

Cruise Line Reservation System

INTERIM REPORT



Bachelor of Information Technology (External Degree)

Faculty of Information Technology

University of Moratuwa

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Statement of Supervisor

The above candidate has carried out work for the Bachelor of Information Technology Degree interim report under my supervision.

Name of the Supervisor: - Mr. Akila Panditha

Signature:

Date: 02/04/2022

Abstract

The Online Cruise Line Reservation System is an innovative solution that provides a seamless and convenient way for tourists to book and manage their cruise reservations. The system offers a user-friendly interface that allows tourists to select their preferred cruise option, cabin type, and payment method. It also provides real-time availability updates, secure payment processing, and instant reservation confirmation. The system's backend functionality is designed to provide administrators with an easy-to-use platform for managing cruise options, cabin types, pricing, and other critical aspects of the system. Additionally, the system includes a robust customer support component that ensures tourists receive prompt and efficient assistance when they need it. The project report of the Online Cruise Line Reservation System provides a detailed overview of the system's design, development, and implementation process. It covers the project's scope, objectives, and requirements, as well as the system architecture, user interface, and functionality.

Acknowledgment

I would like to thankful to University of Moratuwa for conducting and giving this valuable opportunity to start my higher studies by providing a Bachelor of Information Technology (BIT- External) degree program. Also, I would like to thank my project supervisor,

Mr. Akila Panditha

for begin support for my project. He guided me to how to start my project and what should be added to this report and coordinating my project.

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Introduction

Tourists often choose cruises as a popular form of vacation. A cruise offers travelers the chance to visit multiple destinations, experience different cultures and cuisines, and enjoy a variety of onboard entertainment options. However, planning a cruise vacation can be overwhelming, and tourists need an efficient and reliable system to make reservations and arrangements.

This is where the Cruise Line Reservation System comes in. It's an essential tool for both tourists and cruise companies. Tourists can use the system to search for and compare different cruise packages, choose their preferred cabin type, and make online bookings for their desired dates. The system also enables travelers to customize their itinerary and select onboard activities, excursions, and dining options.

For cruise companies, the Reservation System helps manage their inventory, streamline their booking processes, and maintain efficient customer service. It also helps them to analyze and forecast demand, maximize revenue, and enhance the overall customer experience.

one of the biggest social and economic phenomena in the world is tourism, and the internet plays a key role in facilitating connections between the various tourist-related entities and the items they relate to. Tourism is one of the industries that use the Internet the most concurrently. When it comes to online sales, touristic goods like last-minute airline tickets, hotel rooms, and package deals are the most popular, excluding the sale of books. As a result, the Internet functions as the primary reserve mechanism.

"Cruise tourism is an opulent kind of travel that entails an all-inclusive vacation on a cruise ship for at least 48 hours, on a predetermined route, during which the ship makes port calls at various towns or ports." A cruise ship, sometimes known as a cruise liner, is a type of passenger ship used for leisure travel, where the journey itself, the amenities on board, and the various ports of call along the way all contribute to the overall experience. Cruising serves more than just transportation needs, especially on cruises that take guests back to their starting port (also known as a closed-loop cruise), with the ports of call often located in a certain area of a continent.

Based on my research, there are a few web applications that identify as cruise booking for world; however, they are not competent enough to fulfill the integral necessities of a traveler. Here, I identified the needs of the tourist and divided the way of booking the ships accordingly into several parts. Accordingly, according to the destination country, the destination port and the traveling ship, and according to the convenient dates for the traveler, a website will be created to make it easy for them to book these ships.

In summary, the Cruise Line Reservation System is a valuable tool for tourists looking for a hassle-free vacation planning experience and for cruise companies seeking to provide efficient and reliable services to their customers.

1.1 Background

The Cruise Line Reservation System has become a necessity for tourists due to the growing popularity of cruise vacations. With an increasing number of people opting for cruises, it's essential to have a system that streamlines the booking process, making it easier for travelers to plan their vacation.

Recently, due to the epidemic situation in the world and the global economic crisis, this great industry has been severely damaged. At that time, there was plenty of room for tourists to enjoy this kind of entertainment on such a ship. At this time when the situation in the world is becoming favorable again, this design was intended to make it easier for them to reserve these ships very easily and very easily. And for this purpose, there are currently private websites for ships that are made by existing private organizations that are only related to the relevant organization. The problem given here is that they have the opportunity to get the tourists from the ship to their satisfaction, so this website will undoubtedly be a good help for them to do the work in a very convenient and convenient way.

However, the ocean cruise industry is currently estimated to be 11 months from COVID-19. As vessels became more modern and environmentally friendly, it accelerated the retirement of many ships. A total of 31 ships will exit ocean cruise operations worldwide between 2019 and 2021, reducing passenger capacity by 49,105. These numbers are offset to some extent by 8 new ships with 34,312 passenger capacities to be added in 2021 (see tables below).

This equates to a worldwide ocean cruise passenger capacity of 581,200 from 323 ships carrying 13.9 million passengers at the end of 2021 (96.2% increase over 2020 and -49.4% decrease from 2019).

Traditionally, booking a cruise was a complicated and time-consuming process that involved contacting travel agents, discussing options and prices, and waiting for confirmation. However, with the advent of technology, cruise companies have developed Reservation Systems that allow tourists to make reservations and payments online.

The Cruise Line Reservation System offers several benefits to tourists. Firstly, it provides a one-stop-shop for booking cruises, making it easier to compare different options and select the best package. Secondly, the system allows tourists to choose their preferred cabin type, select onboard activities, and customize their itinerary, making it easier to plan their vacation according to their preferences. Finally, the system provides a secure and convenient way to make payments, eliminating the need for cash transactions.

The Cruise Line Reservation System has become a necessary tool for tourists looking to book a hassle-free cruise vacation. It offers convenience, customization, and security, making the process of planning a cruise vacation much simpler and more enjoyable.

1.2 Problem Statement

Tourists may face several problems when booking a cruise ship through an agency or other methods.

Booking through an agency may limit the tourist's options in terms of available cruise lines, cabin types, onboard activities, and excursions. This can be frustrating, especially if the tourist is looking for a unique or customized experience. And higher costs due to fees and commissions charged by the middleman. Additionally, the lack of transparency in pricing may lead to unexpected costs.

It can be time-consuming, involving multiple phone calls, visits, or emails. It may take several days or even weeks to finalize the booking, which can be inconvenient for tourists who need to plan their itinerary and budget. Communication issues can arise when booking through an

agency, especially if there is a language barrier or the agency is located in a different time zone. This can lead to misunderstandings, delays, and frustration.

Some agencies may have limited customer support, making it difficult for tourists to resolve issues or get assistance during their booking process.

although booking through an agency or other methods is still a viable option, there are several challenges and problems that tourists may face. These include limited options, higher costs, time-consuming processes, communication issues, and limited support. These challenges can be minimized by using an online Reservation System, which offers greater convenience, transparency, and customization options.

Reserving Cruise Line seats online has become increasingly popular among tourists due to its convenience and ease of use. Here are some of the benefits of reserving cruise seats online compared to other methods:

Online reservations eliminate the need for tourists to physically visit a travel agency, wait in long queues or make multiple phone calls. With online reservations, tourists can browse different cruise options, compare prices, and make reservations in a matter of minutes from the comfort of their homes.

