Hong Kong Institute of Vocational Education (Tsing Yi)

Department of Information and Communications Technology

Higher Diploma in Software Engineering

System Development Project

Design and Analysis Specification

Date: 15th April 2016

Group No. **Group 6**

Student	Contribution to the project (%) (Total 100%)	Signature
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- We declare that this is a group project and that no part of this submission has been copied from any other student's work or from any other source except where due acknowledgement made explicitly in the text, nor has any part been written for us by another person.

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1. Abstract

To plan with the phase of design and analysis specification, we have reconsidered the needs of the system which help building the refined problem and refined function. Among the prepared database from the Ticket Tailor Ltd, there are some wrong data which have been resolve. At the same time, we have found out the diversity of the system use between the accounts of the staff and driver.

For the current initial problem description, we were pretty sure about the problems and building risks of the current system. Besides, the refined function may conduct a big mend which can reform the orientation of the system development. In order to represent the system idea of the integrated tourism management system, the system architecture has been designed by using Unified Modeling Language (UML) and Entity Relationship Diagram (ERD) for data modeling respectively. The preliminary ideas and the arrangement of system building are also shown as following specification.

The spotlight of improved change:

Refined functional requirement

- The user add-on with staff of driver (Expandability)
- The process of customer order request (Reconsider)

Prepared database from the Ticket Tailor Ltd

- Program-data vulnerability (Resolve)
- Program-data dependence (Reorganize)
- Data inconsistent (Data merge)
- Data redundancy (Duplication of data)

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2. Refined Problems

2.1 Problem from customer

Refined problem	Brief suggested solution
1. Customers may not get the desired information and may be misguided.	**Searching function** We can add a search function in new system. Customers have to search something through entering some keyword, system will look for all data of the database which it matches the customers' desired information. **Information filter** Refer to some Informational system or website. We suggest building an information filter function for expending the keywords searching function. The system will provide some filter choice for customer by searching per their request.
2. Customer need to read a lot of travel planning information that is really tedious for the customer.	**Travel planning package** It is difficult to plan a travel for our customers, so we would provide some packages such as some planned attractions and hotel for them to choose, which are recommended by customers. In view of this, our customers can easily collect and analyze the travel information. **Customize Travel Planning(for customer)** In the new system, perhaps we could add a new button called "Combination packages" in the Module Selection Form. Customers have to choose some items such as 'city', 'price' and 'travel time'. Our system that filters out some packages which do not match their requirement shows some available packages to them. Therefore, it is convenient for customers to order without reading a lot of information.

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2.2 Problem from staff

Refined problem	Brief suggested solution
1. The system is defective that staff and customers need much paperwork for handle the orders. This often requires a lot of time and effort.	**Computerization system with database** We suggest using new software system to replace paperwork. New system not only integrates the air tickets and hotels information, but also provides cruise items and attractions. Customers only have to submit their personal profile one time because the system database would automatically store their data. If they want to book again, they only need to input some simple data, that it can reduce a lot of paperwork and processing time for customers and staff.
2. In the present system, staff is difficult to explain the details and the information of travel plan by speech.	**Multimedia for represent plan details** Our new system working on GUI operating system which allows using multimedia functions including text, audio, images and video. Those functions ease to express some abstract information. For example, using video or images to introduce attractions are more appealing. Through inserting more multimedia functions in the system, we can reduce the time of introduction and explanation.
3. The staff may forget to cross out the air tickets have been sold so that make system error and customer cannot board a plane.	**Show the remaining amount of air tickets** Our new system is real-time synchronization with database. After transaction is completed, and the system will records the amount of air tickets has been sold in the order. The system calculates the total amount of air tickets for each flight in the database and then subtract the amount of sold, thus we obtain the remaining amount of air tickets. When the remaining amount less than one, the flight will be hidden. However, the remaining amount will be shown on each flight schedules, let our customer refer as well as avoid making mistakes.

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2.3 Problem from company

Refined problem	Brief suggested solution
1. The process of handling customer is inefficient.	**Multitasking** In the present system, handling many customers at the same time is very difficult due to paperwork only. So staff are easy to forget some important things about the customers, which is very inefficient. **Support stable & large data transfers** We suggest arranging some computers at the kiosk and those computers will be installed our "Integrated Tourism Management System" for customers. The system allows one to easily enquire the relevant information, book tickets and make travel arrangement. Also, the customers themselves can use the new system to handle their travel plan without the service counter. Consequently, it can reduce the workload of the staff and improve the long queues problem.
2. Present system cannot confirm the identity of different staff. The confidential information may be leaked.	**Login function** It can identify different users to login the system that it can restrict the function of different account in order to avoid all users can access some important information. For example, staff cannot access other staff information and get their password. System administrator will provide different user views in the database for every staff, that it is based on different position of the staff. Also, senior staffs have more functions and permissions to manage the information.
3. Present system is not environmentally friendly as it prints a lot of travel leaflets to promote trip.	**Provide diversity detail to the customers** Our new system, which includes all travel information, provides the latest travel promotion under the menu page. So, the travel information will be updated regularly in the system for customers, which is an eco-friendly promotion. It can reduce printing a lot of travel leaflets.

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	Moreover, if users want to get more details, they just need to click the promotion image or relevant link into the page for details.
4. Poor data management.	**<u>Stable server of storing</u>** Present method of maintaining data may appear data redundancy which also leads to data inconsistency. The company has a lot of data and information, but it does not has a system manage to decide which data should be store in same platform, which data should keep long time and which data should back up. For building the computerization system, we would improve the management data improve management of data which is about staffs, customers, products and travel order records. We can solve those problems by building a database. The database contains some relation such as staffs, hotels, and flight, etc. Also, The design goal with the database is that we can integrate the data into a single, logical structure. For the reason that, each data is recorded in only one place in the database that also minimize data redundancy while reducing the probability of inconsistencies.
5. Difficult to calculate financial operation for the department needs.	**<u>System status and the system record</u>** Our new System not only provides travel information for customers but also it would record each deal and calculates the total fee. Then, The record would be automatically added to the database become tuple which clearly listed out staff who handle the orders, the order date, fee and others. The department manager can calculate highest turnover of staff and reward them. In addition, that is easy to calculate the agency's revenues by database which is convenient to make decision.

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3. Refined Functional Requirement

3.1 Function for system management

Refined function	Brief description
1. Account management control	**Enter the system** Login is required before the staff using this system, and different users have different permissions. Each staff will use their staff ID or email account as a login name and password to use the system. The password encrypted by one of the hash function like md5, sha-1 or others. For security, the system will automatic sign out and ask the user login again while stand idle for few minutes. For the customer user interface, customer must using an account calling "guest" to operate the system and those account would set up for staff before turn on the system in the information kiosk. The system will automatically return to the home page without any action. **Privacy protection** All privacy user input such as user password and credit card details will be replaced by "*" due to customers' privacy. **Register account** Staff should provide information to register a user account before using the system. And the permission of the account control should handle by management posts. **Account control add-on** This add-on may include the account frozen & delete account permission for management posts to prohibit the accounts during some situation. And the add-on of forgot password function for staff that they can increase work efficiency.

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3.2 Function for system information enquiry and reservation

Refined function	Brief description
1. Module menu and Recommend journey package	A user form that have four menu selections to link four different forms. After user login for staff (full function) or "guest" for customers (partial function), this form will be displayed with their user name and photo.
2. Air tickets enquiry	The development involves the Air Ticket Enquiry Form with Flight Schedule table. It is used for helping the staff of Ticket Tailor to search the air tickets for customers. Customers also can use this enquiry function at the kiosk.
3. Hotel schedule enquiry	It used for helping the staff to search the hotel schedule for customers. Customers also can use enquiry function at the kiosk. Then, it will show the details of the hotel such as destination, check-in date, check-out date etc.
4. Air ticket order and Hotel schedule reservation	It is used for processing order of air ticket and hotel reservation in a form as well as storing the ordered information into the database.
5. Cruise tour enquiry form and Attraction enquiry form	Attraction Enquiry Form with Attraction table that it is used for helping the staff and customers to search the relevant traveling information for individual travelers. Both of enquiry functions can arrange a lot of tourist attraction for catering to the different customers.
6. Cruise tour booking and Attraction booking	Cruise tour booking function is an extension of the cruise enquiry form as well as the staff and customers can select a particular cruise tour in the cruise enquiry form and click the confirm button in the cruise tour line.
7. Transportation fleet management	The customers select date from the "Pick-up Date", "Drop-off Date" and the "Book Day" will be calculated automatically. And the transportation charges will be calculated by times the book day.
8. Driver and roster for transportation bookings	This function can modify the Transportation Booking Module and apply the driver and its roster to the vehicle bookings for assigning the driver to the vehicle and recording the salary of the driver.

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9. Verification code function	After customer entered their payment information, the system will ask the customer input the verification code for the payment that it can make sure the orders are not entered from the bots.
10. Check work schedule	This function let the driver know the working schedule after login the system. Driver can get the information of the personal status.

3.3 Function for System report and additional function

Refined function	Brief description
1. Data report of all bookings	It is a menu for developing a data report which contains flight information, hotel detail, cruise, attractions and vehicle bookings.
2. Graphics report for data analysis (for manager officer)	This function will display five of data reports with different types of graphics.
3. Check records for customers	This function used for checking their booking records. They should input their telephone number at the kiosk to check the records only. Moreover, they will get a schedule via their email address before their booking.
4. Check records for staff	For checking all customers booking records.
5. Grading function	It is used to grade each item of attraction, tickets and hotel. The system will provide the grading to customers for references. Surely, they would get an email to grade their booked item after travelling.
6. Provide map of place for the hotel	The system will provide more details for the customer and list the coordinate of the hotels.
7. Product searching filter	User can select their desired choice one by one within their budget.
8. Provide the most popular information on the homepage	The system home page will be display the most popular information.
9. Orders request handed over to agencies	When collecting the order request from the customers entered in the kiosk. The system will send the orders request to corresponding agencies in real time.
10. Orders counting management	When the agencies send back the orders completion message to the system, it will calculate the quantity with product and count the remaining booking orders.

