APPLIED INFORMATION TECHNOLOGY AND COMPUTER SCIENCE
e-ISSN: 2773-5141

AITCS

Vol. 6 No. 2 (2025) 1858-1874
https://publisher.uthm.edu.my/periodicals/index.php/aitcs

One 2 Go Travel and Tour Web-Based Management System

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DOI: https://doi.org/10.30880/aitcs.2025.06.02.099

Article Info

Received: 16 July 2025
Accepted: 20 November 2025
Available online: 30 November 2025

Keywords

Travel Agency, Web-Based Management System, Booking System, Prototype Model, Travel Packages.

Abstract

The travel industry continues to grow with technology, yet many small travel agencies still rely on manual methods, reducing efficiency and customer satisfaction. One 2 Go Travel & Tour, located in Kulim, Kedah, currently manages customer inquiries, bookings, and promotions through WhatsApp and Facebook. This manual approach causes delays, repetitive tasks, and disorganized data handling. To address these challenges, a Web-Based Management System was developed to streamline and centralize operations. The system allows administrators to manage bookings, payments, and travel packages, while customers can browse packages, compare prices, make bookings, and track their histories. Using the Prototype Model, the system was developed with Laravel and SQLite, involving phases like requirements gathering, iterative design, and testing. The system significantly improves operational efficiency, reduces errors, and enhances customer experience through real-time access and a self-service interface. Future enhancements may include multi-language support, customizable itineraries, and advanced analytics to further improve functionality and reach.

1. Introduction

The travel industry is comprised of many related industries such as airlines, restaurants, hotels, travel agencies, gift shops, and other local businesses that will attract tourists [1]. In this era of technology, there are some travel agencies that still use a manual method to handle their business without any structure platform [1]. As tourism has become important in our society where there has been a growing trend in social media platforms like TikTok among young people to explore the world which can create memorable experiences while young, a better management system is needed to handle all the possible processes like trip planning, booking and payment processing [2]. By using a web-based management system, this can improve the process but many travel businesses have not fully utilized it.

This project is based on "One 2 Go Travel & Tour" travel agency which is in Kulim, Kedah. This agency is managed by a team that consists of leaders, administrators and travel agents who are responsible for creating the travel packages, itinerary of the packages, handling customer bookings, ensuring smooth payment transactions and other processes. "One 2 Go" serves an affordable travel option where they primarily focus on travel to Thailand, where customers can reduce costs by travelling using bus or van instead of flight. The agency also provides packages to other countries such as Vietnam, Indonesia and South Korea, appealing the travelers seeking an international experience. The current process of handling customer and data is by using platforms like WhatsApp to communicate with customers and Facebook to put their information about company and available package where does not require a database storage.

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

However, most clients may wait for the agency to give the information on available packaging, payment processing and itineraries. In some cases, different customers ask the same common question, requiring the agency to respond to the same inquiries repeatedly. This makes the process time-consuming and can lead to missed customer inquiries and delays in payment processing. Besides, the customer information, payment records, and trip itineraries are stored in various formats such as tools like Microsoft Word and Excel. Managing a variety of information without a centralized system can increase human error and make it difficult for administrators to track bookings, monitor potential packages, manage payment details and generate reports. Customers also face inconvenient experiences due to the lack of a streamlined online booking system, instant information about package provided, and self-services option.

To address these issues, this study in this project proposed the development of a web-based management platform for "One 2 Go Travel & Tour". The platform will cater to two main actors, of which customers and administrators. Customers can browse and book travel packages directly through websites, compare prices with other agencies, make payment, rate services, and receive real-time booking confirmation. While administrator, the platform will provide a comprehensive dashboard for managing customer booking details, payment details, travel packages, handling customer inquiries, and generating reports. The system also required customers to register on the system to access the main functionalities such as booking, payment and viewing their booking history. However, registration will not be required for customers to view available travel packages, agency information, and rate the services.

2. Literature Review

One 2 Go Travel & Tour is a travel agency located in Kulim, Kedah. The agency focuses on budget-friendly trips to Thailand, Vietnam, Indonesia, and South Korea. The agency provides their services to travelers who want affordable and enriching experience abroad. By focusing on affordability and quality, One 2 Go aims to make international travel possible for a large range of customers, including young people, families, and groups that are interested in exploring popular destinations in Asia that meet their budget.

The method used for this project is a web-based management system. A web-based management system is highly suitable for organizing data and operations for a centralized online platform. The approach of web-based system provides real-time information, easy access for users and efficient data handling [3]. This approach allows One 2 Go Travel & Tour to build a seamless and accessible management system. This system also supports many functions including managing booking and customers data, as written in research on web-based tourist and resort management systems [4].

In the One 2 Go Travel & Tour management system, the Laravel framework has been chosen for this project. Laravel is known as the best programming tool for PHP-based web development due to its flexibility, security features and efficiency in building robust web applications [5]. Laravel also provides tools like Eloquent ORM which can simplify database interactions, enabling structured data management for handling customer records, bookings, and payments.

Three existing based systems have been examined to obtain more useful information for the proposed system development. The systems studied were Star Travel & Tour, Parlo Tours and Syoknya Travel. Star Travel & Tour provides package browsing, itinerary details, general destination information, and a customer inquiry form, but lacks a streamlined booking process with data validation or follow-up confirmations. Parlo Tours features structured package labeling such as "Popular" or "New", upfront pricing on listings, and bilingual displays, though its interface could benefit from a language toggle for improved clarity. Syoknya Travel offers seasonal packages for high-demand periods like winter and autumn, as well as a user review and rating system to build customer trust; however, its reliance on external platforms for reviews could be improved with a built-in feedback system for more authenticity. These features collectively inform enhancements for better customer experience and system functionality. The comparison between similar systems and the proposed system will be shown in Table 1.

Table 1 System Comparison

System / Features	Star Travel & Tour	Parlo Tours	Syoknya Travel	One 2 Go Travel & Tours
User Register and Login	X	X	X	√
Package Browsing	√	√	√	√
Online Booking	√	√	X	√
Seasonal Packages	X	X	√	√
Customer Inquiry Form	√	√	X	√
User Reviews and Ratings	X	X	√	√

3. Methodology

The appropriate methodology must be defined correctly to build a successful system. Many methods can be used to develop a system. The most crucial decision to make is deciding what methodology model one wants to use to develop and establish a system since it can affect the whole progress of any project. The Prototype Model is suitable for a project whose requirements are not well-defined in detail [6]. Since the agency didn't have its own web-based system, this model is suitable because it can test and refine the prototype repeatedly until a final acceptable prototype is achieved [6]. For this reason, the Prototype Model is suitable as the primary methodology for this project. This model is the right methodology that can meet the scope of the system. The Prototype Model consists of several phases: Requirement Gathering, Quick Design, Building Prototype, Customer Evaluation, Refining Prototype and Engineer Product. As shown in **Fig. 1** and **Table 2**, each phase has its own assignment and output that needs to be produced during the entire project development. Besides that, the output was completed within the specific days that have been given. Each Phase is carefully planned with milestones and timelines to align with the objective of the project and stakeholder expectations.