Online reservation systems offer 24/7 availability, enabling tourists to make bookings at any time, irrespective of their location. This is particularly convenient for travelers who are in different time zones or have busy schedules. And systems offer greater customization options, allowing tourists to choose their preferred cabin type, select onboard activities, and plan their itinerary according to their preferences.

Online reservation systems provide transparency in terms of pricing, availability, and options. Tourists can compare prices and check the availability of cabins in real-time, making it easier to plan their budget and itinerary. And these systems provide secure payment options, protecting tourists' personal and financial information from cyber threats. Reserving Cruise Line online provides tourists with a convenient, time-saving, and secure way to book their vacation. It allows greater customization options, transparency, and availability, making the entire booking process stress-free and enjoyable.

1.3 Aim & Objective

The aim of developing an online Cruise Line Reservation System is to provide a user-friendly, convenient, and efficient way for tourists to book their cruise vacations. The objectives of the system include:

Simplifying the booking process: The Reservation System should offer a simplified and intuitive interface that enables tourists to search for and book their desired cruise options quickly and easily.

Offering a wide range of options: The Reservation System should offer a wide range of cruise lines, cabin types, onboard activities, and excursions, allowing tourists to customize their experience according to their preferences.

Providing transparent pricing: The Reservation System should provide transparent pricing, displaying all costs and fees upfront, making it easier for tourists to plan and budget for their vacation.

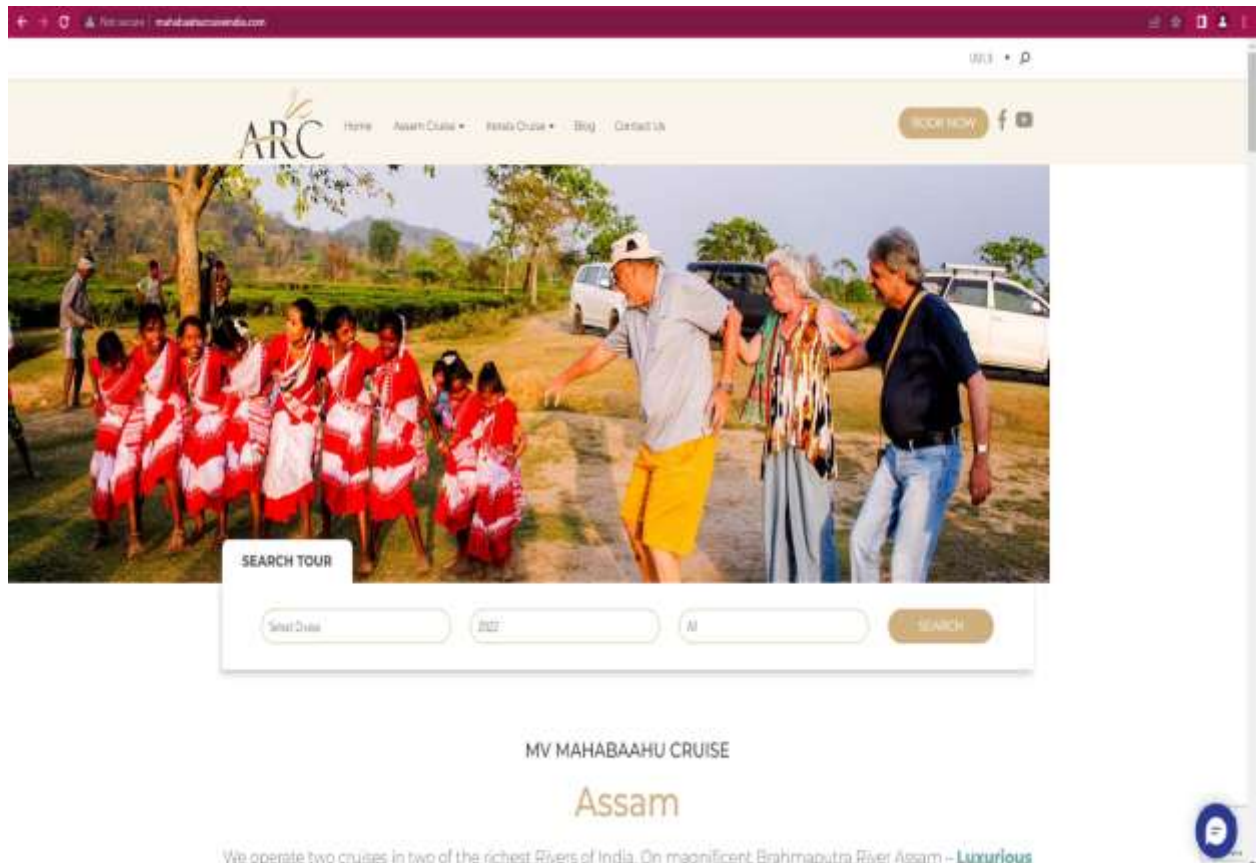
Ensuring security: The Reservation System should ensure the security of tourists' personal and financial information, protecting against cyber threats and fraudulent activities.

Developing an online Cruise Line Reservation System is to provide a seamless, stress-free, and enjoyable booking experience for tourists. The objectives include simplifying the booking process, offering a wide range of options, providing transparent pricing, ensuring security, offering customer support, and providing value-added services.

2 Literature Review

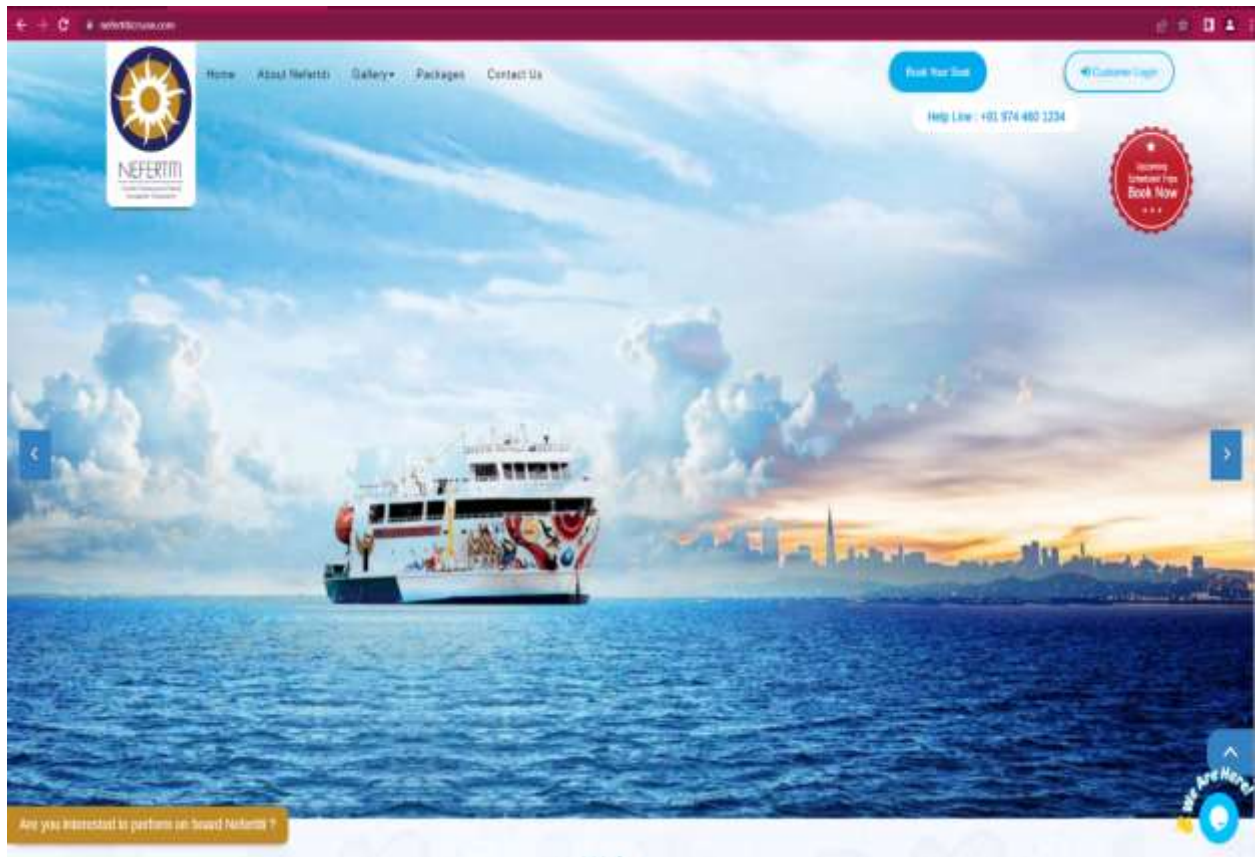
2.1 Critical Evaluation Of 5 Existing Solution