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4. System Architecture

4.1 Product Requirement

Refined requirement	Brief description
1. Computer specification	The needs of minimum computer specification: Microsoft Windows 7 or lasted version, 4 GB RAM minimum, and at least 120 GB hard disk space. For the software, we design the company daily operation and computerize the information system developed by C# computer language by using Microsoft Visual Studio. For the company website, the system will develop by ASP.NET. Also, the system database connection will develop by MySQL.
2. Tablet specification in information kiosk	The important need is that the tablet should operate in the Microsoft OS environment.
3. Server connection with MySQL database and Microsoft server engine	Using the most widely used open-source client-server model database management system can store the system data about travel information or saving the data of the staff. Free-software open-source projects that require a full-featured database management system often use MySQL.
4. Microsoft.Net Framework 4 or latest version	Microsoft.Net Framework is used for the back-end office computer and the system communication.
5. Data Access Right Control	It is aim for the unique account to staff and each account has different data access permission which is based on the staff position.
6. Backup of mechanism	In order to the integrated tourism management system is storing a lot of data of travel information, order record, client's connection, we must have the backup of mechanism for avoiding the data loss.

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4.2 Organizational Requirement

Refined requirement	Brief description
1. More user-friendly and accessibility	For match up with customers of Macau and Southern area of China, the system will provided English, Traditional Chinese and Simplified Chinese version to different user. And it may help for the blind for building with audible-touch software in the information kiosk.
2. System Security and Network Security	The system will only work for the online users for using web version database of the service. Also, the ordering record and the personal information around the web pages will be using MD5 or another method to encrypt. At the same time, it can prevent user data from being leaked.
3. Meet the needs of manager posts	The system can let the managers easier administrate the system action for their needs. In view of the old system in paper work, the computerized system is more high efficiency for handling the order request from the customers. And then, manager can supervise the staff account for controlling the staff commission.
4. Meet the needs of staffs	Staff can use the system before login that they can have the authentication for ordering the items. Also, it can improve the system personal security and it can display the personal volume of business. That staff have more high efficiency for handling the customer order request in the new management system.
5. Meet the needs of customers	The customers can place some orders, information enquiry, or order request enquiry at all time in the new system at the information kiosk. That the company and the customers can have high efficiency for ordering that they needs.

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4.3 External Requirement

Refined requirement	Brief description
1. The data connection for the staff personal information and account management	The system will connect the database of staff personal information for pick up the latest data.
2. The data connection for the customer personal information	The system will connect the database of customer personal information for pick up the latest data.
3. Connect with the hotel database to get most updated hotel details	The system will connect the database of hotel database for pick up the latest hotel booking details and the updated room information.
4. Connect with the airline database to get most updated flight details	The system will connect the database of airline database for pick up the latest flight booking details and the updated flight information.
5. The data connection for the updated details of attractions	The system will connect the database of recommend attractions information for pick up the latest data.
1. The data connection for the transport **6. (vehicle & driver)**	The system will connect the database of transports for pick up the latest data of vehicle renting and the driver reservation.

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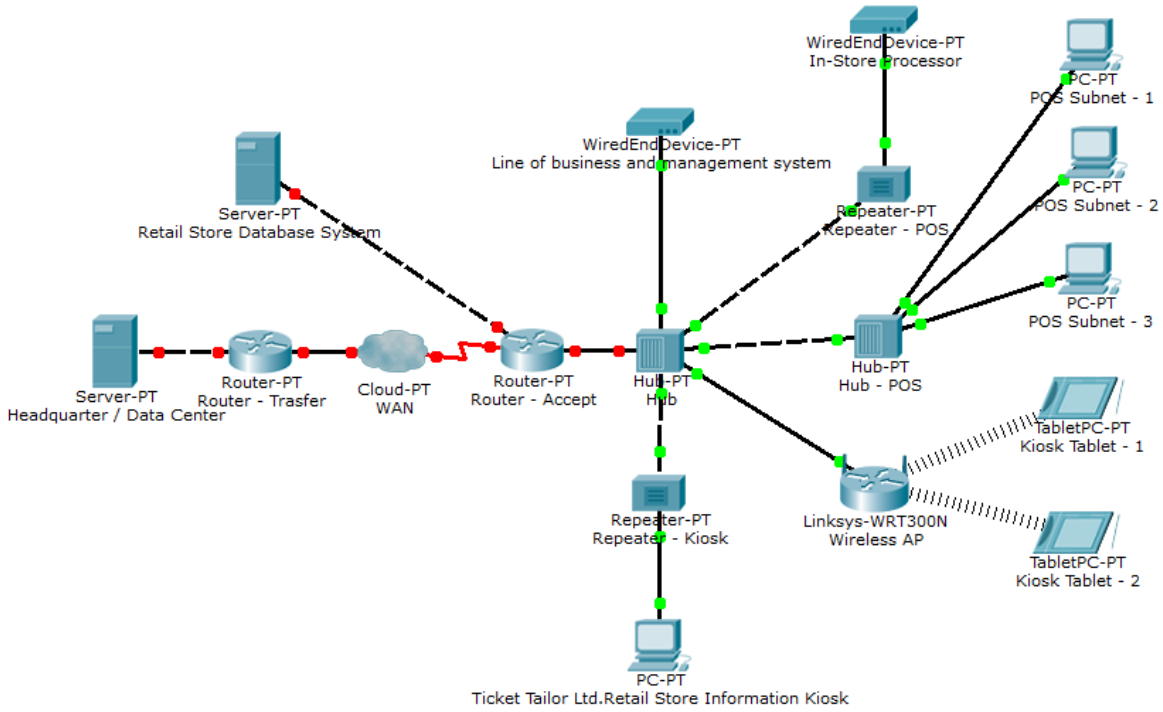

- For imagine and building with the Integrated Tourism Management System, we design an architectural blueprint to developing the system in the retail store with information kiosk appropriately.

- Owing to the problems about the data dependence and inconsistency, we recommend building the database server for storing the consistency customer data.

- We suggest to separate two part of management line for the retail store, and pass through the system manage control of storage.

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5. System Design with UML

5.1 Data Dictionary Description

Class	Definition
Customer (roles played)	A customer can search the travel information by entering keywords or choosing the suitable option. At the same time, the customer can place a booking request by entering name, date of birth, contact number, email address, home address, passport, and nationality, etc.
Staff (roles played)	A staff handles the booking request for confirming and sends a confirmed request to the dealer. And staffs have the attribute of position to identify the position of salesman officer or manager officer.
Driver (roles played)	It stores the work of shuttle guests and the detail of driver information such as their salary and time slot.
Driver Roster (conceptual things)	Driver roster is contained by driver that it arranges the work and schedule for the driver. And it holds details of the timetable such as time slot and the available time.
Booking (events)	A customer can add a booking order to retain the ticket booking. It specifies the request must be confirmed by officer (intermediaries – Ticket Tailor Ltd.) for pass through the request to the dealer.
Package (conceptual things)	An individual travel package may include the ticket booking details of attraction, hotel, flight, cruises, and vehicle. It holds detail of the product such as the id and name.
Hotel (tangible things)	Hotel booking is a part of the discount package bundle. Customer can place a booking request of the hotel by order discount package with flight ticket or order by bulk buy. It holds detail of the hotel such as hotel name, star, rating, region, and the hotel address.

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Hotel Room (tangible things)	The hotel room is contained by hotel for assigned the details of room. It holds details of the hotel room such as room name, room size, fare and the room description.
Flight (tangible things)	Flight booking is a part of the discount package bundle. Customer can place a booking request of the flight by ordering discount package with hotel booking or order by bulk buy. It holds detail of the flight such as flight type, and tax.
Flight Schedule (conceptual things)	The flight schedule is contained by flight and it hold details of the timetable such as origin, aircraft, estimated date of departure (EDD), estimated date of arrival (EDA), estimated time of departure (ETD), and estimated time of arrival (ETA).
Carrier (tangible things)	Carrier is contained by flight and It hold details of carrier such as carrier name, carrier logo, and the carrier id.
Indirect (conceptual things)	Indirect is a part of the flight schedule and it hold details of flight stop position such as the stop number.
Attraction (tangible things)	A customer can place a booking request of the attraction. It holds detail of the attraction such as attraction name, cancellation fee, and the location of city.
Cruises (tangible things)	A customer can place a booking request of the cruises. It holds detail of cruises such as cruises name, organizer, tour day, and start date.
Cruise Organizer (tangible things) (COrganizer)	COrganizer is the organizer of cruises. And it holds the details of the organizer such as the organizer id and the organizer name.
Vehicle (tangible things)	A customer can place a booking request of the vehicle. It holds detail of vehicle such as book day and price.
Equipment (tangible things)	Equipment is contained by equipment list and vehicle. And it hold contains the details of equipment if, suitable, price, and equipment photo.
Equipment List (conceptual things)	Equipment list contains equipment and is assigned by vehicle. It holds the details of the booking price.

