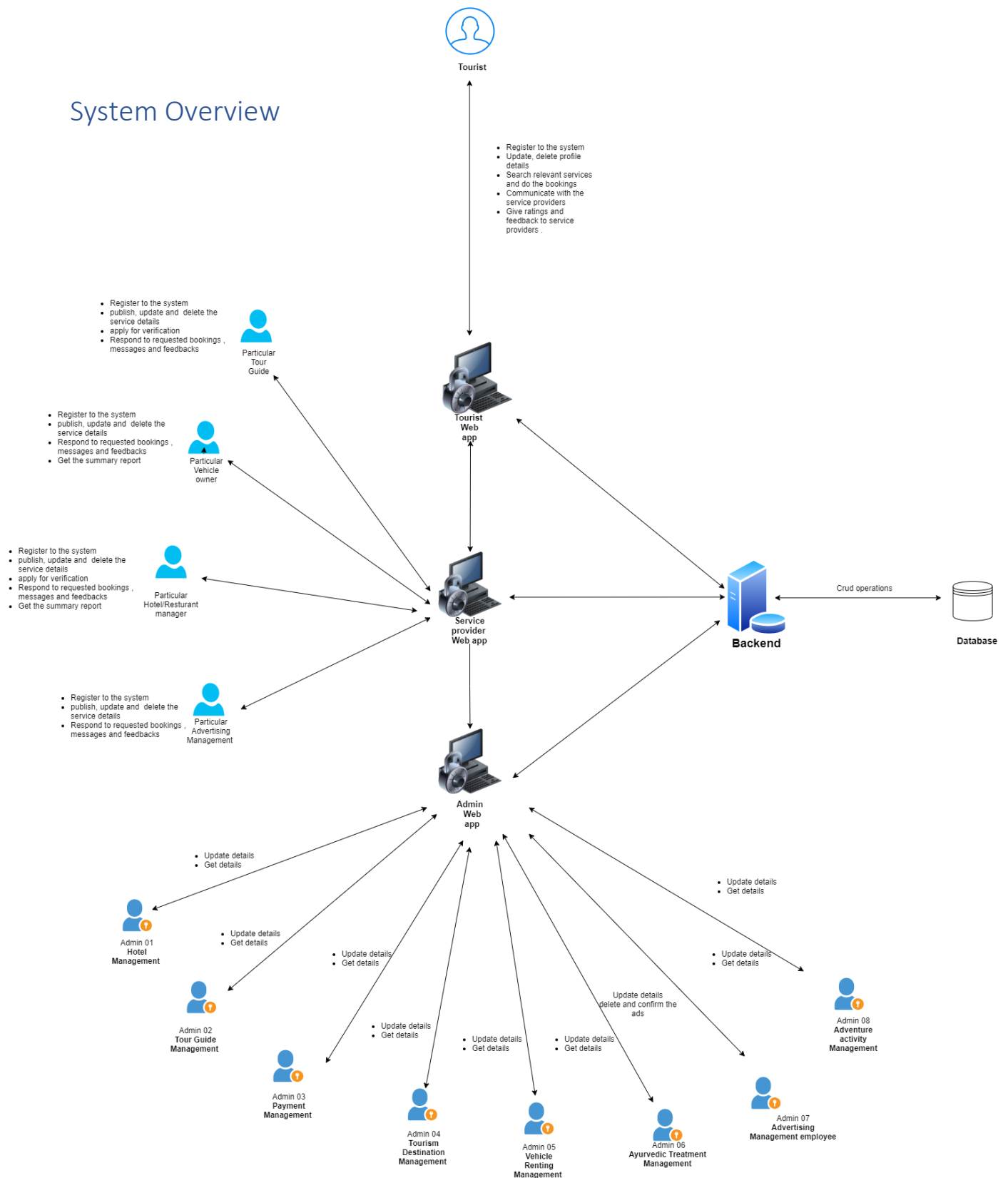
- Every Tourist can plan their trip before fly to destination.
- They can calculate their budget and calculate time.
- The Traveler can choose a service provider (guide, vehicle services) based on feedback.
- They can search about hidden places along the way and possible activities.
- It has the potential to generate revenue by providing an opportunity to provide services in the tourism sector.

Benefits of proposed solution

Web application is a huge platform for the marketing of the product other than the manual system. Company has to work together with so many customers. This web application help to keep in touch with other parties and increase the effectiveness of sharing information. The solutions that we mention above, contribute a lot to the success of the company. Through this we can enhancing the market by attracting lot of customers. And also, it can reduce both time and cost by reducing required manpower. So, some of the benefits of the web application which has purpose as the solution for the problems, has mention below.