2.1.1 MAHABAAHU CRUISE



The luxurious MV. Mahabaahu offers the opportunity to explore India's most fascinating northeastern state – Assam. Travellers can enjoy a magnificent sunset on the majestic Brahmaputra river as the boat winds its way through the verdant 'tea country' to make it one of the epic cruises in India.

2.1.2 NEFERTITI CRUISES



The Nefertiti promises you a cruising experience that is unmatched in its excellence. This marvel on water allows you to rediscover the exotic beauty of the Arabian sea cradling Kerala' s shores. It exceeds your most opulent dreams with her sophisticated elegance, unparalleled comfort and exclusive presence. The cruises in India it provides sets sail from Kochi to Kozhikode in Kerala.

2.1.3 ANGRIYA CRUISES



India's first domestic cruise liner, Angriya, has made many voyages on the Mumbai-Goa sea route, along the pristine Konkan Coast. It provides world-class entertainment along with exquisite cuisine and a host of other amenities that will keep travellers occupied. Its cruises in India are from Mumbai to Goa, and Goa to Mumbai.

2.1.4 ANTARA CRUISES



Antara River Cruises has introduced luxury river cruising across India with exceptional attention to detail. An invitation to take you on unparalleled adventures sailing away to pristine destinations, curating unforgettable experiences with bespoke itineraries and unmatched hospitality.

3 Project Plan and Initial Design

Currently, I have completed some amount of my project and have more to do. Project tasks related to the project plan are being done as follows to implement and deploy the Mobile application along with the relevant documentations.

- ✚ Literature review for the project
 - Creating literature review
 - Submission of literature review
 - Status: completed
- ✚ Stakeholder analysis for Cruise Line Reservation System
 - Identifying stakeholders
 - Finalizing system requirements
 - Status: completed
- ✚ Creating & Submission of project proposal
 - Status: completed
- ✚ Project initiation
 - Determine project scope
 - Status: completed
- ✚ System design
 - Creating rough design of the database and interfaces
 - Database designing
 - Interface designing
 - Status: completed 50%
- ✚ Submission of SRS

Status: completed

- System implementation
- Database
- Implementation Interface
- Implementation Coding