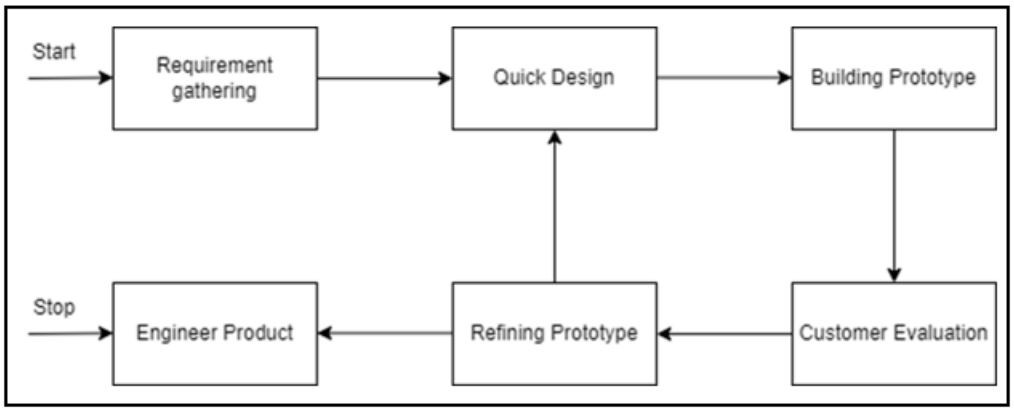


Fig. 1 Prototype Methodology

Table 2 Software development activities

Phase	Task	Output
Planning	Proposed the project and determined the project schedule, activities and output	Project proposal, Gantt chart
Requirement Gathering	Collect requirements of the system through interviews with the staff of the agency	Requirement specification document, DFD, ERD, flowchart
Quick Design	Create initial interface and layout using Laravel template	System architecture, Database schema & data dictionaries, User interface design
Build Prototype	Develop functional prototypes and implement the key features of the system	Project prototype with interactive components
Customer Evaluation	Collect feedback from target user using Google Forms	User feedback report
Refining Prototype	Update prototype based on the feedback	Improve prototype
Engineer Product	Final system using Laravel and MySQL	Develop web-based management system

4. Analysis and Design

In this section, the analysis and design of the purposed system are discussed. The requirements analysis which includes functional requirements and non-functional requirements will be presented to explain the functional of the system. To build up the system, the context diagram, dataflow diagram, and entity relationship diagram are designed. For the database design, it explains the entity relationship diagram and how the tables are connected to each other. Lastly, the interfaces will be presented to show what the system looks like.

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

4.1 Functional and Non-Functional Requirements

Functional requirements determine the function of a developed system, while non-functional requirements define the quality of a system, including performance, security, usability, and compliance [7]. Together, these ensure the system operates effectively. Functional and non-functional requirements are important when developing a system to make sure that the system builds will help users achieve their objectives. Tables 3 and Table 4 show this system's functional and non-functional requirements.

Table 3 Functional Requirements

No	Modules	Functionalities
1	Registration and Login	System should allow customers and admin to log in to the system using separate credentials for each user type.
		System should allow proper access control to functionalities based on the user type.
2	Travel Package Management	System should allow admin to add new available packages.
		System should allow admin to update data about available packages, costs, itineraries, travel tips, and company information.
		System should allow admin to delete data about travel packages.
3	Booking and Payment	System should allow customers to book travel packages and make payments online.
		System should allow customers to view booking history and progress.
		System should allow customers to have options for private or general bookings, with itinerary customization and additional activity for private bookings.
		System should allow admin to manage customer booking details.
4	FAQs Management	System should allow admin to add and display frequently asked questions with answers for easier access.
		System should allow admin to categorize FAQs under specific categories such as “Booking”, “Payment”, and “Travel.
5	Package Ratings and Reviews	System should allow customers to rate their travel experience based on booked packages.
		System should allow customers to use customer feedback to improve future services and assist prospective customers.
		System should allow admin to response to customer reviews and ratings.

Table 4 Non-Functional Requirements

No	Requirements	Description
1	Performance	The system should be able to work on any web browser
2	Operational	The loading time required for a website is no more than 1 minute
3	Security	The system should ensure data confidentiality, integrity, and user authentication
4	Cultural and political	The system should respect cultural diversity and comply with relevant political regulations

4.2 System Analysis

A context diagram provides a high-level overview of how the system interacts with external entities, including users such as customers and administrators. It illustrates the data exchanged between the system and

these users, outlining both inputs and outputs involved in each interaction. Fig. 2 shows the context diagram for the developed system, highlighting the flow of information between users and the web-based management platform. A Data Flow Diagram (DFD) offers a more detailed view by breaking down the system's internal processes. It shows how data moves within the system, how it is processed, stored, and transferred between entities. Fig. 3 shows the Level 0 DFD of the system, which outlines the major processes such as travel package management, booking, payment, and user interaction with the system's database.