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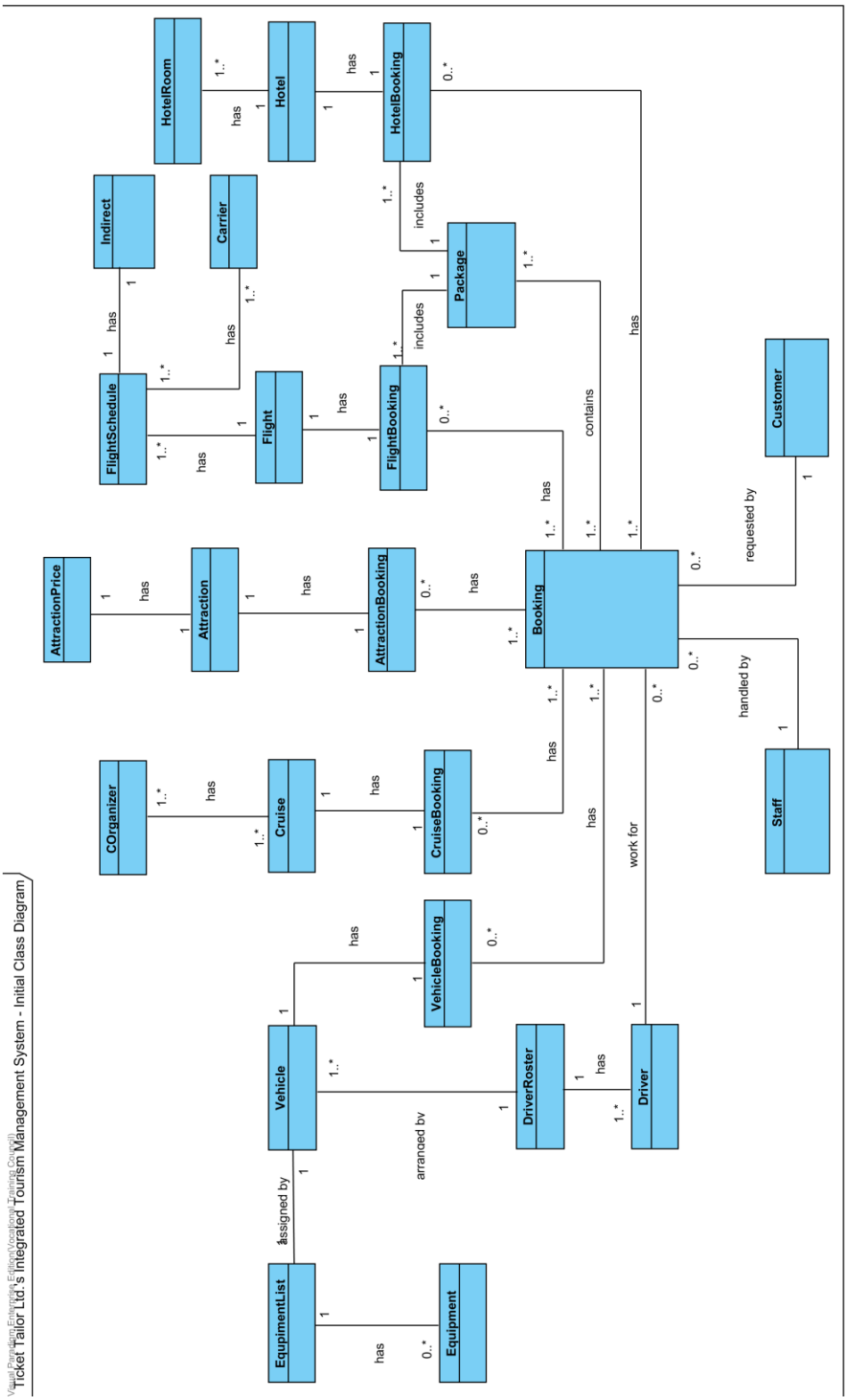
5.2 Class Diagram of the Integrated Tourism Management System



- **Initial Class Diagram**

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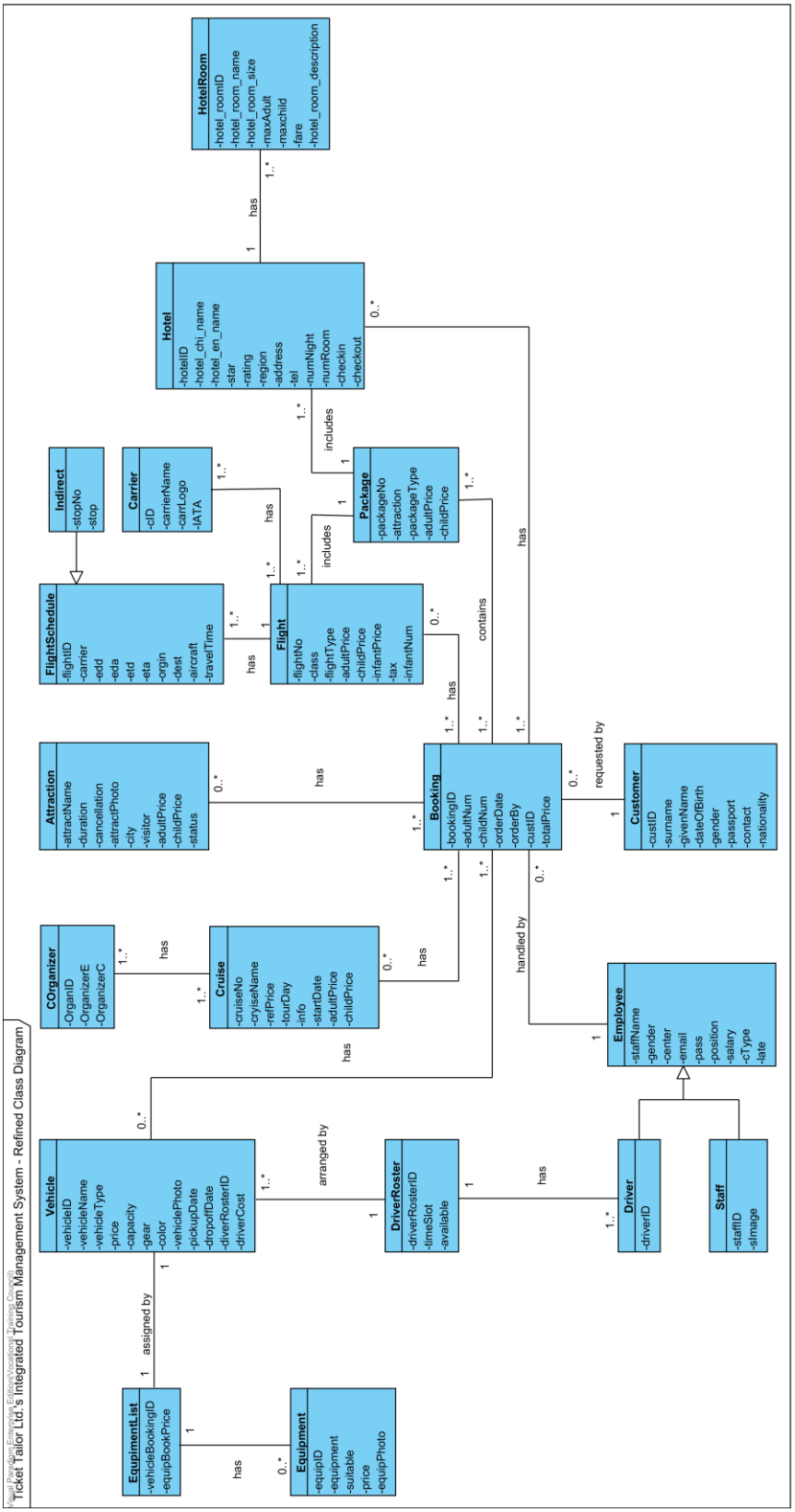
5.2.1 Iteratively the refined model of the Class Diagram



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5.3 Actor Description

Actor	Definition
Customer	A customer is and individual traveler or tour group who can use the Integrated tourism Management System for searching travel information or place the booking order in the information kiosk.
Staff	An external entity who handles confirmation of the booking request.
Manger	An external entity who handles the catalog updating and the confirmation of the booking request.
Driver	An external entity that who can browses the personal information and the timetable of work.

5.3.1 Examine the roles of each actor and identify the use cases

Actor	Use Cases
Customer	1. Enquire attraction 2. Enquire cruise tour 3. Enquire hotel schedule 4. Enquire air tickets
Staff	1. Book transportation 2. Book attraction 3. Book cruise tour 4. Book hotel schedule 5. Book air ticket 6. Order bundle package 7. Enquire vehicle 8. Enquire attraction 9. Enquire cruise tour 10. Enquire hotel schedule 11. Enquire air tickets 12. Generate booking confirmation 13. Retrieve password
Manger	1. Froze account 2. Delete account 3. Register account 4. Generate staff graphic report 5. Retrieve password
Driver	1. Check work schedule