- Improves customer service
- Can Attract customers and provide more services
- Increase visibility and revenue
- Automate business process
- Easy editing and reporting
- Cost saving
- Less paper wastes
- job opportunities

System Overview



System Functions

- **Tour guide Management**

A guide is a service provider who is the help for tourists. In that case, a guide can register as a tour guide through the system. After the Logging, they can be able to provide his details and make packages to tourists. In our system, tourists can search for a tour guide according to their needs. After the select a tour guide, tourists send a booking reservation.

Then system through the payment process from the payment management function and notify the tour guide of relevant details. After the tour guide conforms to the request, the system adds to the tour guide schedule and sends a notification with the relevant details.

The tour guide can show his validation license documents after the system administrator conforms to that. In that case, the tour guide must send license documents to the system admin through the system then the system admin can give a verification status.

Once a foreigner can choose a guide, the Foreigner can send a booking reservation, including the number of days. The guide's profile also shows his availability, and after the send, a booking reservation temperately disables the availability. Then tour guide must confirm or decline the request opinion. When the tour guide approves the request, the tour guide's availability is permanently disabled for the booking period. On a waiting list, Foreigner can cancel their booking request.

Further, Tourists can give a rating and feedback to the tour guide, and that rating is using to display the tour guide list in the web application under the tour guide section.

- **Hotel management**

This is a function that use to manage hotels in the system. All functionalities regarding a hotel service provider, Tourists, and the system admin are done by this Function. When a new Hotel service provider wants to join our company, we need to store Hotel, and system admin can handle details through this Function.

Tourists can be able to search Hotels and send booking reservations. When a Tourist selects a Hotel In this Function shows all the available Rooms. after they send the booking reservation, notifies the hotel service provider. Then hotel owner must conform to that request and inform the Tourist about that confirmation. in that period, tourists should stay on a waiting list. In that waiting period, the Traveller can cancel the request. After a traveller requests a room, the room is temporarily disabled the availability. It also permanently disables the room availability until the customer-booked period after conforming by the service provider.

Further, after registering as a hotel service provider, they should get the verification status to their hotels. For that hotel service provider should send the verified document through the system. Then system administrator gives the verification status to showing that status to travellers.

As sub-functions, Between the traveller and hotel service provider can communicate through the system. And can give feedback and rating for the hotels from travellers. That rating will be a default sorting method for showing the hotels in our system under the hotels' categories.

Further, it generates reports to hotel service providers and system administrators across the system.

- **Payment management**

This Function manages travellers booking payments, service providers charges and advertising charges. And first the traveller visits to our site and search what they want before or during the journey, then they can easily add or remove their needs from the cart. In the cart page it generates a bill like a quotation with the service charges.

If they want to book any service, then they can book them by adding valid payment details and booking details. Then the booking details and payment details passed through via notification to relevant service provider and to the traveller. After the payment process when done Tourist can view their payment reports.

As payment admin, he or she can search and update or delete all the payment details and booking details. Also, the admin can view the monthly payment report.

And charge a payment as service charges, for the advertisements which publish by Hotels, Vehicle renting, guest booking, ayurvedic treatment, and outdoor and adventure activities when the customer booking through the site and transfer the relevant payment to service providers. And according to advertising function the full payment collects as the service charge.

- Tourism destination management

This is a management function for the destination. This function is responsible for all client, traveller, and system administrator functions. The destination and the addition can be connected. The system administrator inputs and controls information about the destination and location.

When a tourist wishes to get to his destination, he uses the system to choose a package that suits his needs. When a tourist wishes to choose a place, the category, location, and similar locations are filtered and shown. He has the option of selecting one or more places that are connected to the location filtered category. The payment management procedure may then be used to make payments. A map provides the direction and position data from their location to selected destinations.

For example, if the desired location is filtered without the outdoor event category, all of the places are presented, and the Traveller may choose the one they want. The map depicts the selected sites' information and directions.

When a client wishes to add a location, the transaction is handled by the administrator. The administrator is in charge of insert, updating, and delete categories, locations, and data from the system.

For example, if a customer wants to add a venue and information to an outdoor event category, they should contact the administrator.

- Vehicle renting management

As a traveller they cannot own a car in every place or country they go, they always prefer other options like public transports, cabs, busses, trains, and rent cars or bikes. Getting a car on hire has become quite popular because it is considerably less expensive than owning one. With this in mind, I've settled on the operation of car rental management, in which a tourist may reserve a vehicle through an online tourism system.

Tourists may choose the car and amenities that they wish. Tourists can also select whether or not they want a driver. As the car owner, he has the ability to insert, update, and delete vehicle information. He has the authority to approve or refuse visitor bookings. Booking records and car information are available to the administrator.

After registering as a vehicle owner, they should get information on the progress of their car's verification. The driver also became a member of the system. As a result, the validated document should be sent via the system. The system administrator then assigns the verification status to passengers.