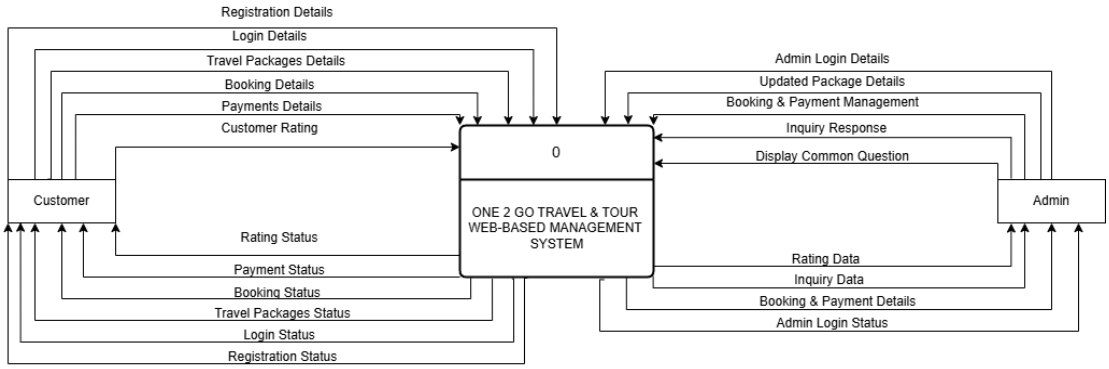


Fig. 2 Context Diagram

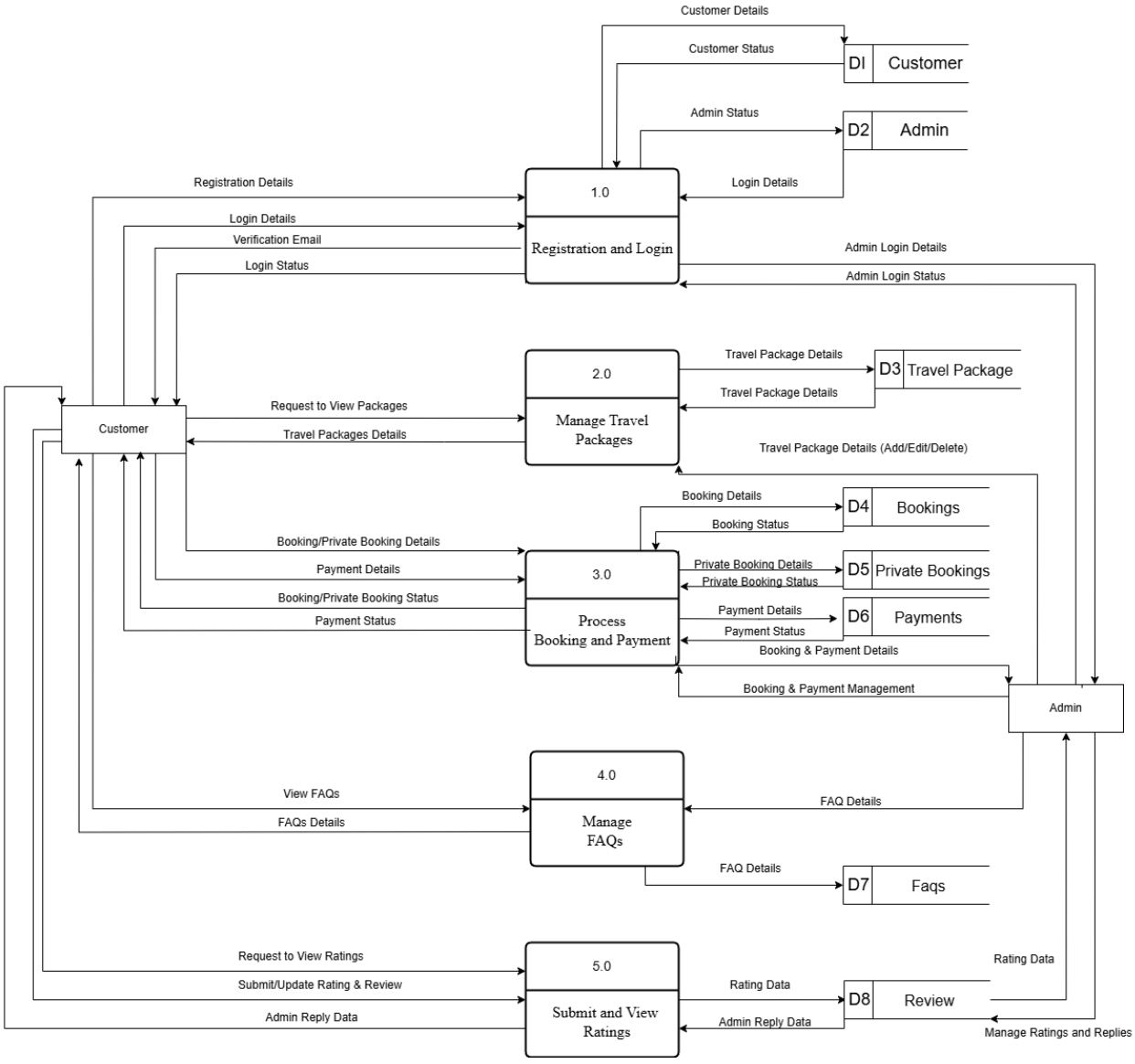


Fig. 3 Data Flow Diagram level 0

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

An Entity Relationship Diagram (ERD) is a visual representation of how different entities in the Travel Agency Management System relate to each other, providing a clear structure for the database and ensuring data integrity. In this system, the following tables have been identified: Customer, Admin, Travel Packages, Booking, Private Booking, Payments, FAQs and Review. These tables represent key components of the system, such as managing user accounts for customer and admin, handling travel packages, processing bookings for general booking and private booking and payments, storing customer inquiries with answer based on category and collecting ratings and review. Fig. 4 shows the entity relationship diagram for this system.