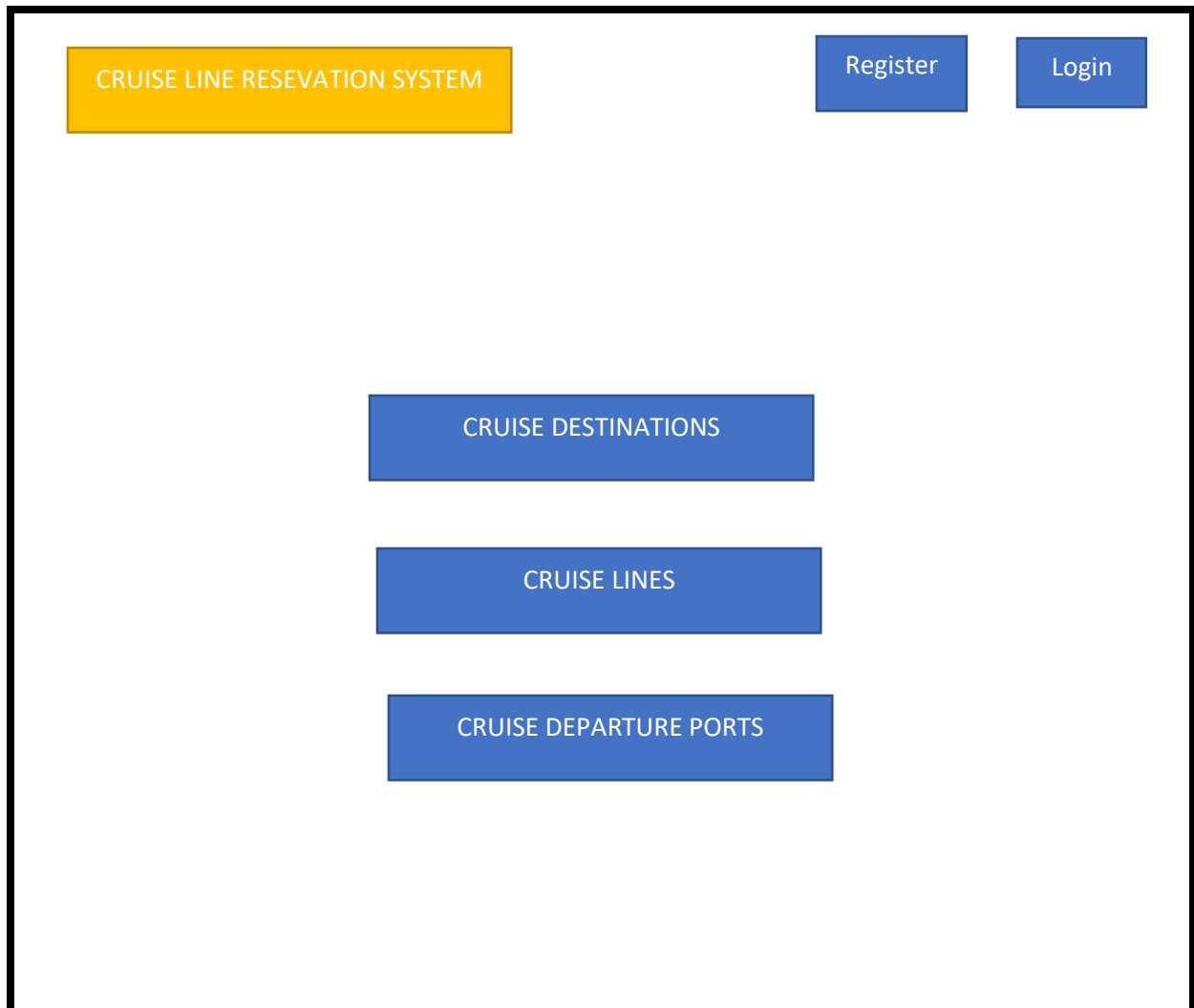
Status: Working on

- ✚ Project Interim Evaluation

Status: completed 50%

3.1 Components Of the System

3.2 Software Component and Task



CRUISE DESTINATIONS

ARCTIC

CARIBBEAN

HAWAII

AUSTRALIA

EASTERN
EUROPE

NORTHERN
EUROPE

PANAMA
CANAL

MEXICAN
RIVIERA

ATLANTIC

CANADA

WESTERN
CARIBBEAN

JAPAN

CRUISE LINES

Cunard

Carnival

Virgin

AUSTRALIA

MSC

Royal
Caribbean

Disney
Cruise

DEPARTURE PORTS

ADELAIDE

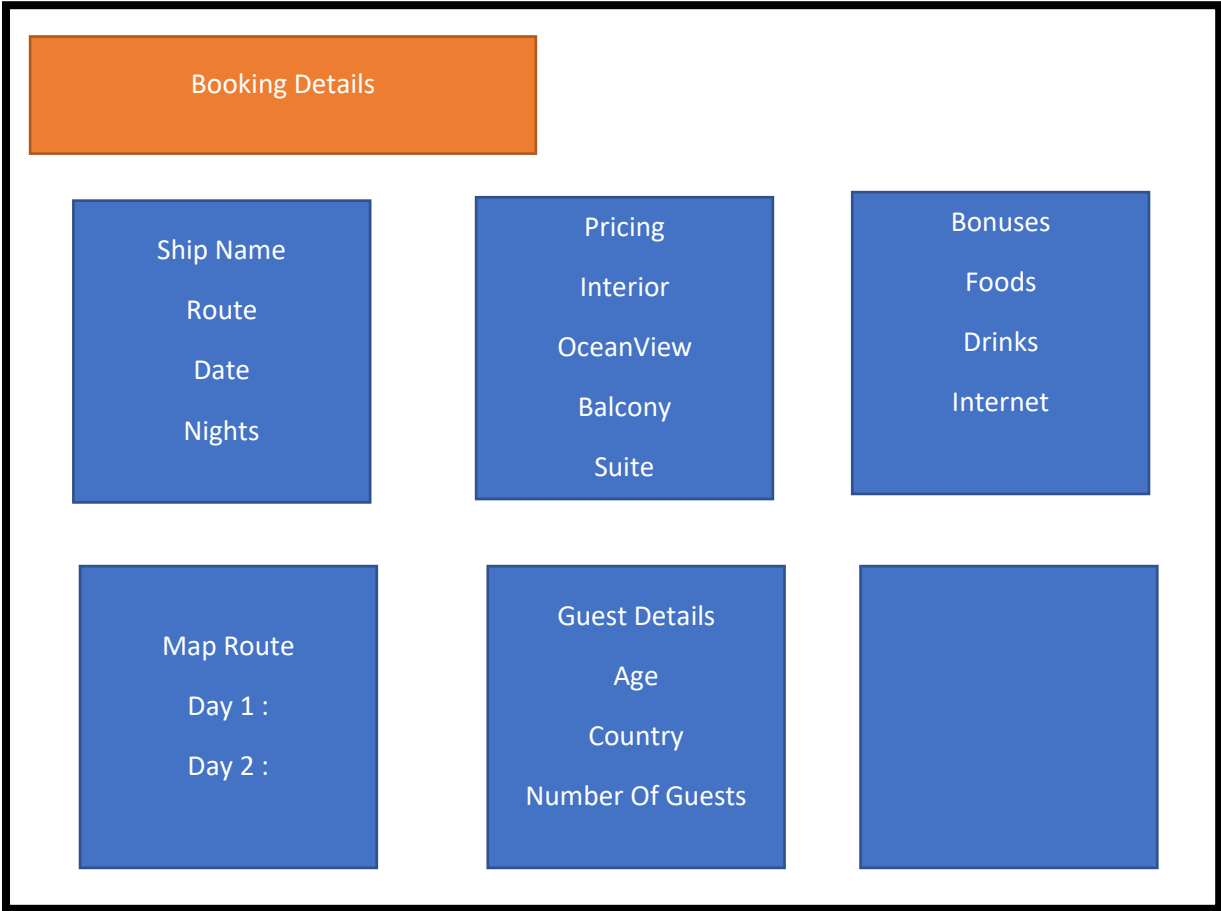
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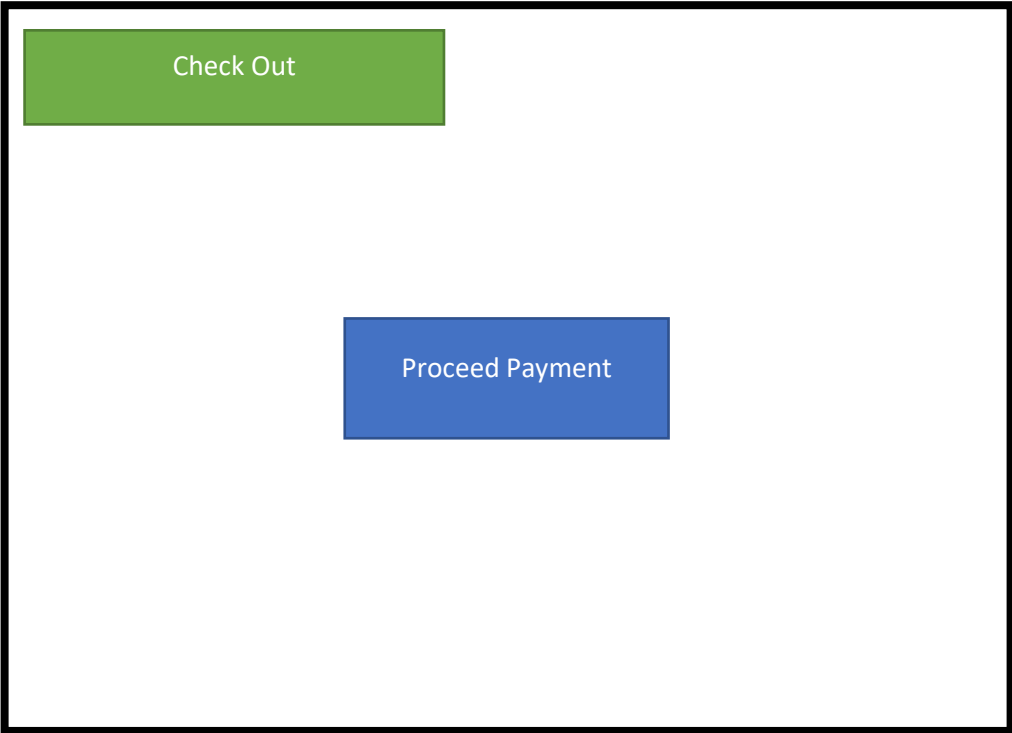
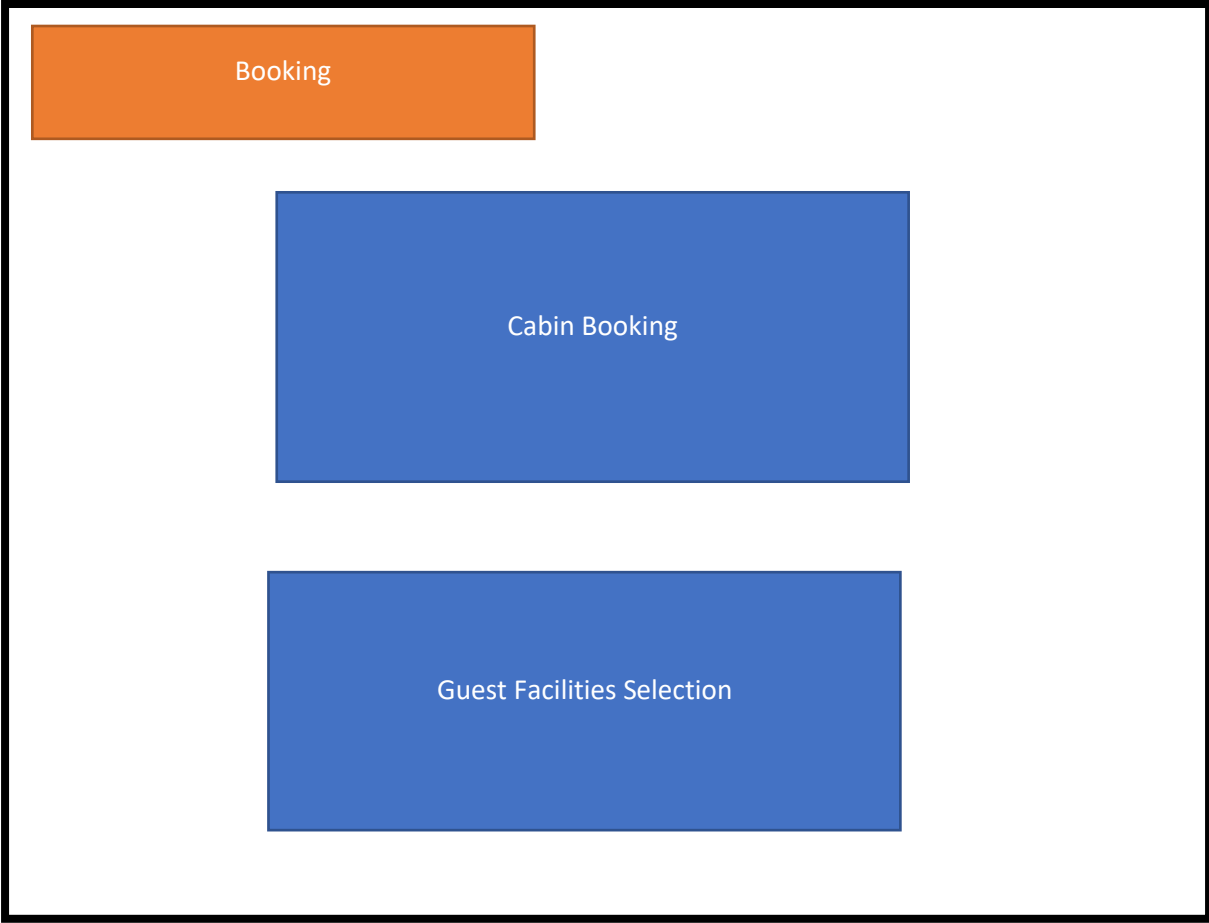
Virgin