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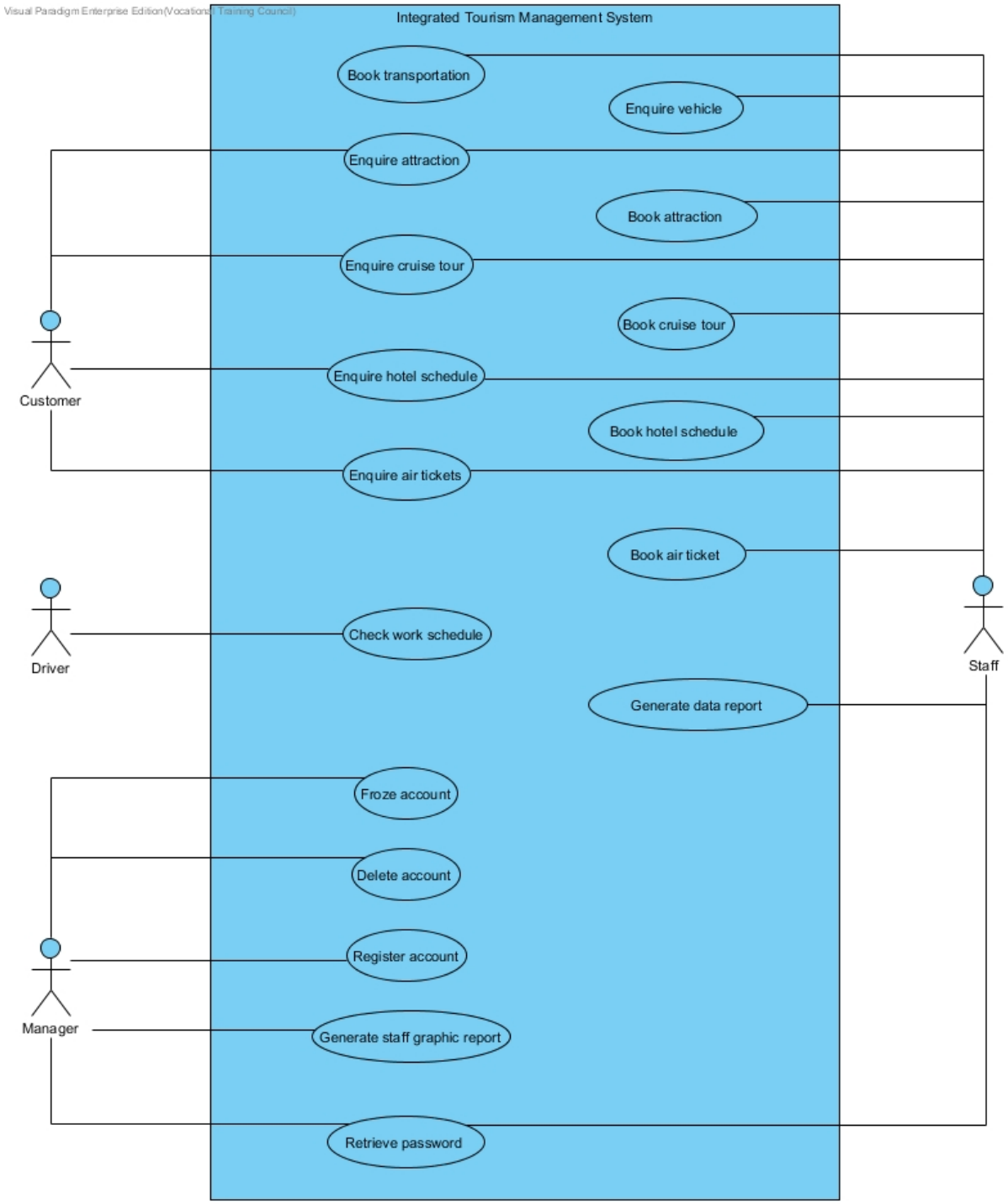
5.4 Use Case Diagram of the Integrated Tourism Management System



- **The initial use case diagram**

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5.4.1 Initial use cases descriptions

Use case name:	Enquire air tickets
Use case ID:	UC-010
Actor:	Customer, Staff
Description:	A staff can search the flights by entering keywords for customers. Customers also can use this enquiry UI at the kiosk.

Use case name:	Enquire hotel schedule
Use case ID:	UC-020
Actor:	Customer, Staff
Description:	A staff can search the hotel schedule by entering keywords for customers. Customers also can use this enquiry UI at the kiosk.

Use case name:	Enquire cruise tour
Use case ID:	UC-030
Actor:	Customer, Staff
Description:	A staff can search the cruise tour information by entering keywords for individual travelers. Customers also can use this enquiry UI at the kiosk.

Use case name:	Enquire attraction
Use case ID:	UC-040
Actor:	Customer, Staff
Description:	A staff can search the attraction information by entering keywords for individual travelers. Customers also can use this enquiry UI at the kiosk.

Use case name:	Book air ticket
Use case ID:	UC-050
Actor:	Staff
Description:	After searching the air ticket, the system displays all flights information. The staff select a flight for booking, they can click “Order” button to book the air ticket for customer. The staff checks out the booking and the order form is displayed. All the related orders and total amount will be displayed in this form. The staff can modify the number of air ticket. The staff presses the “Confirm Order” button, the orders will be saved into the database and the form will be gone. In addition, the customer who orders both air ticket and hotel schedule can get a discount.

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Use case name:	Book hotel schedule
Use case ID:	UC-060
Actor:	Staff
Description:	After searching the hotel schedule, the system displays all hotels. The staff select a record for booking, they can click “Reserve” button to reserve the hotel for customer. The staff checks out the booking and the hotel schedule Booking form is displayed, the related hotel booking details and total amount will be displayed in this form. The staff can modify the number of night. The staff presses the “Confirm Order” button, the orders will be saved into the database and the form will be gone. In addition, the customer who orders both air ticket and hotel schedule can get a discount.

Use case name:	Book cruise tour
Use case ID:	UC-070
Actor:	Staff
Description:	After searching the cruise tour, the system displays all cruise tour information. The staff select a cruise tour line for booking, they can click “Book” button to reserve the tour for customer. The staff checks out the booking and the Cruise Tour Booking form is displayed, the related Cruise details and total amount will be displayed in this form. The staff can modify the number of ticket. The staff presses the “Confirm Order” button, the orders will be saved into the database and the form will be gone.

Use case name:	Book attraction
Use case ID:	UC-080
Actor:	Staff
Description:	After searching the attraction, the system displays all attraction information. The staff select an attraction line for booking, they can click “Order” button to reserve the attraction for customer. The staff checks out the booking and the Attraction Booking form is displayed, all booking information and total amount will be displayed in this form. The staff can modify the number of ticket. The staff presses the “Confirm Order” button, the orders will be saved into the database and the form will be gone.

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Use case name:	Enquire vehicle
Use case ID:	UC-090
Actor:	Staff
Description:	After booking the attraction, the staff clicks the Transportation Fleet Management form. Staff selects an attraction booking. The system shows all available vehicle details from the Vehicle table.

Use case name:	Book transportation
Use case ID:	UC-100
Actor:	Staff
Description:	After searching the vehicle, Staff selects a vehicle details line and click “Book” button to pass the booking record to “Booking” tab. The staff finishes search vehicle and click the “Booking” tab. The staff selects date, then the staff click “Confirm” button to confirm the booking. Finally, the staff click “OK” button for saving all transportation booking.

Use case name:	Generate data report
Use case ID:	UC-110
Actor:	Staff
Description:	The staff selects a customer from a combo box to generate a report. A report contains all relevant details with booked fees. The subtotal shows the total fees of each type of bookings. Then, the staff selects a customer in the All Bookings Form to generate a confirmation document for the particular bookings. The system shows the confirmation document.

Use case name:	Generate staff graphic report
Use case ID:	UC-120
Actor:	Manager
Description:	The manager clicks the “Performance” button. All reports should be show in the Tab page in a Tap control include “Total Payment for a Staff”, “Top Five Sales Staff” and so on. They can select one of the reports to examination.

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Use case name:	Check work schedule
Use case ID:	UC-130
Actor:	Driver
Description:	After login, the driver presses the work schedule button to check their work. The system shows their work schedule in sequence.

Use case name:	Frozen account
Use case ID:	UC-140
Actor:	Manager
Description:	Managers prohibit some accounts during some situations (e.g. system test, malicious attacks, staff in blacklist) that they can use this function for improving the security.

Use case name:	Delete account
Use case ID:	UC-150
Actor:	Manager
Description:	Managers delete some accounts in the staff account database during some situations (e.g. labor turnover) that they can use this function for improving the management efficiency.

Use case name:	Register account
Use case ID:	UC-160
Actor:	Manager
Description:	Staff provides their information to register a user account before using the system. Moreover, the permission of the account control should be handled by management posts.

Use case name:	Retrieve password
Use case ID:	UC-170
Actor:	Manager, Staff, Driver
Description:	The system user uses this function when they forgot their password. The system will send the spare password after entering their user ID and some personal information.