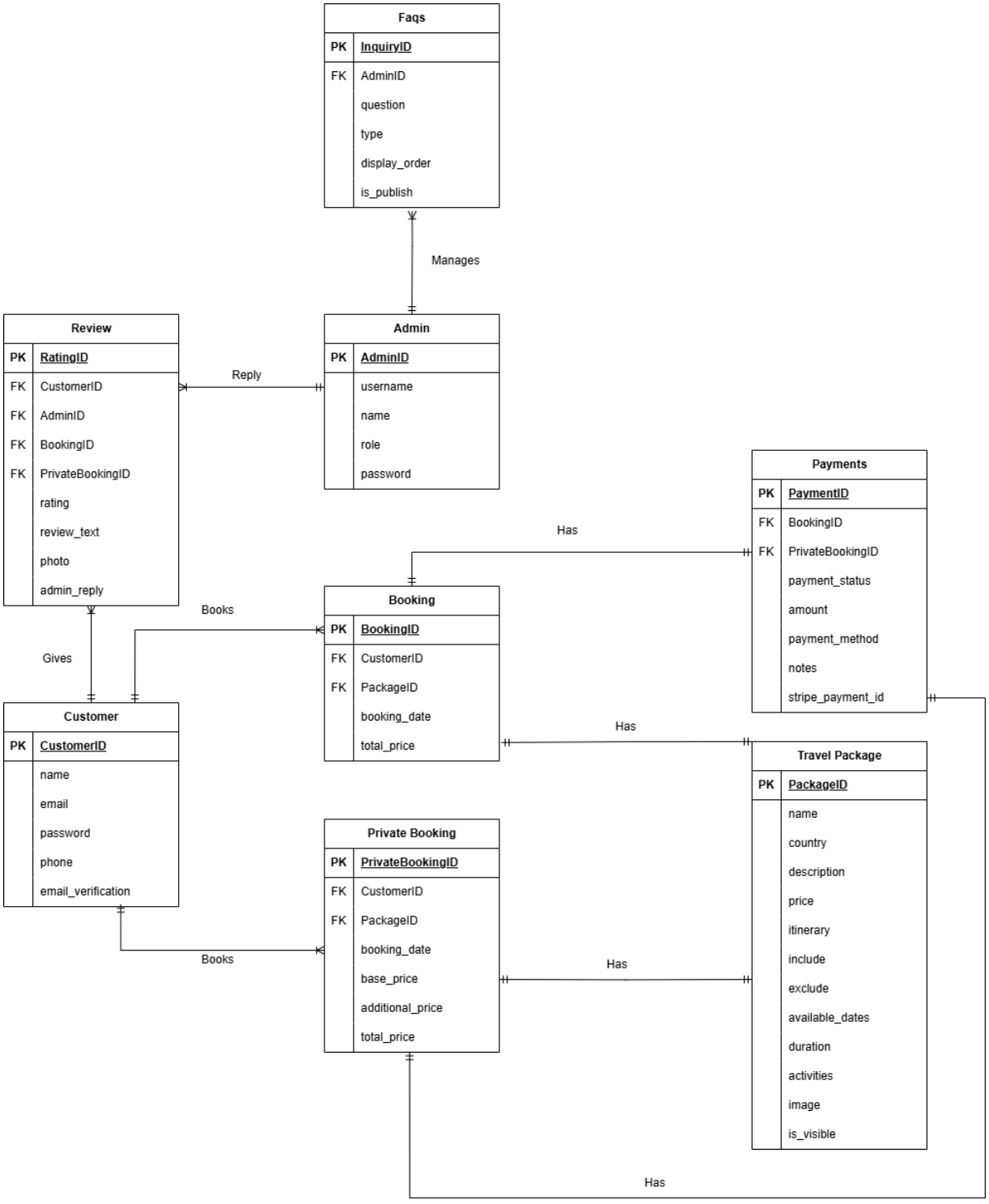


Fig. 4 Entity Relationship

A flowchart is a visual diagram used to represent the sequence of steps involved in a process. In this project, it is used to illustrate the workflow for both customer and admin users. Flowcharts help to visualize, analyze, and communicate system processes clearly and effectively. Each step in the process is represented using standardized symbols, accompanied by brief descriptions to indicate the function of that stage. The customer process flowchart is provided in Appendix A, while the admin process flowchart is shown in Appendix B.

4.3 System Design

After all user requirements were successfully analyzed, the project proceeded to design phase. In this phase, both the system interface and database structure were designed to visualize the flow of the One 2 Go Travel & Tour Web-Based Management System. This system architecture outlines how some components interact and function together to support travel booking and management operation. Fig. 5 shows the system architecture for this web-based system, the system involves two users, which are customers and admin. Both users will interact with the User Interface (UI), which serves as the front-end of the system. Customers can register, log in, view travel packages, make bookings (general or private), manage payments, read FAQs, and submit or view reviews. Admins, on the other hand, access the interface to manage travel packages, handle customer bookings, respond to reviews, and maintain FAQs. These functionalities are integrated with the backend through a web server, which handles all data requests and responses. The server interacts with a centralized database that stores all relevant data, including user accounts, bookings, payment records, FAQs, and customer feedback.

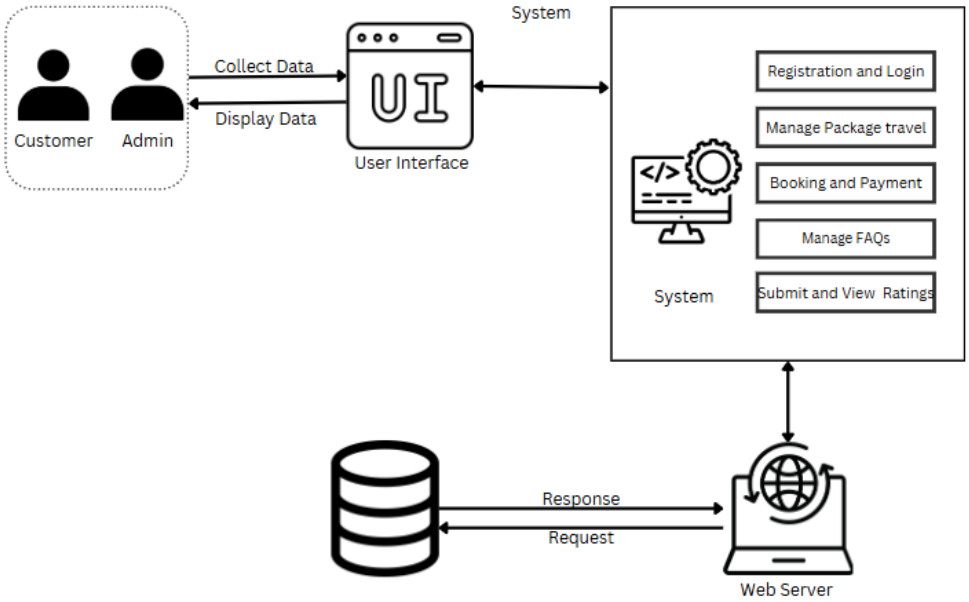


Fig. 5 System Architecture

5. Results and Discussion

Implementation is a process of building a system, which develops a system with the combination of HTML, JavaScript, PHP, CSS and Bootstrap to ensure that the system's operation and quality meet the required standard. In this section, developers must ensure that the system aligns with the user requirements and the development plan. Next, system testing is conducted to ensure that the system's functionality and operations meets the user requirements and to fix any unexpected bugs or errors. There are two types of testing that will be explained in this section, which are functional testing and user acceptance testing.

5.1 System Implementation

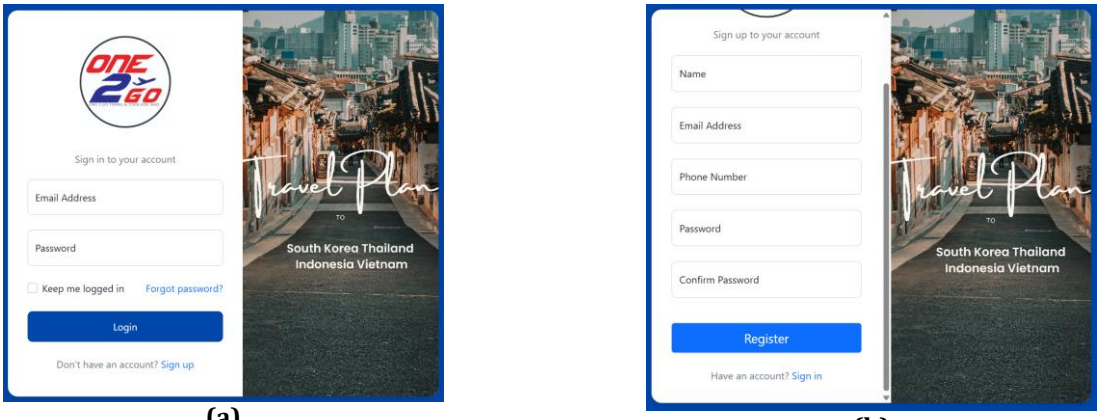
The system implementation for the system One 2 Go Travel & Tour Web-Based Management System involves the coding, design and executing of the project. Based on the previous planning, analysis and design phases, this phase will transform the system design into a fully functional product that operates as intended and meets the requirements.

5.1.1 Login and Registration Interface

Fig. 6(a) shows the Login Interface, where existing customers can log into the system using their registered email and password. Fig. 6(b) displays the Registration Interface, which allows new customers to create an account by entering their personal details. Customers are required to register before accessing the system's

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

main features such as booking and payment. These interfaces ensure that only verified users can access personalized functions like booking history and payment tracking.