AUSTRALIA

BROOME

CALGARY





3.2.1 Database Component

User table:
User ID (primary key)
Name
Email
Password
Contact number
Address
Payment information

Cruise table
Cruise ID (primary key)
Cruise name
Description
Destination
Departure date
Return date
Price

Cabin table:
Cabin ID (primary key)
Cabin type
Capacity
Price
Availability
Cruise ID (foreign key)

Reservation table:
Reservation ID (primary key)
User ID (foreign key)
Cabin ID (foreign key)
Cruise ID (foreign key)
Reservation date
Status (e.g., confirmed, pending, canceled)

Payment table:
Payment ID (primary key)
Reservation ID (foreign key)
Payment amount
Payment date
Payment status (e.g., paid, pending, refunded)

Customer support table:
Request ID (primary key)
User ID (foreign key)
Request description
Request date
Request status (e.g., open, resolved)

Admin table:
Admin ID (primary key)
Name
Email
Password
Status (e.g., confirmed, pending, canceled)

3.2.2 Hardware Component

Hardware Computer

- 64-bit Microsoft Windows 7/8/10/11
- CPU architecture; Intel Pentium 4 or later
- 2 GB minimum, 4 GB recommended
- 1280x1024 or larger
- Broadband Internet connection

Software

- Web Browser
- Xampp
- Adobe Dreamweaver

3.3 Proposed Methodology

Web application development

- HTML
- CSS
- Java Script
- PHP
- Bootstrap
- Laravel

Database

- MySQL

Documentation

- MS Word
- Draw.io

4 References

[1] <https://www.cruisemummy.co.uk/cruise-industry-statistics-facts/> [Online]

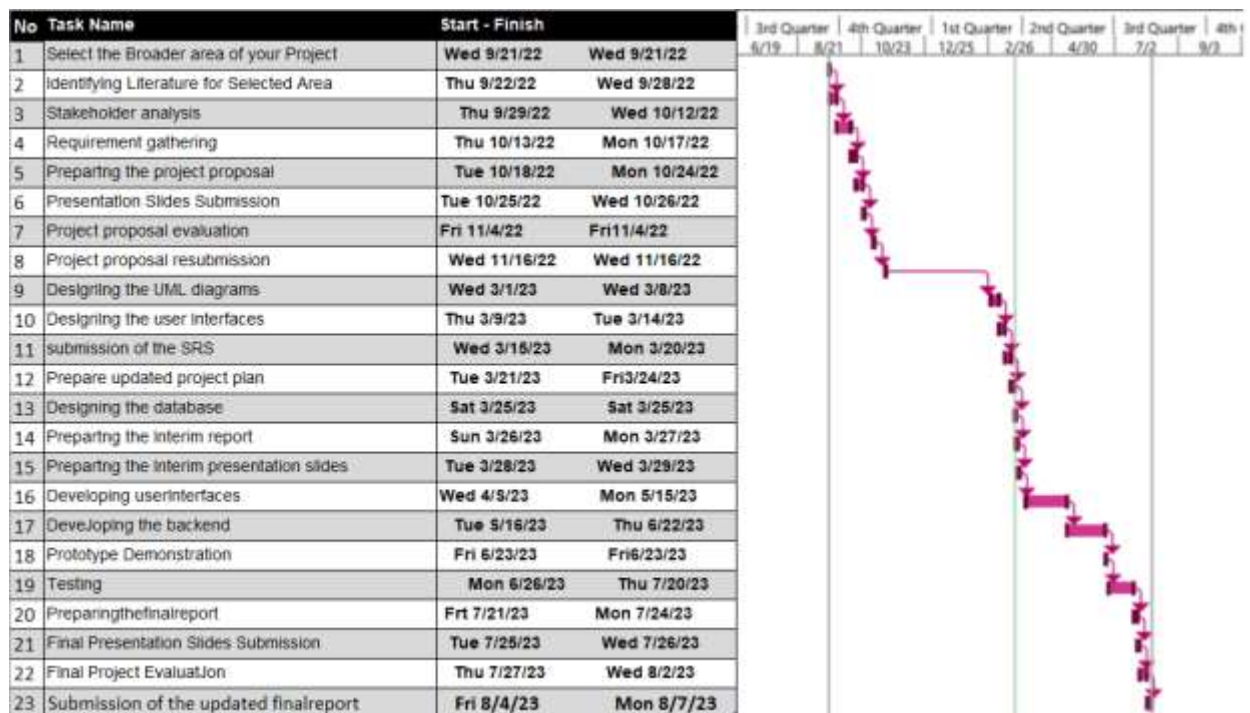
[2] https://www.streetdirectory.com/travel_guide/215769/cruises/top_five_reasons_why_cruise_vacations_are_so_popular.html [Online]