The system can communicate between the traveller and the car owner as sub-functions. Also, tourists may provide feedback and ratings for the vehicles and drivers. The default sorting technique for the presenting list of automobiles in our system under the vehicle categories will be that rating.

- Ayurvedic treatment management

This Function manages all ayurvedic treatments. Customer register and then log in to the system. When the customer logged in, "Book a virtual skin consult" will be displayed. Under it, there are four main parts, body, face, foot, neck, and massage.

Under them there are many sub parts. Body treatments include Salt Scrub, Detoxifying Body Mask - Seaweed/Mud/Algae, Hydrating Body Wrap, Bali Nese Massage, Serail Mud Chamber, Hot Stone Massage, Deep Tissue Massage, and Holistic Full body massage. Face treatments include Microdermabrasion, Laser Skin Resurfacing, Chemical Peels, Laser Skin Rejuvenation, ENVY Facial, HydraFacial, Fraxel Skin Resurfacing, and IPL Photo Rejuvenation. Foot treatments include Sole Therapy, Foot Reflexology, Reflexology Deluxe, Foot Rejuvenation, and Foot Detox. Neck treatments include Botox, Light Therapy, Thermage, and CoolSculpting. Message treatments include Signature Relaxation Massage, Therapeutic Massage, and Basic Swedish, Pre-natal Massage, Medical Massage, and other.

When a customer selects one of these categories, a full description of the treatment (how it works, payment, time, result) is displayed. Then when the customer forwards it, it will tell the customer to choose your location. After that, the treatment places (SPA) related to that location are displayed. Then, the customer should click on the desired location, add user details, and click on the payment process. Then it connects to the payment page and when it is successful, the customer should click book now and book an appointment (delete and update are also possible). After that, a treatment rating is displayed, and the customer can rate it.

After booking, when the customer comes and finishes the treatment, the admin will send a thank you email to the customer and delete the appointment.

- Advertising management

In this Function, if a person or company wants to publish an advertisement, first he/she must register on our website. Then he can give the detail of Ad information and Ad.

Ex- Think Sri Lankan airline want to publish an advertisement about their special ticket offer on our site so they can give us their Advertisement

He can customize the pages he wants to post and how long this advertisement should last. He can update if he wants to change the ad and extend the time the ad should be published further. We will provide an interface and methods for this Function and Information and Advertisements are storing our Database.

Upon receipt of an advertisement, the advertisement will be relevant to our website and upon receipt of payment for the ad we will confirm the advertisement and publish the ad on the pages where the advertisement is to be published. In this case, the pages that need to be published on the same page or on the relevant pages if he has paid extra.

Ex-Think Sri Lankan airline wants to publish their Advertisement on our main page so they can do additional payment or if they only want to publish the Ad so then Admin decided what are the pages are better to publish the Advertisement.

When payments and Ad are all clear and send a confirmation email to customer or when payments or Ad are not accepted so then send an email to customer.

Using this Function,

- Customer can create user account
- Customer can give Ad and information
- Customer can update Ad and make payments
- Customer can add additional service
- Customer can delete or end the Ad
- Admin can log to the system and check the Ad
- Admin can Update the Advertisement
- Admin can Confirm or reject the Ad
- Admin can Delete or end the Published ad
- Admin can check payments of Ad

- Outdoors & Adventure Experiences

The travelers can Get back to nature with adventure travel We've selected our favorite outdoor activities including adventure sports

They can book any kind of outdoor activities from our website and plan suitable places to do the activities within their tour. we always giving suggestions to the Tourist by considering their main tour plan.

Ex – Assume that if someone wants to do adventure activities through their tour to Galle considering that in outdoor and adventure web page, we will push activities near to the destination such as Hikkaduwa coral watching, Surfing.

Travelers can book one or more activities by searching themselves or given suggestion list, to do. After getting the service customer can give the feedback through the system as well. and then the admin can manage the Booking as well. If a traveler needs to cancel or update their booking it can also be done by themselves

Apart from we provide some exciting food places as well such as street foods, food zones.

In the admin side we are getting activity details by providing link on web page, In this case if some service provider interested to post their activity details on our web page they can go through the relevant link and post the application form which we provided to them. after submitting the Form admin notified through the system.

When payments are all clear we will send confirmation email to the service provider and post the relevant activity details on our web page.

Tools and Technologies



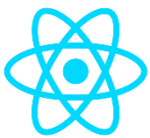
Visual studio code is the platform we use to develop the coding.



Source code management, team collaboration, and version control are managed using a **GitHub**



MongoDB is the database program use for this web application.



With **React Js** we code the front-end interface.



Node Js encodes the back - end.