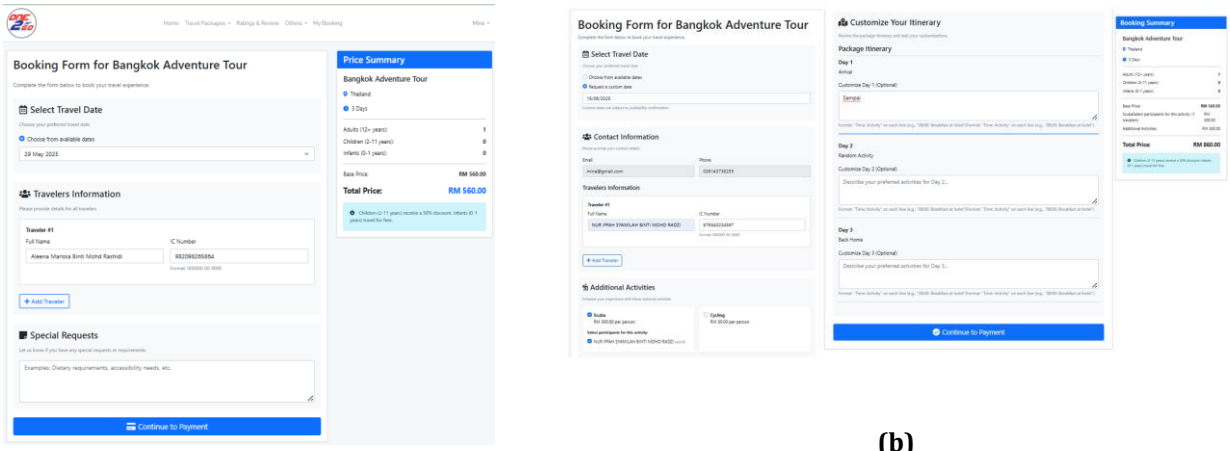


(a) **(b)**

Fig. 6 Interface (a) Login; (b) Register

5.1.2 Booking and Private Booking Interface

Fig. 7(a) shows the General Booking Interface, where customers can specify the number of participants (adults, children, and infants) for the selected travel package. This feature helps calculate the total cost based on the participant categories. Fig. 7(b) displays the Private Booking Interface, which allows customers to customize their travel dates, daily itineraries, and select additional activities based on their preferences. The interface also displays the cost of additional activities based on the number of participants joining, helping users understand the total price before confirming their booking.

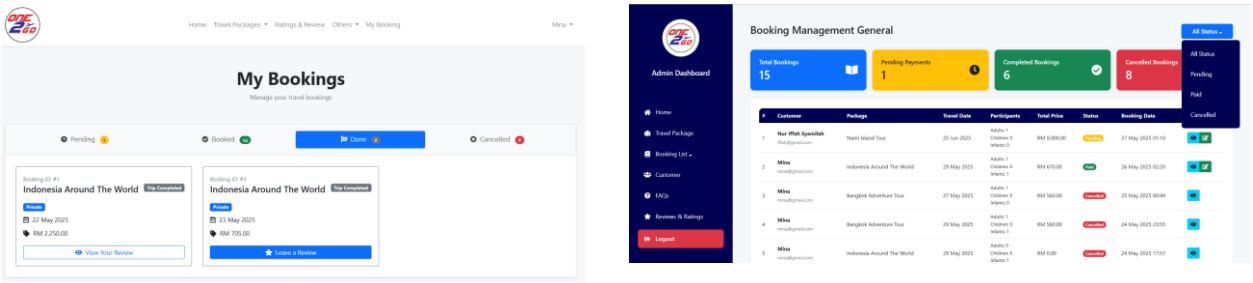


(a) **(b)**

Fig. 7 Interface (a) Booking; (b) Private Booking

5.1.3 Booking History Interface

Fig. 8(a) shows the Booking History Interface for customers, where bookings are organized into four categories which are Pending Payment, Booked, Done, and Cancelled. This helps users easily track the status of each booking they've made. Fig. 8(b) displays the Admin Booking Management Interface, which allows administrators to view and manage all customer bookings. Admins can update booking details and monitor payment progress. The interface also includes summary statistics such as total bookings, pending payments, completed bookings, and cancellations to support quick decision-making and tracking.



(a) (b)

Fig. 8 Interface (a)Booking History; (b) Booking Management

5.1.4 Payment Interface

Fig. 9 shows the Payment Interface, where customers can review important booking details such as the total amount, list of participants, selected additional activities, and the full itinerary before proceeding with payment. The interface also displays the available payment methods, allowing customers to either pay immediately using a card or choose the "Pay Later" option. This flexibility ensures that users can complete their transactions according to their preferences and financial readiness. The clear breakdown of costs and options improves transparency and supports a smoother payment experience.

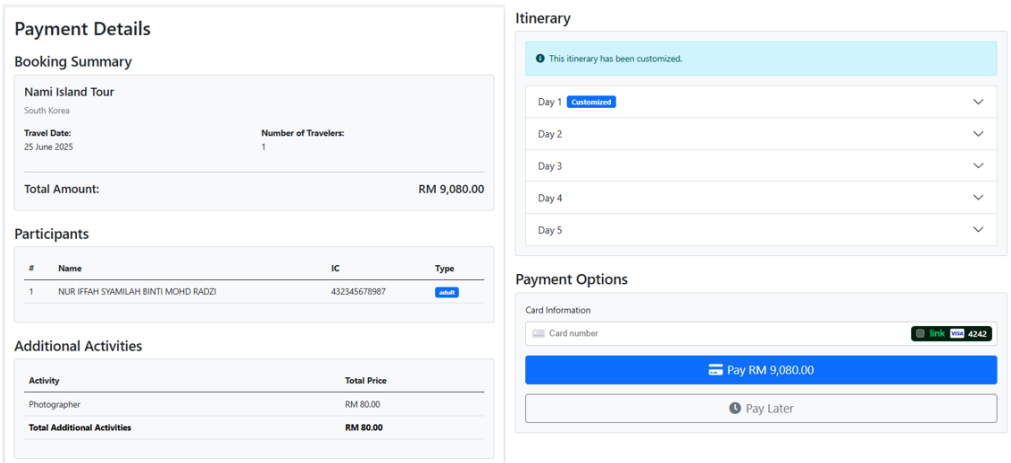
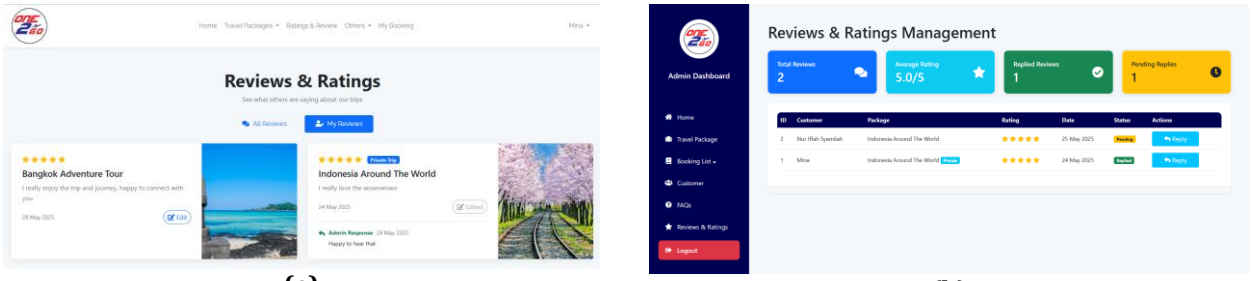


Fig. 9 Payment Interface

5.1.5 Reviews and Ratings Interface

Fig. 10(a) shows the Reviews and Ratings Interface for customers. This interface includes two sections: one displays reviews submitted by other users, while the second section allows customers to view their own submitted review. Customers can provide a written review and give a star rating based on their experience. Fig. 10(b) presents the Admin Reviews Management Interface, where administrators can monitor all customer reviews and provide responses to each review. This feature ensures that customer feedback is acknowledged and handled professionally. These interfaces support two-way interaction between the agency and its customers, promoting transparency, improving trust, and helping the agency identify areas for service improvement.