[3] <https://www.revfine.com/tourism-industry/> [Online]

[4] <https://blog.windstarcruises.com/why-people-like-cruising/> [Online]

5 Appendix

5.1 Timeline - Gantt Chart

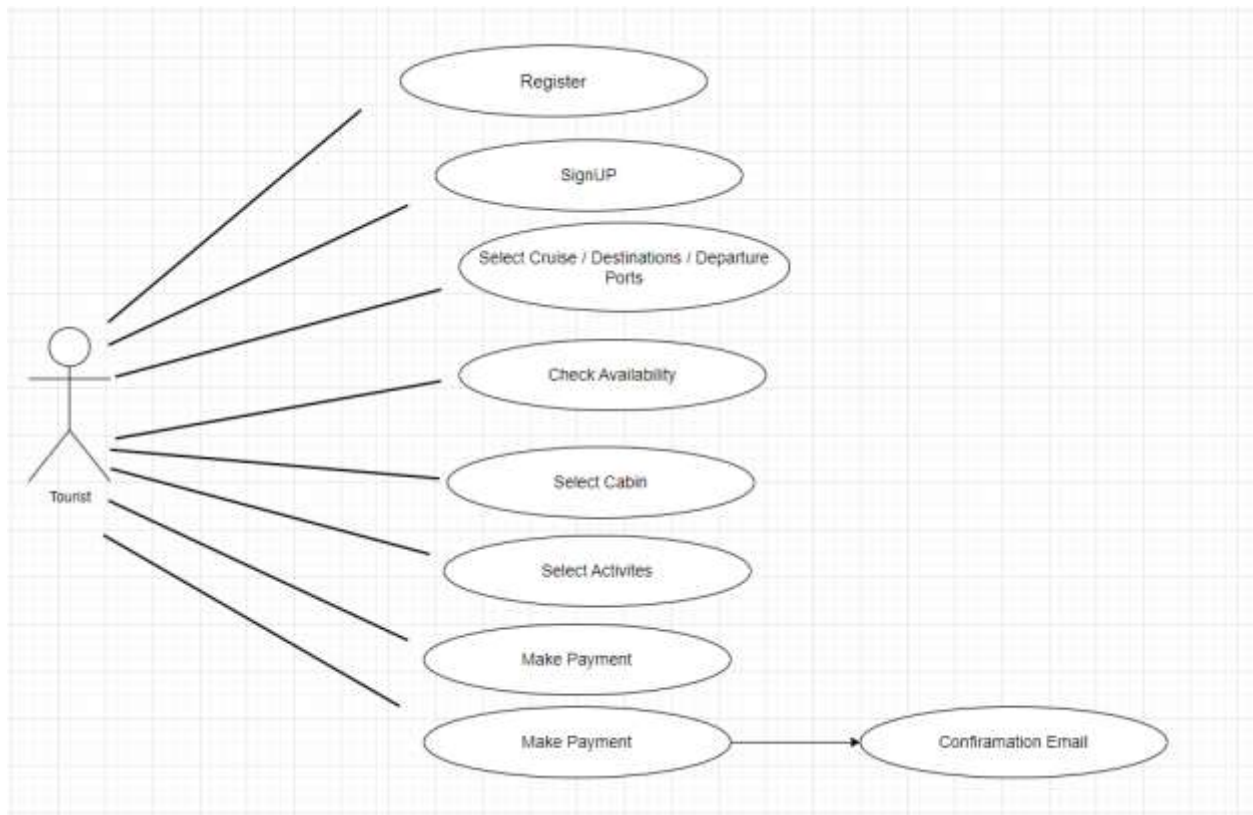


5.2 SRS

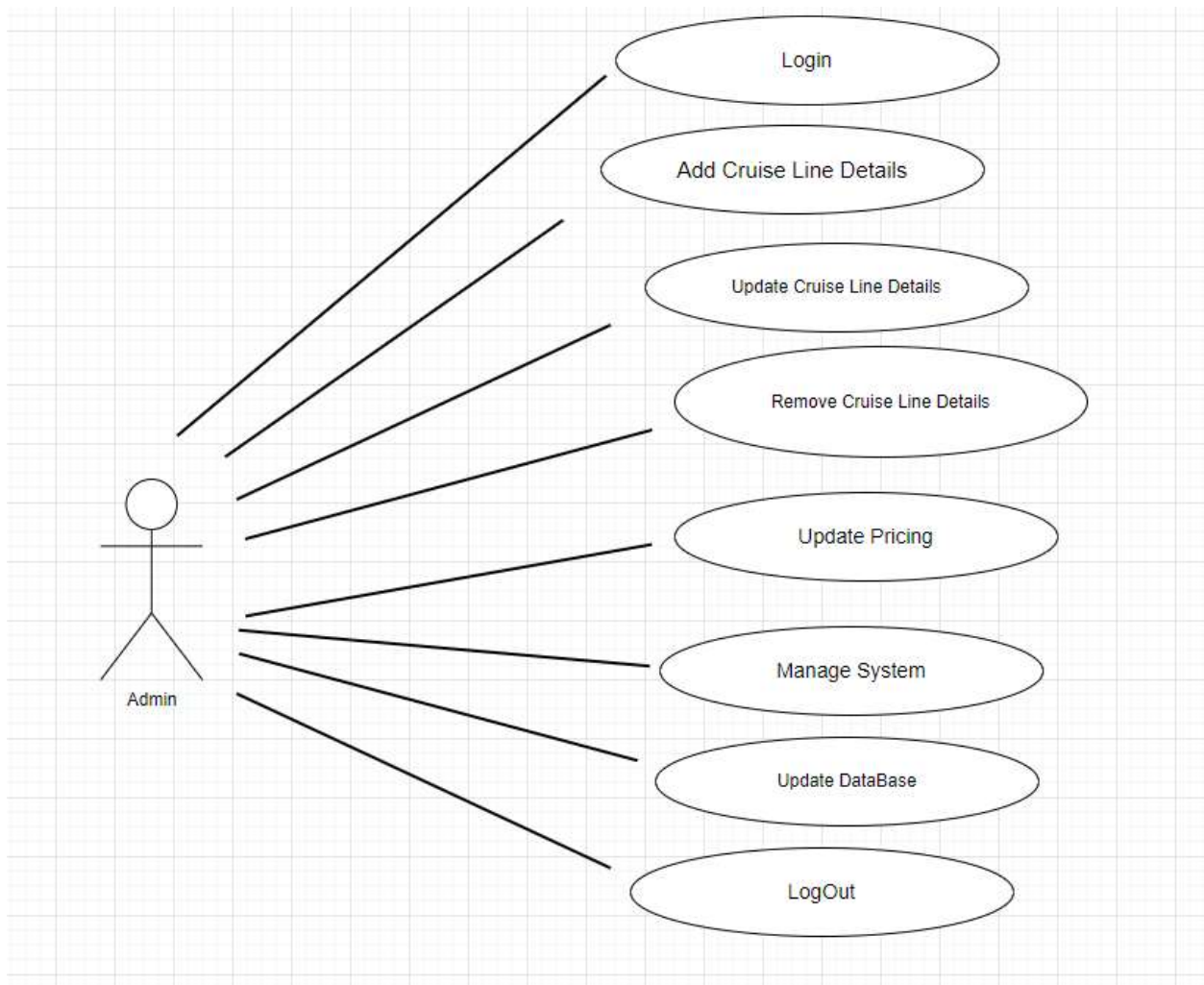
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5.3 Use Case Diagrams