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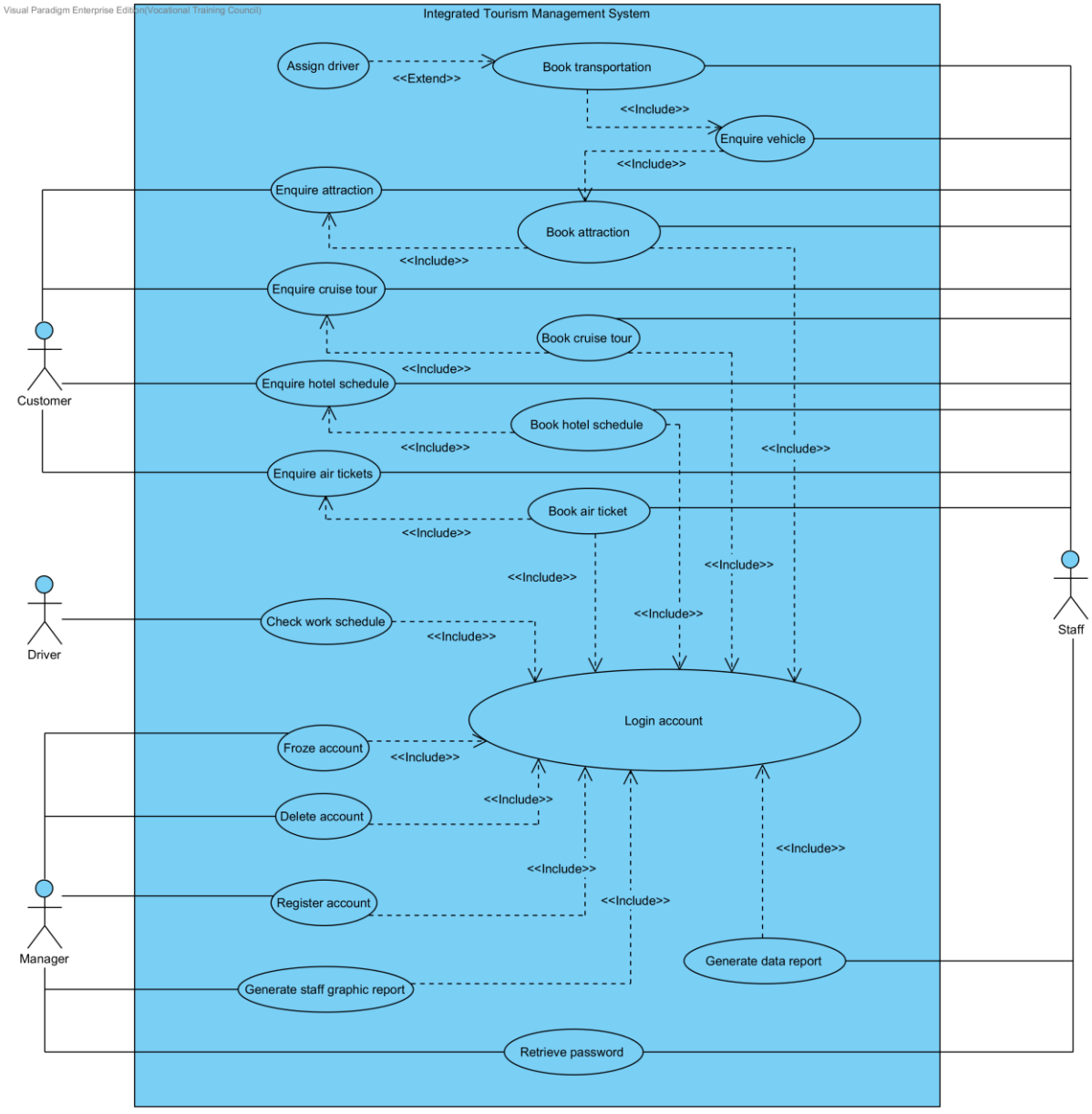
5.4.2 Iteratively the refined model of the Use Case Diagram



- **The Refined use case diagram**

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5.4.3 Refined use case description

Use case name:	Enquire air tickets
Use case ID:	UC-010
Actor	Customer, Staff
Brief description:	A staff and customer can search the flights by entering keywords.
Post-conditions:	The flights matching the keywords are listed.
Flow of events:	1. User can use the textbox and other controls as the keywords to search. The search result would be shown. 2. User selects a flight. The system displays the detail information of flight.
Alternative flows and exceptions:	• In step 1, if there are no matching flights, the system asks the user to re-enter keywords.

Use case name:	Enquire hotel schedule
Use case ID:	UC-020
Actor	Customer, Staff
Brief description:	A staff and customer can search the hotel schedule by entering keywords.
Post-conditions:	The hotel schedules matching the keywords are listed.
Flow of events:	1. User can use the textbox and other controls as the keywords to search. The search result of hotel would be shown. 2. User selects a hotel room. The system displays the detail information of hotel room.
Alternative flows and exceptions:	• In step 1, if there are no matching hotel schedules, the system asks the user to re-enter keywords.

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Use case name:	Enquire cruise tour
Use case ID:	UC-030
Actor	Customer, Staff
Brief description:	A staff and customer can search the cruise tour by entering keywords.
Post-conditions:	The cruise tours matching the keywords are listed.
Flow of events:	1. User can use the start date and cruise organizer as the keywords to search. The search result of cruise tours would be shown. 2. User selects a cruise tour. The system displays the detail information of cruise tour.

Use case name:	Enquire attraction
Use case ID:	UC-040
Actor	Customer, Staff
Brief description:	A staff and customer can search the attractions by entering keywords.
Post-conditions:	The attractions matching the keywords are listed.
Flow of events:	1. User can use the city name as the keywords to search. The search result of cruise tours would be shown.
Alternative flows and exceptions:	● In step 1, if there are no matching attractions, the system asks the user to re-enter keywords.

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Use case name:	Book air ticket
Use case ID:	UC-050
Actor	Staff
Brief description:	After searching the air ticket, the staff selects a flight for booking, they can click "Order" button to book the air ticket for customer. The staff checks out the booking go to the order form. The staff presses the "Confirm Order" button.
Pre-conditions:	The staff need to login account.
Post-conditions:	The orders will be saved into the database.
Flow of events:	1. include(Enquire air ticket). 2. Staff selects a flight and click "Order" button to book the air ticket for customer. 3. The staff finishes search air ticket and checks out the booking. 4. include(Login account). 5. System will go to the order form, all the related orders and total amount will be displayed in this form. 6. The staff presses the "Confirm Order" button, the orders will be saved into the database and the form will be gone.
Alternative flows and exceptions:	● In step 1-2 can be repeated until the staff checks out the booking. ● In step 5, if customer orders both air ticket and hotel schedule can get a discount. ● In step 6, staff can modify the number of air tickets before confirm order. In addition, if the number of air tickets is less than one, staff cannot confirm order.

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Use case name:	Book hotel schedule
Use case ID:	UC-060
Actor	Staff
Brief description:	After searching the hotel schedule, the staff selects a record for booking, they can click "Reserve" button to book the hotel for customer. The staff checks out the booking go to the order form. The staff presses the "Confirm Order" button.
Pre-conditions:	The staff need to login account.
Post-conditions:	The orders will be saved into the database.
Flow of events:	1. include(Enquire hotel schedule). 2. Staff selects a hotel room and click "Order" button to book the hotel for customer. 3. The staff finishes search hotel schedule and checks out the booking. 4. include(Login account). 5. System will go to the order form, all the related orders and total amount will be displayed in this form. 6. The staff presses the "Confirm Order" button, the orders will be saved into the database and the form will be gone.
Alternative flows and exceptions:	● In step 1-2 can be repeated until the staff checks out the booking. ● In step 5, if customer orders both air ticket and hotel schedule can get a discount. ● In step 6, staff can modify the number of nights before confirm order. In addition, if the number of nights is less than one, staff cannot confirm order.

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Use case name:	Book cruise tour
Use case ID:	UC-070
Actor	Staff
Brief description:	After searching the cruise tour, the staff selects a cruise tour for booking, they can click "Book" button to reserve the tour for customer. The staff checks out the booking go to the Cruise Tour Booking form. The staff presses the "Confirm Order" button.
Pre-conditions:	The staff need to login account.
Post-conditions:	The orders will be saved into the database.
Flow of events:	1. include(Enquire cruise tour). 2. Staff selects a cruise tour line and click "Order" button to reserve the tour for customer. 3. The staff finishes search cruise tour and checks out the booking. 4. include(Login account). 5. System will go to the Cruise Tour Booking form, all the related orders and total amount will be displayed in this form. 6. The staff presses the "Confirm Order" button, the orders will be saved into the database and the form will be gone.
Alternative flows and exceptions:	● In step 1-2 can be repeated until the staff checks out the booking. ● In step 6, staff can modify the number of tickets before confirm order. In addition, if the number of tickets is less than one, staff cannot confirm order.

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Use case name:	Book attraction
Use case ID:	UC-080
Actor	Staff
Brief description:	After searching the attraction, the staff selects an attraction line for booking, they can click "Order" button to reserve the attraction for customer. The staff checks out the booking go to the Attraction Booking form. The staff presses the "Confirm Order" button.
Pre-conditions:	The staff need to login account.
Post-conditions:	The orders will be saved into the database.
Flow of events:	1. include(Enquire attraction). 2. Staff selects an attraction line and click the attraction photo or click "Order" button to reserve the tour for customer. 3. The staff finishes search attraction and checks out the booking. 4. include(Login account). 5. System will go to the Attraction Booking form, all the related orders and total amount will be displayed in this form. 6. The staff presses the "Confirm Order" button, the orders will be saved into the database and the form will be gone.
Alternative flows and exceptions:	● In step 1-2 can be repeated until the staff checks out the booking. ● In step 6, staff can modify the number of tickets before confirm order. In addition, if the number of tickets is less than one, staff cannot confirm order.

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Use case name:	Enquire vehicle
Use case ID:	UC-090
Actor	Staff
Brief description:	A staff can search the vehicle by select an attraction booking.
Pre-conditions:	The staff need to login account. The customer need to book attraction.
Post-conditions:	The available vehicle will be shown.
Flow of events:	1. include(Book attraction). 2. The staff clicks the Transportation Fleet Management form. All attractions booking are displayed for the staff selection. 3. Staff uses the combo box to select the attraction booking and filter other attraction booking. The system shows the filter result. 4. Staff selects an attraction booking. The system will show all available vehicle details from the Vehicle table.
Alternative flows and exceptions:	● In step 4, if staff does not select an attraction booking in the first grid, there will be no data show.