(a) **(b)**

Fig. 10 Interface (a) Reviews & Ratings Customer; (b) Reviews & Ratings Admin

5.1.6 Admin Dashboard Interface

Fig. 11(a) shows the Admin Dashboard Interface, which provides a visual summary of the system's key metrics such as total revenue, top destinations, and top countries. The dashboard uses graphical representations like pie and bar charts, and these can be filtered by month for more specific insights, helping administrators track performance trends effectively.

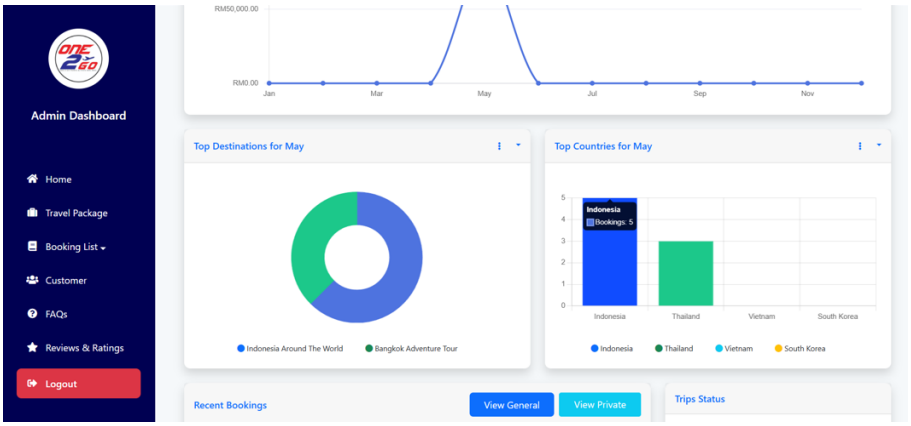
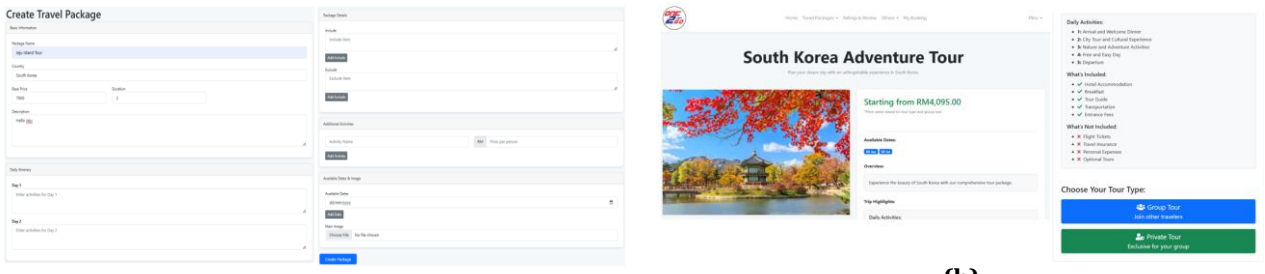


Fig. 11 Admin Dashboard Interface

5.1.7 Travel Package Management Interface

Fig. 12(a) displays the Admin Package Entry Form, where administrators can input travel package details including the package name, country, price, duration, itinerary, additional activities, items included/excluded, and available travel dates. This ensures all essential information is systematically captured. Fig. 12(b) shows the Customer Package Display Interface, where the submitted travel package details are presented to customers in a user-friendly layout. The interface also provides two booking options: group tour or private tour, offering flexibility based on customer preferences.

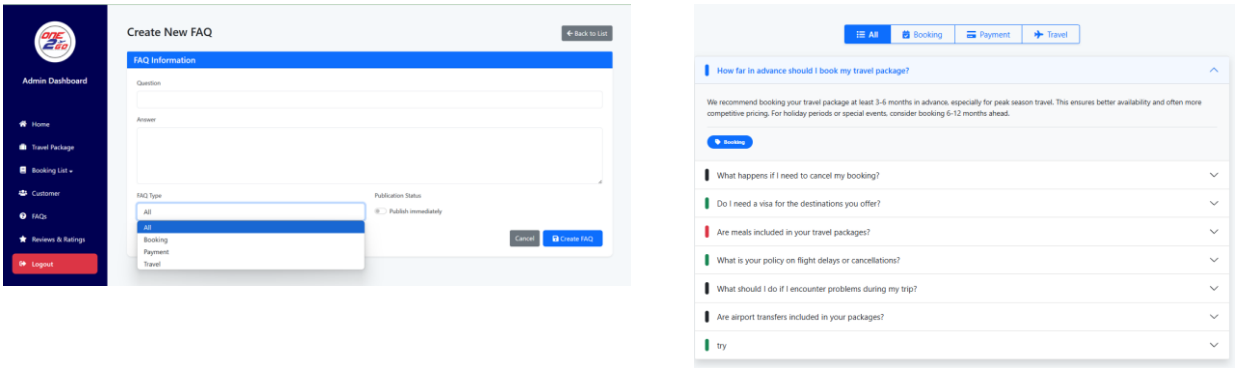


(a) **(b)**

Fig. 12 Interface (a) Create Travel Package; (b) Customer Travel Package

5.1.8 FAQs Interface

Fig. 13(a) presents the Admin FAQ Creation Interface, which allows administrators to create frequently asked questions along with their answers and categorize them based on topics. There is also an option to immediately publish FAQs, making them visible to customers as soon as they are submitted. Fig. 13(b) illustrates the Customer FAQ Interface, where published FAQs are displayed in a structured and categorized manner. This helps users easily locate the information they are looking for based on topic types such as Booking, Payment, or Travel Information.



(a) **(b)**

Fig. 13 Interface (a)Create FAQs; (b) Customer FAQs

5.2 System Testing

System testing is the phase where the complete and integrated system is tested. In this phase, both functional testing and user acceptance testing are conducted to evaluate the One 2 Go Travel & Tour Web-Based Management System. The purpose is to verify whether the system meets user requirements and to identify any bugs or error in the system. Tabel 5 shows the functionality testing results for the One 2 Go Travel & Tour Web-Based Management System.