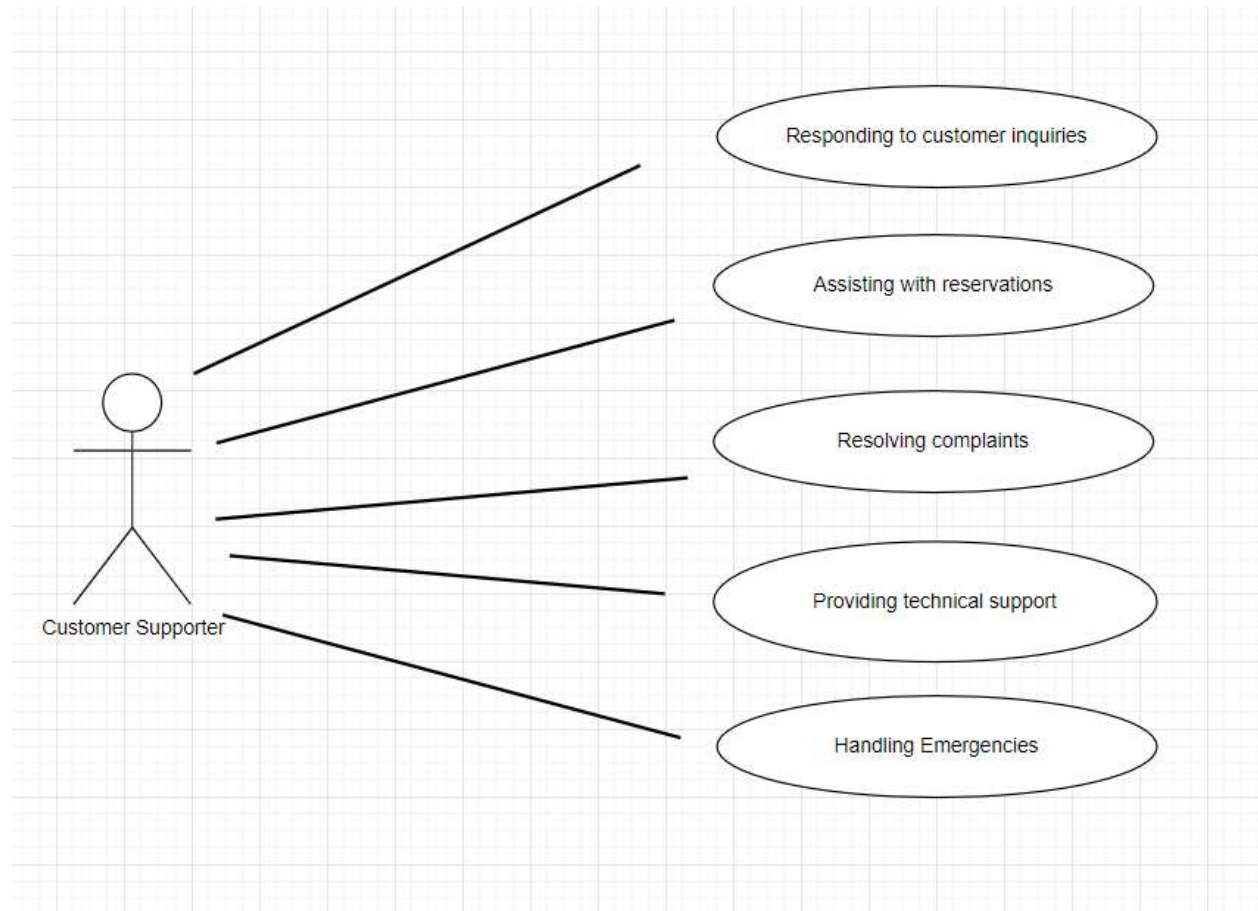
Use Case Diagram -Tourist



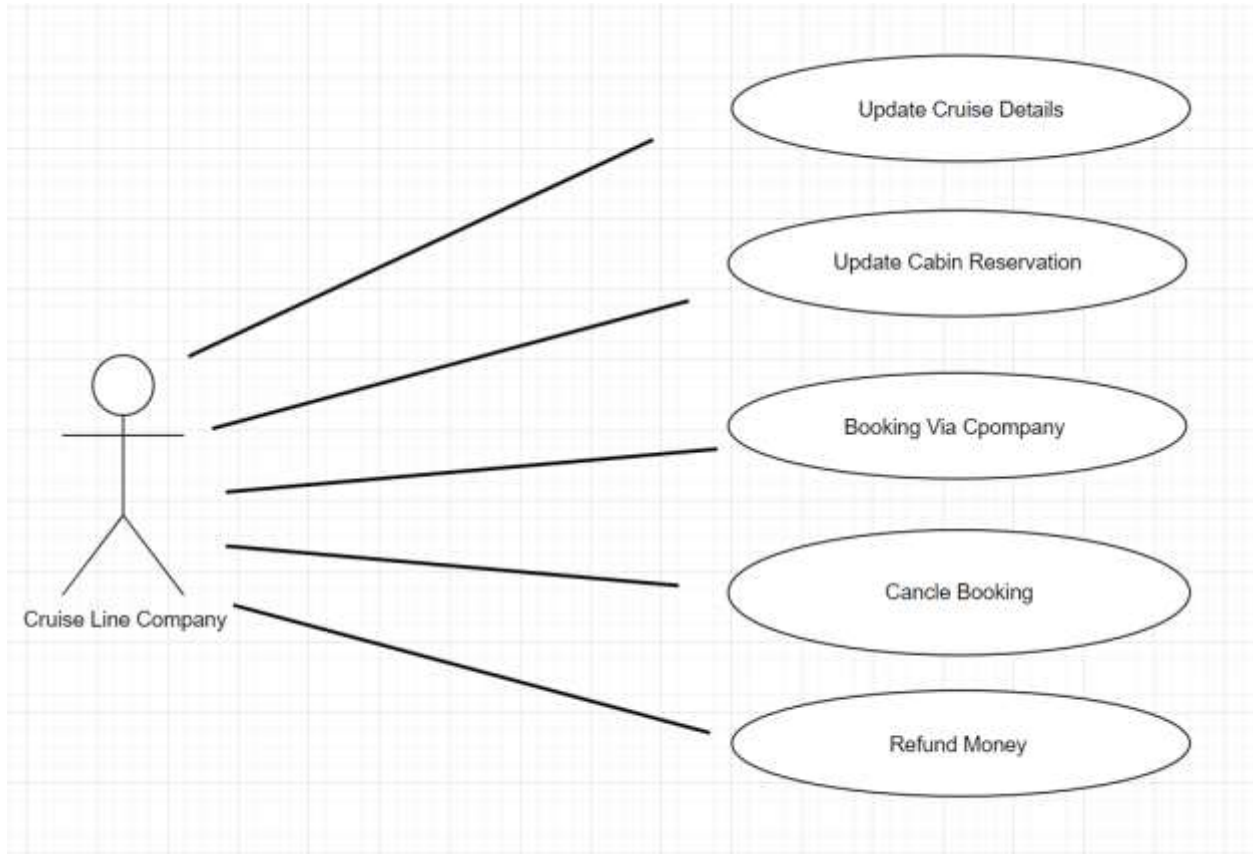
Use Case Diagram – Admin