Use case name:	Book transportation
Use case ID:	UC-100
Actor	Staff
Brief description:	After searching the vehicle, the staff selects a vehicle for booking. Staff can click “Book” button to book vehicle for customer. The staff selects date and presses the “Confirm” button.
Pre-conditions:	The staff need to login account. The customer need to book attraction.
Post-conditions:	The orders will be saved into the database.
Flow of events:	1. include(Enquire vehicle). 2. Staff selects a vehicle details line and click “Book” button to pass the booking record to “Booking” tab. 3. The staff finishes search vehicle and click the “Booking” tab. The system shows all booked vehicle. 4. The staff selects date from “Pick-up Date” and “Drop-off Date”. The Book day and transportation charges will be shown. 5. The staff click “Confirm” button to confirm the booking. The “OK” button is able to click. 6. The staff click “OK” button for saving all transportation booking.
Alternative flows and exceptions:	● In step 4, staff can select equipment for the vehicle booking

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Use case name:	Generate data report
Use case ID:	UC-110
Actor	Staff
Brief description:	The staff selects a customer to generate a report.
Pre-conditions:	The staff need to login account.
Post-conditions:	System generates a report for customer booking.
Flow of events:	1. include(Login account). 2. The staff selects a customer from a combo box to generate a report. The system will show all booking and fees for the particular customer. 3. The staff selects a particular booking. System generates a confirmation document for the particular booking.
Alternative flows and exceptions:	● In step 2, if the staff do not select a customer and click one of the buttons to generate the document. An error message should be prompted. ● When there is no record for the particular bookings. It will show “No bookings”.

Use case name:	Generate staff graphic report
Use case ID:	UC-120
Actor	Manager
Brief description:	The manager selects a report to generate.
Pre-conditions:	The manager need to login account.
Post-conditions:	System generates a report.
Flow of events:	1. include(Login account). 2. The manager clicks the “Performance” button. All reports should be show in the Tab page. 3. The manager selects a report. The system generates a graphic report.
Alternative flows and exceptions:	● In step 2, there are many report such as “Salary and Retirement Fund”, “Top Five Sales Staff” and so on. Manager can select different report to generate.

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Use case name:	Check work schedule
Use case ID:	UC-130
Actor	Driver
Brief description:	The driver can check their work schedule.
Pre-conditions:	The driver need to login account.
Post-conditions:	The driver's work schedule will be listed.
Flow of events:	1. include(Login account). 2. The driver presses the work schedule button to check their work. The system will show their work schedule in sequence.
Alternative flows and exceptions:	● The driver can enter the duration to filter the work schedule.

Use case name:	Froze account
Use case ID:	UC-140
Actor	Manager
Brief description:	The manager can prohibit some accounts.
Pre-conditions:	The manager need to login account.
Post-conditions:	The account that has been frozen cannot login.
Flow of events:	1. include(Login account). 2. The manager presses the account froze button to froze a staff account. The system will show list of staff account. 3. The manager selects a staff account and then click confirm froze the account. The system will show success message. The account cannot login now.
Alternative flows and exceptions:	● The manager can enter the staff name to filter the list of staff account. ● The manager can select the account again and then click unfreeze the account.

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Use case name:	Delete account
Use case ID:	UC-150
Actor	Manager
Brief description:	Managers delete some account in the staff account database during some situation
Pre-conditions:	The manager need to login account.
Post-conditions:	The account record has been removed from account database.
Flow of events:	1. include(Login account). 2. The manager presses the delete account button to delete a staff account. The system will show list of staff account. 3. The manager selects a staff account and then click confirm delete the account. The system will show success message.
Alternative flows and exceptions:	● The manager can enter the staff name to filter the list of staff account.

Use case name:	Register account
Use case ID:	UC-160
Actor	Manager
Brief description:	Managers register a new account for new staff.
Pre-conditions:	The manager need to login account.
Post-conditions:	A new staff account is created.
Flow of events:	1. include(Login account). 2. The user presses the register account button to register a staff account. The system will ask the manager to enter the information. 3. The manager click “submit” button. The system confirms there is no same account exists in database. 4. The system creates the account and sends an acknowledgement to the user via email.
Alternative flows and exceptions:	● If an account already exists, the system will show a error message.

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Use case name:	Retrieve password
Use case ID:	UC-170
Actor	Manager, Staff, Driver
Brief description:	The function can let the employee retriever their password
Post-conditions:	The new employee's password will update to database.
Flow of events:	1. The user presses the "forgot password" button. The system asks the user to enter their personal information. 2. The user fills all information and submits. The system will send the spare password to their email. 3. User input the spare password. The system will ask the user to change the password again.
Alternative flows and exceptions:	● If the personal information is invalid, the user needs to re-enter them.

Use case name:	Assign driver
Use case ID:	UC-180
Actor	Staff
Brief description:	The staff assigns a driver to drive the coach.
Pre-conditions:	The staff need to login account. The customer need to book coach
Post-conditions:	The new driver work schedule will update to database.
Flow of events:	1. extend(Book transportation) 2. The staff clicks the coach booking. The system will show all available drivers in the booking day. 3. The staff selects a driver from the list box. System will show a confirmation dialog to prompt staff. 4. Staff clicks the "Confirm" button. The status will be changed to "Driver" and save it into the database.
Alternative flows and exceptions:	● "Non-available" will be displayed when the customer booked an attraction with a car booking.

Use case name:	Login account
Use case ID:	UC-190
Brief description:	The user of Ticket Tailor Ltd must login the system before get the permissions for handling the customer's booking orders.
Pre-conditions:	The member must have registered with the system.
Post-conditions:	The user can use system other function.
Flow of events:	1. The staff enters the staff id and password. The system verifies the email and password.
Alternative flows and exceptions:	• If the staff id and the password are not valid, the user needs to re-enter them.

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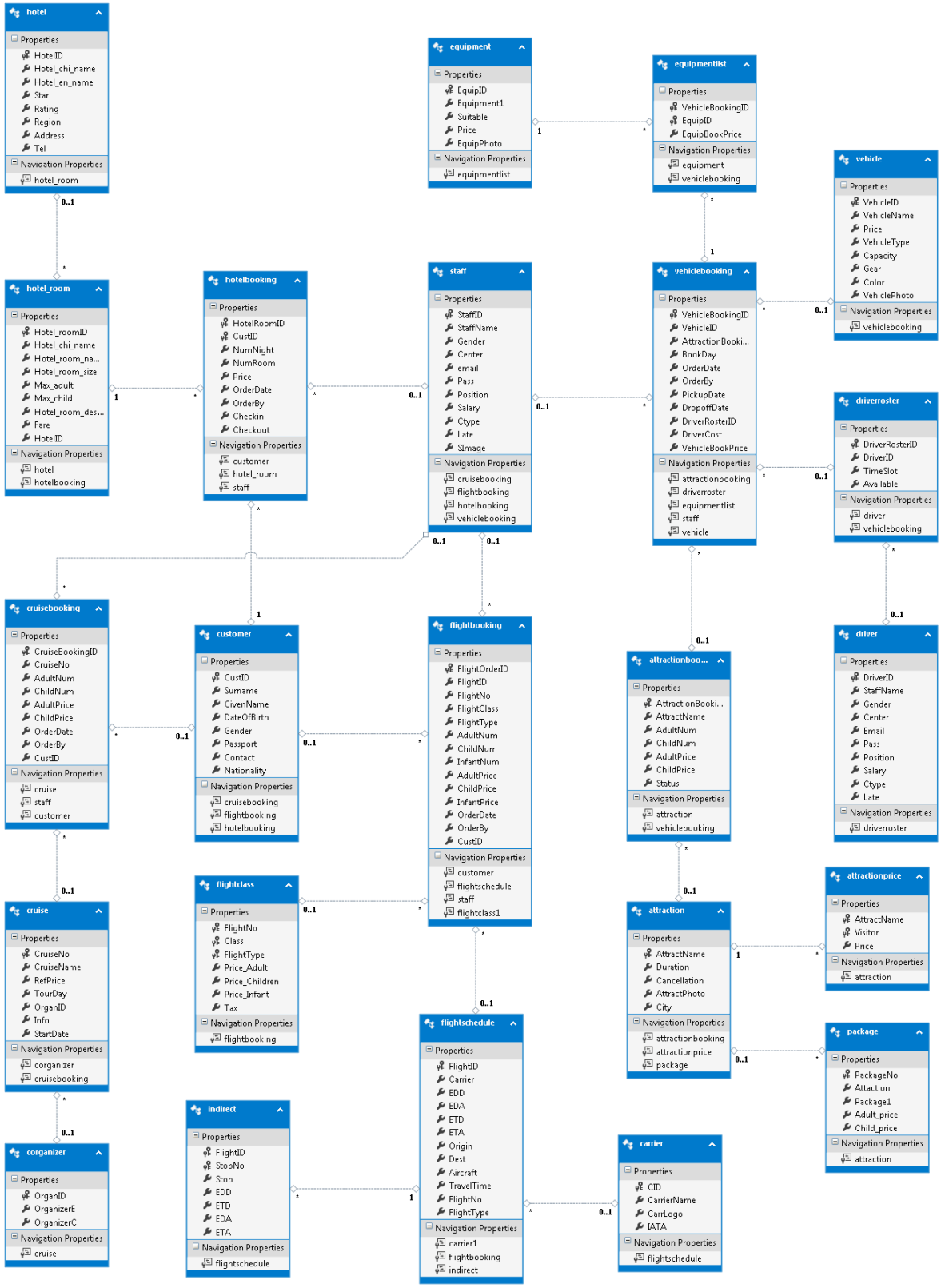
6. Database Design

6.1 Entity Relationship Diagram



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6.2 Data Dictionary

Attraction

Name	Type	Length	Min	Max	Description
*AttractName	Alphanumeric	40	//	//	Attraction name
Duration	Alphanumeric	10	//	//	Attraction duration
Cancellation	Alphanumeric	7	//	//	Attraction charge type
AttractPhoto	Alphanumeric	40	//	//	Attraction photo
City	Alphanumeric	20	//	//	City

AttractionBooking

Name	Type	Length	Min	Max	Description
*AttractionBookingID	Integer	3	1	999	Attraction booking ID
AttractName	Alphanumeric	40	//	//	Attraction name
AdultNum	Integer	2	1	99	Number of adult
ChildNum	Integer	2	0	99	Number of child
AdultPrice	Integer	5	0	99999	Adult total price
ChildPrice	Integer	5	0	99999	Child total price
Status	Alphanumeric	20	//	//	Transportation status