5.2.1 Functional Testing

Table 5 Functional Testing

No	Module	Test Cases	Description	Expected Output	Actual Output
1	Registration and Login	M1-1	System should allow customers and admin to log in to the system using separate credentials for each user type.	Customers and Admin login to the system with different credentials	SUCCESS
		M1 -2	System should allow proper access control to functionalities based on the user type.	Customer and Admin access different system interfaces base do user roles.	SUCCESS
2	Travel Package Management	M2-1	System should allow admin to add new available packages.	Admin can successfully add new travel packages	SUCCESS
		M2-2	System should allow admin to update data about available packages, costs, itineraries and additional activity.	Admin can update travel package details successfully	SUCCESS

Table 5: (Cont)

No	Module	Test Cases	Description	Expected Output	Actual Output
		M2-3	System should allow admin to update the visibility status of travel packages in the user interface.	Admin can update package visibility to “visible” or “not visible”	SUCCESS
3	Booking and Payment	M3-1	System should allow customers to book travel packages	Customers can select and book available travel packages.	SUCCESS
		M3-2	System should allow customer to make payment online or pay letter	Customers can choose to pay online or select the "pay later" option during booking.	SUCCESS
		M3-3	System should allow customers to view booking history and progress.	Customers can view their booking history on my booking page	SUCCESS
		M3-4	System should allow customers to have options for private or general bookings, with itinerary customization and additional activity for private bookings.	Customers can choose between private and general bookings, with customization options for private trips.	SUCCESS
		M3-5	System should allow admin to manage customer booking details.	Admin can view and manage customer booking information.	SUCCESS
4	FAQs	M4-1	System should allow admin to add and display frequently asked questions with answers for easier access.	FAQs are displayed in the system for customer reference.	SUCCESS
		M4-2	System should allow admin to categorize FAQs under specific categories such as “Booking”, “Payment”, and “Travel.	FAQs are organized into clear categories for easier access by customers.	SUCCESS
5	Package Ratings and Reviews	M5-1	System should allow customers to rate their travel experience based on booked packages.	Customers can provide ratings for travel packages.	SUCCESS
		M5-2	System should allow customers to use customer feedback to improve future services and assist prospective customers.	Customers can view reviews and ratings from other customers.	SUCCESS
		M5-3	System should allow admin to response to customer reviews and ratings	Admin can view and reply to customer reviews.	SUCCESS

5.2.2 User Acceptance Testing

User Acceptance Testing(UAT) is the last phase of the system testing process for this project. The One 2 Go Travel & Tour Web-Based Management System carried out the UAT that conducted using Google Form, which was distributed to few targets users, including both customer and staff of One 2 Go Travel & Tour Agency. There are total of 15 respondents who took part in this test, of which there are 10 customers and 5 are from staff of One 2 Go Travel & Tour Agency. This session aimed to collect feedback on various aspects of the system, such as ease of navigation, functionality and overall satisfaction. Participants were required to interact with the system and then complete the test by answering a set of questions.

As the system provides different access to using the system for admin and customers, there will be two sections of Google Form for user acceptance testing. Fig. 14 shows the results of Google Form that illustrates the results of the admin-Specific User Acceptance Testing (UAT), focusing on the functionality and efficiency of the system from the admin's perspective. There are five questions regarding the updating categories, admin control, clear action buttons, and visual display of travel packages. The bar chart indicates that most admins strongly agreed that the system meets key requirements, including ease of accessing customer data, efficiency in managing travel packages, and the ability to monitor payment records effectively. A few responses indicated "Agree", while no responses fell under the categories of Fair, Disagree, or Strongly Disagree. This suggests that admins are highly satisfied with the system's features and performance, indicating that it effectively supports administrative tasks and enhances overall management capabilities.

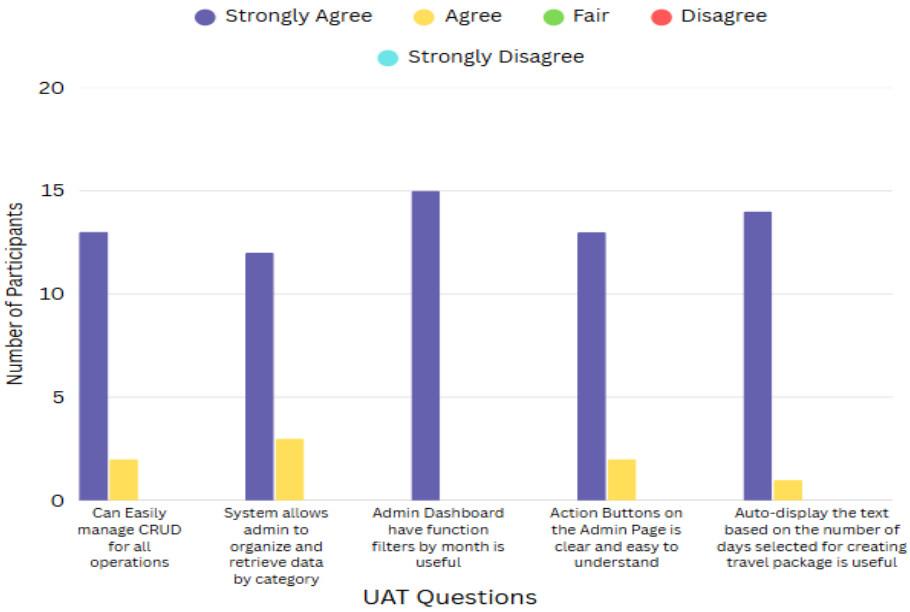


Fig. 14 Admin-Specification User Acceptance Testing

Fig. 15 shows the results of Google Form that illustrate the results of the Customer-Specific User Acceptance Testing (UAT), evaluating various features designed to enhance the user booking experience. There are eight questions regarding the intuitiveness, informativeness, accessibility, flexibility and visual clarity of the booking process. The chart reveals that most users strongly agreed with the usefulness and clarity of the features provided. These include automatic category assignment by IC number, the requirement of at least one adult per booking, the ability to choose the number of participants, and itinerary customization for private packages. Users also appreciated the review system, FAQ organization, flexible payment options, and the clarity of the "My Booking" page. A small number of users selected "Agree", and only a few choose "Fair", with no users selecting Disagree or Strongly Disagree. Overall, the results suggest that the system successfully meets customer expectations and offers a smooth, user-friendly experience.