Project management plan

Gantt Chart

ID	Task Name	Week 1							Week 2							Week 3							Week 4						
		6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug
	Analysis																												
1	Requirement Gathering																												
2	Requirement Analysis																												
3	Preparing Charter Document.																												
4	SCRUM Activity																												
4	Preparing Proposal Presentation																												
5	Preparing Proposal Document																												
6	Preparing SRS																												
7	Proposal Evaluation																												

ID	Task Name	Week 5								Week 6								Week 7				Week 8							
		3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug
	Design																												
8	Wireframe Drawing																												
9	User Interface Design																												
10	Database Design (ER)																												
11	Database Development																												
12	Document Design Specifications																												
	Development																												
13	Develop System Modules																												

ID	Task Name	Week 9							Week 10							Week 11						
		31-Aug	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep
	Development																					
13	Develop System Modules																					
14	Integrate System Modules																					
15	Perform Initial Testing																					
16	Progress Evaluation																					
	Testing																					
17	Perform System Testing																					
18	Debugging																					

ID	Task Name	Week 12							Week 13							Week 14						
		21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct
	Implementation																					
19	Final Report Writing																					
20	Final Presentation and Viva																					
21	Final Report Submission																					
22	System Implementation																					



Work breakdown structure

Name	Function	Description
Imeshika T.H IT20113254	Tour Guide Management	<ul style="list-style-type: none"> Implementing Insert, update, Search and delete guide details Create method to handling travellers requests Create method to communicate between guide and Tourist Create a method for tour guide booking process Create method to give rating and a feedback Create a method to schedule the work plan and to get a report Create a method to turn on/off guide availability
Senarathne S.M.A.D IT20089436	Hotel management	<ul style="list-style-type: none"> Implementing the related insert, update, Search and delete methods. Create a method for generate reports for each section Create a method for booking process Create method to give rating and a feedback Create a method for communicate between service provider and Tourist Create a method to hotel verification process Create a method to turn on/off hotel room's availability. Create methods to categorize the hotels and rooms.
Jayawardhana E.H.K IT19192024	Tourism destination management	<ul style="list-style-type: none"> Implementing Insert, update, Search and delete destination details Create a method to creating packages and subscribing process Create a method for the package allocation process Create a method to filter category, location Create a method for get destination report to Tourist Create a method for get report to admin, who subscribed the tour plan packages
Kumarasinghe C.A.W IT20032692	Vehicle renting management	<ul style="list-style-type: none"> Implementing Insert, update, Search and delete vehicle details Make a method. Select if you want a driver or not. Create a way for ranking and providing feedback. Create a way for the car owner and the tourist to communicate.

		<ul style="list-style-type: none"> • Make a mechanism for the booking procedure. • Create a mechanism for registering the owner and driver of a car.
Fernando P.T.N IT20049140	Payment management	<ul style="list-style-type: none"> • Implementing Insert, update, search and delete payment details, and booking details. • Create a method for communicate between traveller, service provider and system admin. • Create a method for generate a cart and quotation. • Create a method for notifying relevant clients. • Create a method for generate a summary report.
Gunasinghe U.J.H IT20084318	Advertising management	<ul style="list-style-type: none"> • Implementing Insert, update, Search and delete direction and location details • Create a method for show advertisement on relevant pages • Create a method for confirm the requested advertisement through admin • Create a method for notifying relevant advertiser
De Silva K.G.S IT20037192	Outdoors & Adventure Experiences	<ul style="list-style-type: none"> • Implementing Insert, update, search and delete activity details • Create a method for send outdoors & adventure details inquiry to system admin. • Create a method for place the activities on the system • Create a method for Generating the reports
Peiris H.R.D.R IT20236328	Ayurvedic treatment management	<ul style="list-style-type: none"> • Implementing Insert, update, search and delete Ayurvedic treatments. • create a method for customer can select category and select available Ayurvedic treatments withing the site. • Create a method for manage appointments. • Create a method for get rating and feedback • Create a method for Generating the reports.
All Members		<ul style="list-style-type: none"> • User management • UI Designing • Database management



References

We utilized a lot of references in order to make this project a success. This project is being built with the JAVASCRIPT language with React and Node js. As a result, we were required to learn these languages and libraries. For learning these things, we referred lot of web sites.

There are names of YouTube channels that we are referred.

- <https://www.youtube.com/watch?v=yCWc91uwWPg>
- <https://www.youtube.com/watch?v=LXJOvkVYQqA>
- <https://youtu.be/aJVDEF7ROoI>
- <https://www.youtube.com/channel/UCWv7vMbMWH4-V0ZXdmDpPBA>

When we stuck in our project, we referred some web site also,

- <https://www.udemy.com/>
- <https://stackoverflow.com/>
- www.tutorialspoint.com
- <https://da-14.com/blog/its-high-time-reactjs-ten-reasons-give-it-try>
- <https://reactjs.org/>
- www.w3schools.com.