AttractionPrice

Name	Type	Length	Min	Max	Description
*AttractName	Alphanumeric	40	//	//	Attraction name
*Visitor	Alphanumeric	5	AAAAA	ZZZZZ	Visitor type
Price	Integer	4	0	9999	Attraction price

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Carrier

Name	Type	Length	Min	Max	Description
*CID	Integer	2	1	99	Carrier ID
CarrierName	Alphanumeric	20	//	//	Carrier name
CarrLogo	Alphanumeric	15	//	//	Carrier logo
IATA	Alphanumeric	2	AA	ZZ	International Air Transport Association code

Corganizer

Name	Type	Length	Min	Max	Description
*OrganID	Integer	2	1	99	Organizer ID
OrganizerE	Alphanumeric	20	//	//	Organizer English name
OrganizerC	Alphanumeric	20	//	//	Organizer Chinese name

Cruise

Name	Type	Length	Min	Max	Description
*CruiseNo	Alphanumeric	6	AAA00A	ZZZ99Z	Cruise number
CruiseName	Alphanumeric	100	//	//	Cruise name
RefPrice	Decimal	9	0.00	999999.99	Cruise reference price
TourDay	Integer	3	1	999	Tour day
OrganID	Integer	2	1	99	Organizer ID
Info	Alphanumeric	10	AAA00A.PDF	ZZZ00Z.pdf	Cruise information
StartDate	Date	10	01-01-2015	31-12-9999	Start date

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CruiseBooking

Name	Type	Length	Min	Max	Description
*CruiseBookingID	Integer	3	1	999	Cruise booking ID
CruiseNo	Alphanumeric	6	AAA00A	ZZZ99Z	Cruise number
AdultNum	Integer	2	1	99	Number of adult
ChildNum	Integer	2	0	99	Number of child
AdultPrice	Integer	5	0	99999	Adult total price
ChildPrice	Integer	5	0	99999	Child total price
OrderDate	Date	10	01-01-2015	31-12-9999	Order placing date
OrderBy	Alphanumeric	10	//	//	Staff ID
CustID	Alphanumeric	4	C001	C999	Customer ID

Customer

Name	Type	Length	Min	Max	Description
*CustID	Alphanumeric	4	C001	C999	Customer ID
Surname	Alphanumeric	10	//	//	Customer surname
GivenName	Alphanumeric	30	//	//	Customer given name
DateOfBirth	Date	10	01-01-1800	99-99-9999	Date of birth
Gender	Alphanumeric	1	A	Z	Gender
Passport	Alphanumeric	9	//	//	Customer passport ID
Contact	Integer	8	00000000	99999999	Customer telephone number
Nationality	Alphanumeric	20	//	//	Customer nationality

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Driver

Name	Type	Length	Min	Max	Description
*DriverID	Alphanumeric	10	//	//	Driver ID
StaffName	Alphanumeric	30	//	//	Driver name
Gender	Alphanumeric	1	A	Z	Gender
Center	Alphanumeric	2	AA	ZZ	Center
Email	Alphanumeric	50	//	//	Email address
Pass	Integer	6	000000	999999	Password
Position	Alphanumeric	30	//	//	Position
Salary	Decimal	4	0.00	99999.99	Salary
Ctype	Alphanumeric	10	//	//	Position type
Late	Integer	3	1	999	Late times

DriverRoster

Name	Type	Length	Min	Max	Description
*DriverRosterID	Integer	2	1	99	Driverroster ID
StaffID	Alphanumeric	10	//	//	Driver ID
TimeSlot	Integer	2	1	99	Timeslot
Available	Alphanumeric	7	AAAAAAA	ZZZZZZZ	Available time

Equipment

Name	Type	Length	Min	Max	Description
*EquipID	Alphanumeric	3	e01	e99	Equipment ID
Equipment	Alphanumeric	50	//	//	Equipment name
Suitable	Alphanumeric	10	//	//	Suitable vehicle
Price	Decimal	6	0.00	999.99	Equipment price
EquipPhoto	Alphanumeric	7	e01.png	e99.png	Equipment photo

EquipmentList

Name	Type	Length	Min	Max	Description
*VehicleBookingID	Integer	3	1	999	Vehicle booking ID
EquipID	Alphanumeric	3	e01	e99	Equipment ID
EquipBookPrice	Decimal	6	0.00	999.99	Equipment booking price

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FlightBooking

Name	Type	Length	Min	Max	Description
*FlightOrderID	Integer	4	1	9999	Flight order ID
FlightID	Integer	4	1	9999	Flight ID
FlightNo	Alphanumeric	6	//	//	Flight number
FlightClass	Alphanumeric	8	//	//	Flight class
FlightType	Alphanumeric	8	//	//	Flight type
AdultNum	Integer	2	1	99	Number of adult
ChildNum	Integer	2	0	99	Number of child
InfantNum	Integer	2	0	99	Number of infant
AdultPrice	Decimal	9	0.00	999999.99	Adult total price
ChildPrice	Decimal	9	0.00	999999.99	Child total price
InfantPrice	Decimal	9	0.00	999999.99	Infant total price
OrderDate	Date	10	01-01-2015	31-12-9999	Flight order date
OrderBy	Alphanumeric	10	//	//	Staff ID
CustID	Alphanumeric	4	C001	C999	Customer ID

FlightClass

Name	Type	Length	Min	Max	Description
*FlightNo	Alphanumeric	6	//	//	Flight number
*Class	Alphanumeric	8	//	//	Flight class
*FlightType	Alphanumeric	8	//	//	Flight type
Price_Adult	Decimal	8	0.00	99999.99	Adult price of the flight class
Price_Children	Decimal	8	0.00	99999.99	Child price of the flight class
Price_Infant	Decimal	8	0.00	99999.99	Infant price of the flight class
Tax	Decimal	6	0.00	999.00	Flight tax

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FlightSchedule

Name	Type	Length	Min	Max	Description
*FlightID	Integer	4	1	9999	Flight ID
Carrier	Integer	2	1	99	Carrier ID
EDD	Date	10	01-01-2015	31-12-9999	Estimated date of departure
EDA	Date	10	01-01-2015	31-12-9999	Estimated date of arrival
ETD	Time	5	00:00	23:59	Estimated time of departure
ETA	Time	5	00:00	23:59	Estimated time of arrival
Origin	Alphanumeric	3	AAA	ZZZ	Origin
Dest	Alphanumeric	3	AAA	ZZZ	Destination
Aircraft	Alphanumeric	8	//	//	Aircraft number
TravelTime	Alphanumeric	6	//	//	Travel time
FlightNo	Alphanumeric	6	//	//	Flight number
FlightType	Alphanumeric	8	//	//	Flight type

Hotel

Name	Type	Length	Min	Max	Description
*HotelID	Integer	4	1	9999	Hotel ID
Hotel_chi_name	Alphanumeric	20	//	//	Hotel Chinese name
Hotel_en_name	Alphanumeric	60	//	//	Hotel English name
Star	Decimal	3	0.0	5.0	Star level
Rating	Decimal	3	3.0	5.0	Rating
Region	Alphanumeric	50	//	//	Hotel area
Address	Alphanumeric	100	//	//	Hotel address
Tel	Integer	8	00000000	99999999	Hotel telephone number

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Hotel_room

Name	Type	Length	Min	Max	Description
*Hotel_roomID	Integer	4	1	9999	Hotel room ID
Hotel_chi_name	Alphanumeric	20	//	//	Hotel Chinese name
Hotel_room_name	Alphanumeric	60	//	//	Hotel room name
Hotel_room_size	Alphanumeric	7	//	//	Hotel room size
Max_adult	Integer	2	1	99	Maximum number of adult
Max_child	Integer	2	0	99	Maximum number of child
Hotel_room_description	Alphanumeric	20	//	//	Hotel room description
Fare	Decimal	8	0.00	99999.99	Hotel room fare
HotelID	Integer	4	1	9999	Hotel ID

HotelBooking

Name	Type	Length	Min	Max	Description
*HotelRoomID	Integer	4	1	9999	Hotel room ID
*CustID	Alphanumeric	4	C001	C999	Customer ID
NumNight	Integer	3	1	999	Number of night
NumRoom	Integer	2	1	99	Number of room
Price	Decimal	8	0.00	99999.99	Hotel room price
OrderDate	Date	10	01-01-2015	31-12-9999	Order room date
OrderBy	Alphanumeric	10	//	//	Staff ID
Checkin	DateTime	16	01-01-2015 00:00	31-12-9999 23:59	Checkin date and time
Checkout	DateTime	16	01-01-2015 00:00	31-12-9999 23:59	Checkout date and time

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Indirect

Name	Type	Length	Min	Max	Description
*FlightID	Integer	4	1	9999	Flight ID
*StopNo	Integer	2	1	99	Flight stop number
Stop	Alphanumeric	3	AAA	ZZZ	Flight stop name
EDD	Date	10	01-01-2015	31-12-9999	Estimated date of departure
ETD	Time	5	00:00	23:59	Estimated time of departure
EDA	Date	10	01-01-2015	31-12-9999	Estimated date of arrival
ETA	Time	5	00:00	23:59	Estimated time of arrival

Package

Name	Type	Length	Min	Max	Description
*PackageNo	Integer	2	1	99	Package number
Attraction	Alphanumeric	40	//	//	Attraction name
Package	Alphanumeric	15	//	//	Package type
Adult_price	Integer	4	0	9999	Adult price
Child_price	Integer	4	0	9999	Child price