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

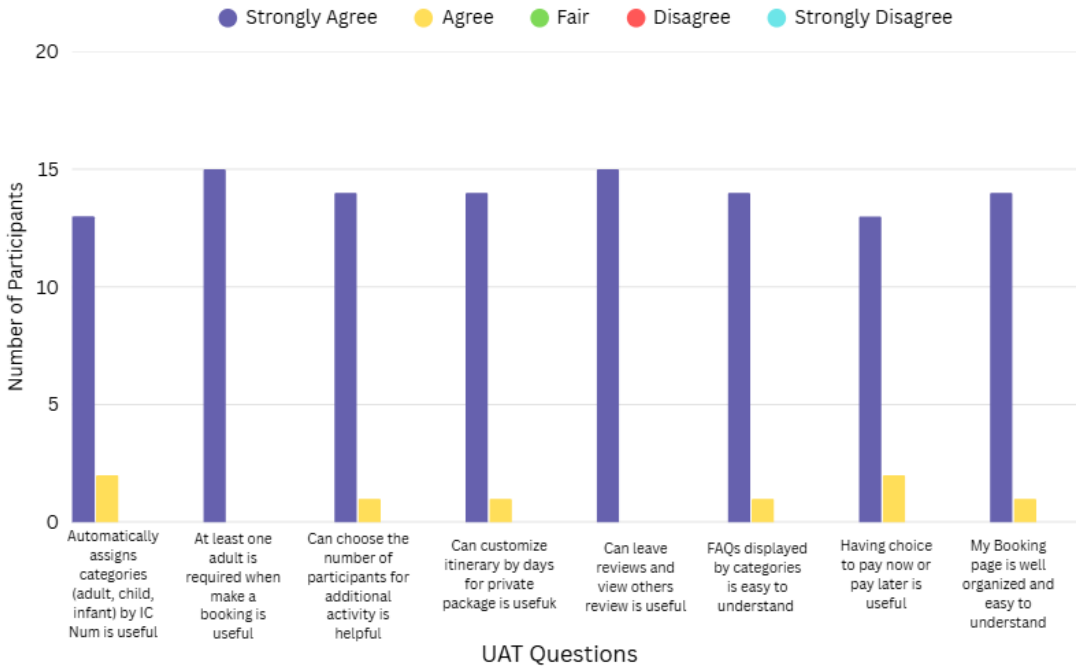


Fig. 15 Customers-Specification User Acceptance Testing

6. Conclusion

In conclusion, the proposed One 2 Go Travel & Tour travel agency aims to change the current manual approach to web-based management system to manage travel-related operations by providing centralized and automated platforms. This will solve problems like slow booking processes, payment tracking issues, and delayed responses, help the agency save time and improve customer service. This system is designed to streamline operations, ensure accurate data and support better decision-making, which will help the business grow. By using this system, the company can handle current challenges and prepare for future expansion while delivering a better experience for both customers and staff.

Although the objective has been achieved, there are a few limitations existing in this system. Firstly, the system design and layout are still not uniform for all pages for customers and admin. Some of the layouts of the system are adaptive but some layouts are not when using non-windows screen. Firstly, the system design and layout are not fully uniform across all pages for both customers and admins. Some pages have adaptive layouts while others do not, particularly when viewed on non-windows devices. Next, the participant data for each additional activity is not stored individually in the database, only the total number of participants for an activity is stored. This feature can be improved in the future to enhance a better system. Lastly, the purposed system is integrated with the Stripe payment gateway, which only supports card payments due to Stripe's requirements for a verified business account to enable other payment methods. In the future, when the agency fully implements the system, multiple payment methods can be added to provide more flexibility for customers.

Acknowledgement

The authors would like to thank the Faculty of Computer Science and Information Technology, Universiti Tun Hussien Onn Malaysia for its support.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of the paper.

Author Contribution

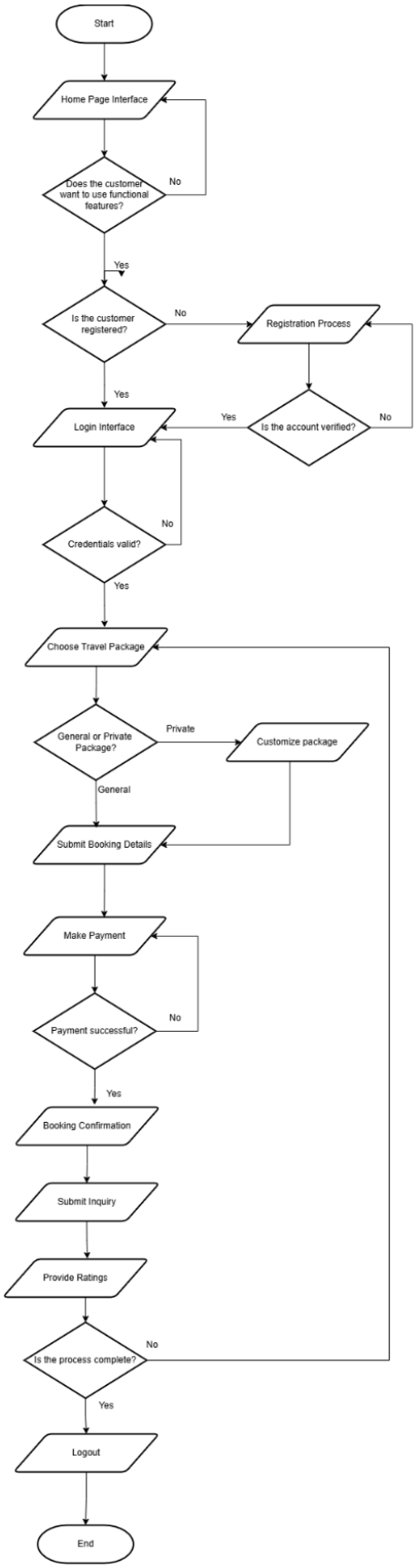
The authors confirm sole responsibilities for the following: **study conception and design:** Nur Iffah Syamilah Mohd Radzi, Rozlini Mohamed; **data collection:** Nur Iffah Syamilah Mohd Radzi, Rozlini Mohamed; **analysis and interpretation of results:** Nur Iffah Syamilah Mohd Radzi, Rozlini Mohamed; **draft manuscript preparation:** Nur Iffah Syamilah Mohd Radzi, Rozlini Mohamed. All authors reviewed the results and approved the final version of the manuscript.

References

[1] P. Lam and R. Cheung, "How travel agency survive in e-business world," *Communications of the IBIMA*, vol. 10, no. 85, p. 25, 2009.
[2] M. J. Abu-AlShaeer, H. A. Hasan, S. I. Mustafa, D. Khlaponin, and K. Krasovska, "A comprehensive online tourism management system revolutionizes travel," in *Proc. 2024 35th Conf. Open Innovations Assoc. (FRUCT)*, Apr. 2024, pp. 22–32.
[3] A. P. Chassiakos and S. P. Sakellaropoulos, "A web-based system for managing construction information," *Advances in Engineering Software*, vol. 39, no. 11, pp. 865–876, 2008.
[4] A. A. Yazdeen and S. R. Zeebaree, "Comprehensive survey for designing and implementing web-based tourist resorts and places management systems," *Academic Journal of Nawroz University (AJNU)*, vol. 11, no. 3, 2022.
[5] M. Amini, A. Rahmani, M. Abedi, M. Hosseini, M. Amini, and M. Amini, "Mahamgostar.com as a case study for adoption of Laravel framework as the best programming tools for PHP-based web development for small and medium enterprises," *Journal of Innovation & Knowledge*, pp. 100–110, 2021.
[6] U. S. Senarath, "Waterfall methodology, prototyping and agile development," *Tech. Rep.*, pp. 1–16, 2021.
[7] S. Rahy and J. M. Bass, "Managing non-functional requirements in agile software development," *IET*, 2022.

Applied Information Technology and Computer Science Vol. 6 No. 2 (2025) p. 1858-1874

Appendix A: Customer Flowchart



Appendix B: Admin Flowchart