Staff

Name	Type	Length	Min	Max	Description
*StaffID	Alphanumeric	10	//	//	Staff ID
StaffName	Alphanumeric	30	//	//	Staff name
Gender	Alphanumeric	1	A	Z	Gender
Center	Alphanumeric	4	AA01	ZZ99	Center
Email	Alphanumeric	50	//	//	Email address
Pass	Integer	6	000000	999999	Password
Position	Alphanumeric	30	//	//	Position
Salary	Decimal	8	0.00	99999.99	Salary
Ctype	Alphanumeric	10	//	//	Position type
Late	Integer	3	1	999	Late times
SImage	Alphanumeric	10	//	//	Staff image

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Vehicle

Name	Type	Length	Min	Max	Description
*VehicleID	Alphanumeric	5	car01	car99	Vehicle ID
VehicleName	Alphanumeric	60	//	//	Vehicle name
Price	Decimal	6	0.00	999.99	Booking price
VehicleType	Alphanumeric	10	//	//	Vehicle type
Capacity	Integer	2	1	99	Vehicle sitting size
Gear	Alphanumeric	5	//	//	Gear type
Color	Alphanumeric	30	//	//	Vehicle color
VehiclePhoto	Alphanumeric	9	car01.AAA	car99.ZZZ	Vehicle photo

VehicleBooking

Name	Type	Length	Min	Max	Description
*VehicleBookingID	Integer	3	1	999	Vehicle booking ID
VehicleID	Alphanumeric	5	car01	car99	Vehicle ID
AttractionBookingID	Integer	3	1	999	Attraction booking ID
BookDay	Date	10	01-01-2015	31-12-9999	Book vehicle date
OrderDate	Date	10	01-01-2015	31-12-9999	Order vehicle date
OrderBy	Alphanumeric	10	//	//	Staff ID
PickupDate	Date	10	01-01-2015	31-12-9999	Pick-up date
DropoffDate	Date	10	01-01-2015	31-12-9999	Drop-off date
DriverRosterID	Integer	2	1	99	Driver roster ID
DriverCost	Integer	4	1	9999	Driver cost
VehicleBookPrice	Decimal	6	0.00	999.99	Vehicle book total price

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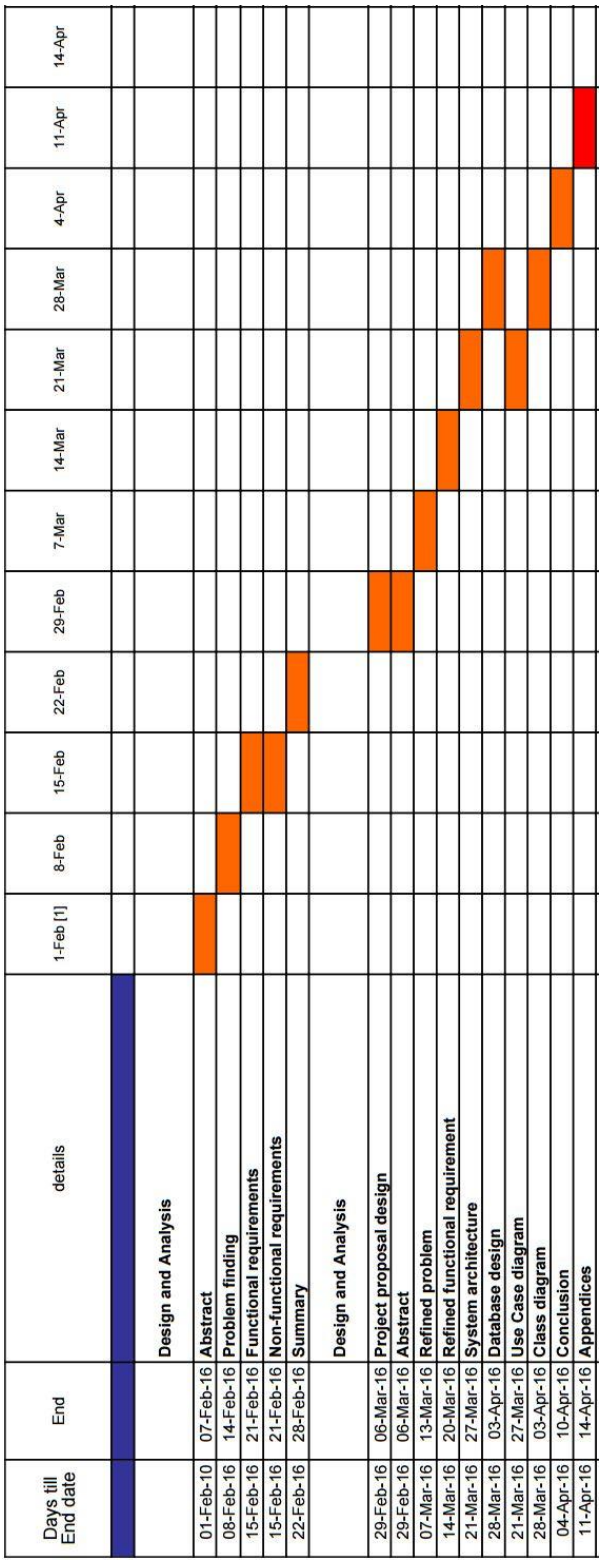
7. Project Schedule

7.1 Gantt chart of the Integrated Tourism Management System



Days till End date		End	details	1-Feb [1]	8-Feb	15-Feb	22-Feb	29-Feb	7-Mar	14-Mar	21-Mar	28-Mar	4-Apr	11-Apr	14-Apr
			Design and Analysis												
01-Feb-10		07-Feb-16	**Abstract**												
08-Feb-16		14-Feb-16	**Problem finding**												
15-Feb-16		21-Feb-16	**Functional requirements**												
15-Feb-16		21-Feb-16	**Non-functional requirements**												
22-Feb-16		28-Feb-16	**Summary**												
			Design and Analysis												
29-Feb-16		06-Mar-16	**Project proposal design**												
29-Feb-16		06-Mar-16	**Abstract**												
07-Mar-16		13-Mar-16	**Refined problem**												
14-Mar-16		20-Mar-16	**Refined functional requirement**												
21-Mar-16		27-Mar-16	**System architecture**												
28-Mar-16		03-Apr-16	**Database design**												
21-Mar-16		27-Mar-16	**Use Case diagram**												
28-Mar-16		03-Apr-16	**Class diagram**												
04-Apr-16		10-Apr-16	**Conclusion**												
11-Apr-16		14-Apr-16	**Appendices**												

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7.2 Project Log

The timetable for the group mate's work

Scheduled		Task Action List	Initial
Estimate Start Day	**Actual End Day**	**Event**	**Person in charge**
Requirement Specification			
1/2	**2/2**	Cover page & Directory	Au Chi Chung
2/2	**4/2**	Study Background	Whole group mates
5/2	**7/2**	Abstract & Assumption & Introduction	Au Chi Chung
8/2	**14/2**	Problems Finding	Li Kai Kwong
15/2	**21/2**	Functional Requirement	Kwok Yuk Lam
15/2	**21/2**	Non-Functional Requirement	Yu Kwok Ho
22/2	**28/2**	Conclusion	Yu Kwok Ho
Due Date		**1/3**	**Whole group mates**
System Analysis and Design Specification			
29/2	**1/3**	Project proposal design	Au Chi Chung
29/2	**1/3**	Abstract	Au Chi Chung
2/3	**9/3**	Refined problem	Li Kai Kwong
10/3	**17/3**	Refined functional requirement	Kwok Yuk Lam, Li Kai Kwong
18/3	**20/3**	System architecture	Au Chi Chung, Kwok Yuk Lam
20/2	**1/4**	Database Design	Yu Kwok Ho
2/4	**8/4**	System Design with UML (Class Diagram)	Au Chi Chung
2/4	**8/4**	System Design with UML (Use Case Diagram)	Li Kai Kwong
8/4	**10/4**	Project Schedule	Kwok Yu Lam
12/4	**13/4**	Conclusion	Yu Kwok Ho
14/4	**14/4**	Appendices	Whole group mates
Due Date		**15/4**	**Whole group mates**
Assignment Integrate Version			
15/4	**15/4**	Typesetting	Whole group mates
Due date		**15/4**	**Whole group mates**

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8. Conclusion

The current system of Ticket Tailor Ltd. is an untimely system, and there are many problems from different aspects. For example, the data inconsistency problems, excessive use paper, and the inefficient problem. In order to prevent current system have an impact on company development in the future, the current system must be computerized with the database storage.

As mentioned earlier system function, an Integrated Tourism Management System basically include login, product information, product details enquiry, taking orders and generate different report, other function include ticket status regularly check function. Also, well-designed and user-friendly interface is great help for the company.

Efficiency is nowadays the basic requirement, computerized system and design ordering system there are many benefits. First, reduce service delivery time, using the current method often use a lot of manpower and material. If write down the order records by paper, search the records would be a long time and staff has to physically go to each section, that produce transaction delay problem.

In addition, the new ordering system will have generated different report function, the report reflects your business and the productivity of your employees helps to make company policy. That means the computerized system can completely eliminates the problem and which largely enhance overall efficiency.

To sum up, we recommend some of the suggest solution correspond any problems or risks. And we designed some of the system architecture for developing the integrated tourism management system between design and analysis phase. For selecting a more appropriate direction, that we must improve the system structure before building the system.

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9. Appendices

Preliminary ideas of the system user interface

- For imagining the system architecture of the Integrated Tourism Management System in Ticket Tailor Ltd, we recommend the user interface should be developed more official and traditional. We have considered the age group of user and the additional methods for reducing the unnecessary graphics and contents by increasing the efficiency of staffs.

- **The initial demo login page of the system user interface**

- **It shown the function of user input checking and the multi-language add-on**

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