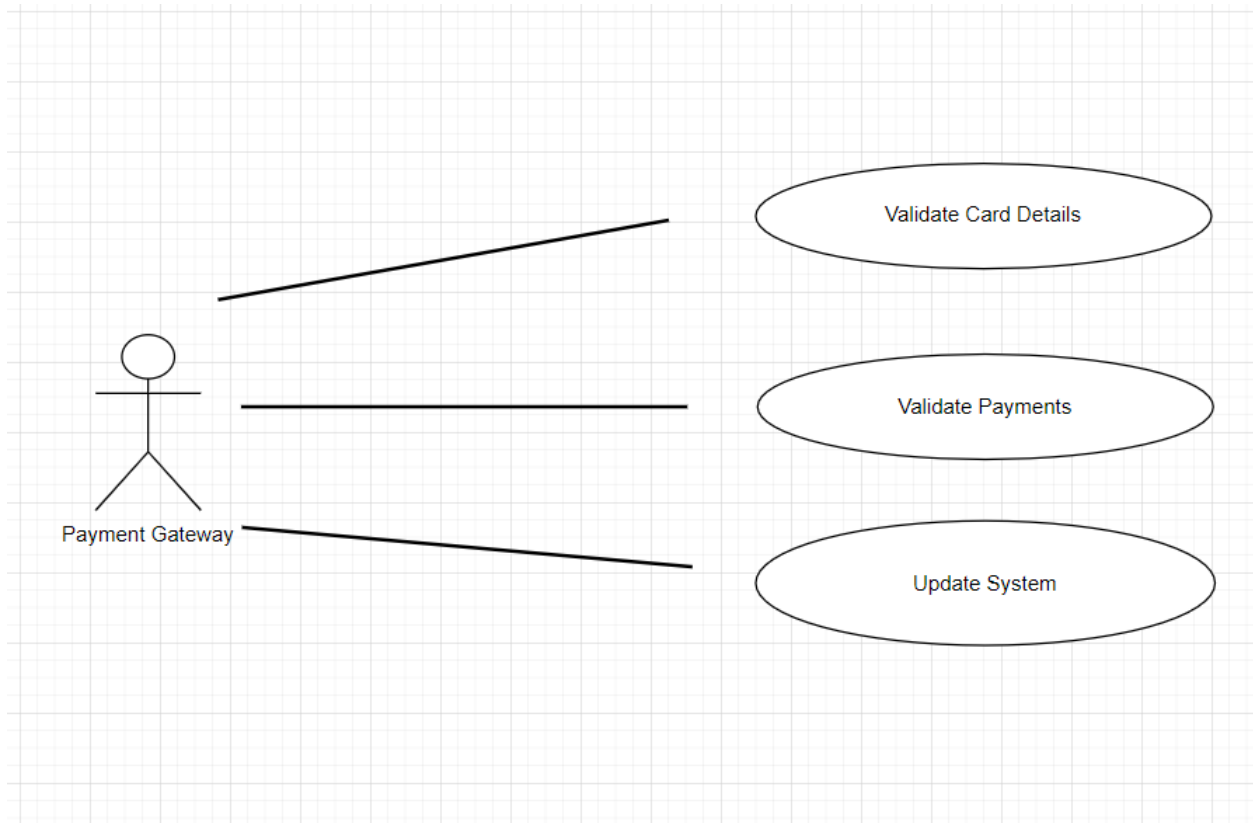
Use Case Diagram – Customer Supporter



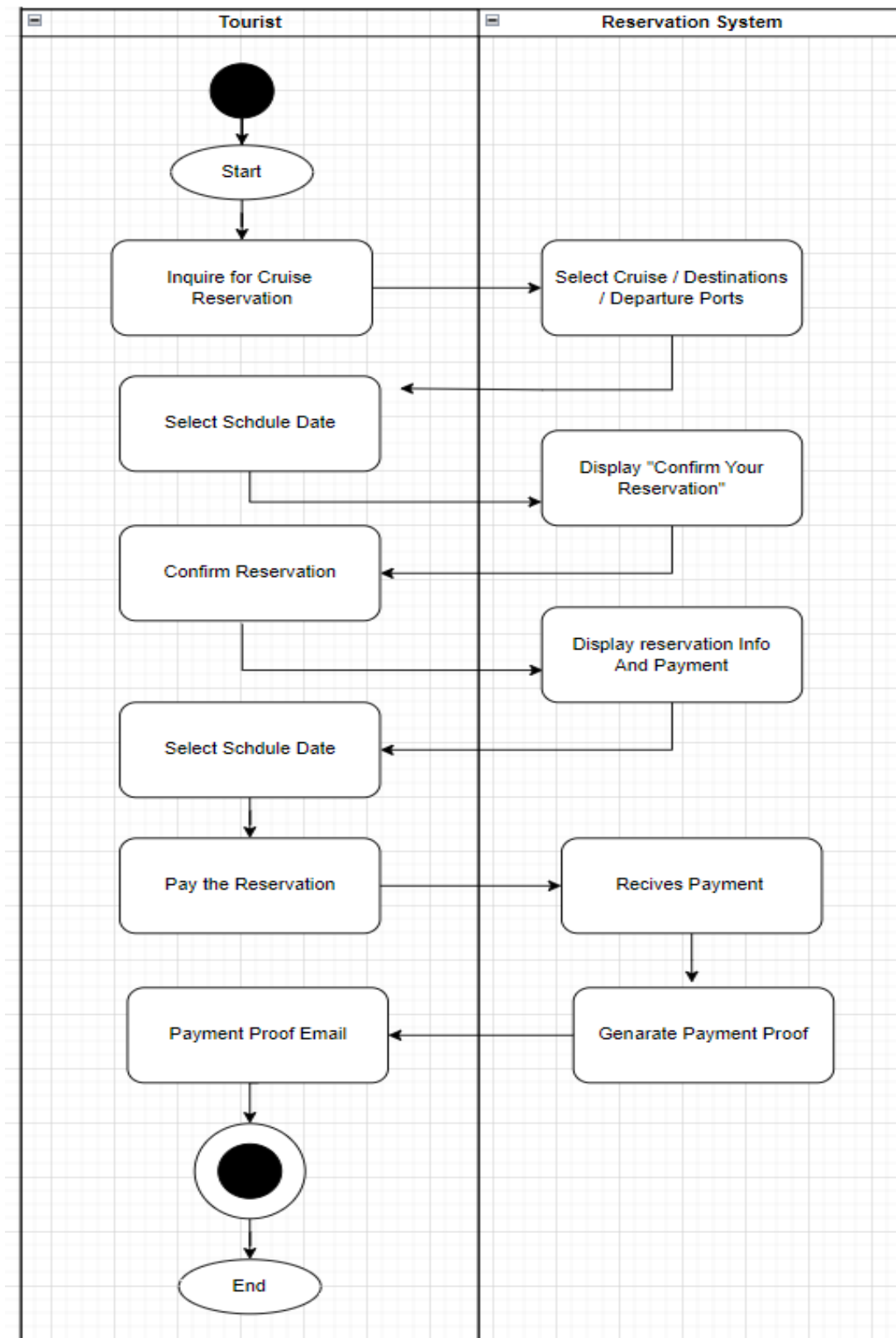
Use Case Diagram – Cruise Line Company

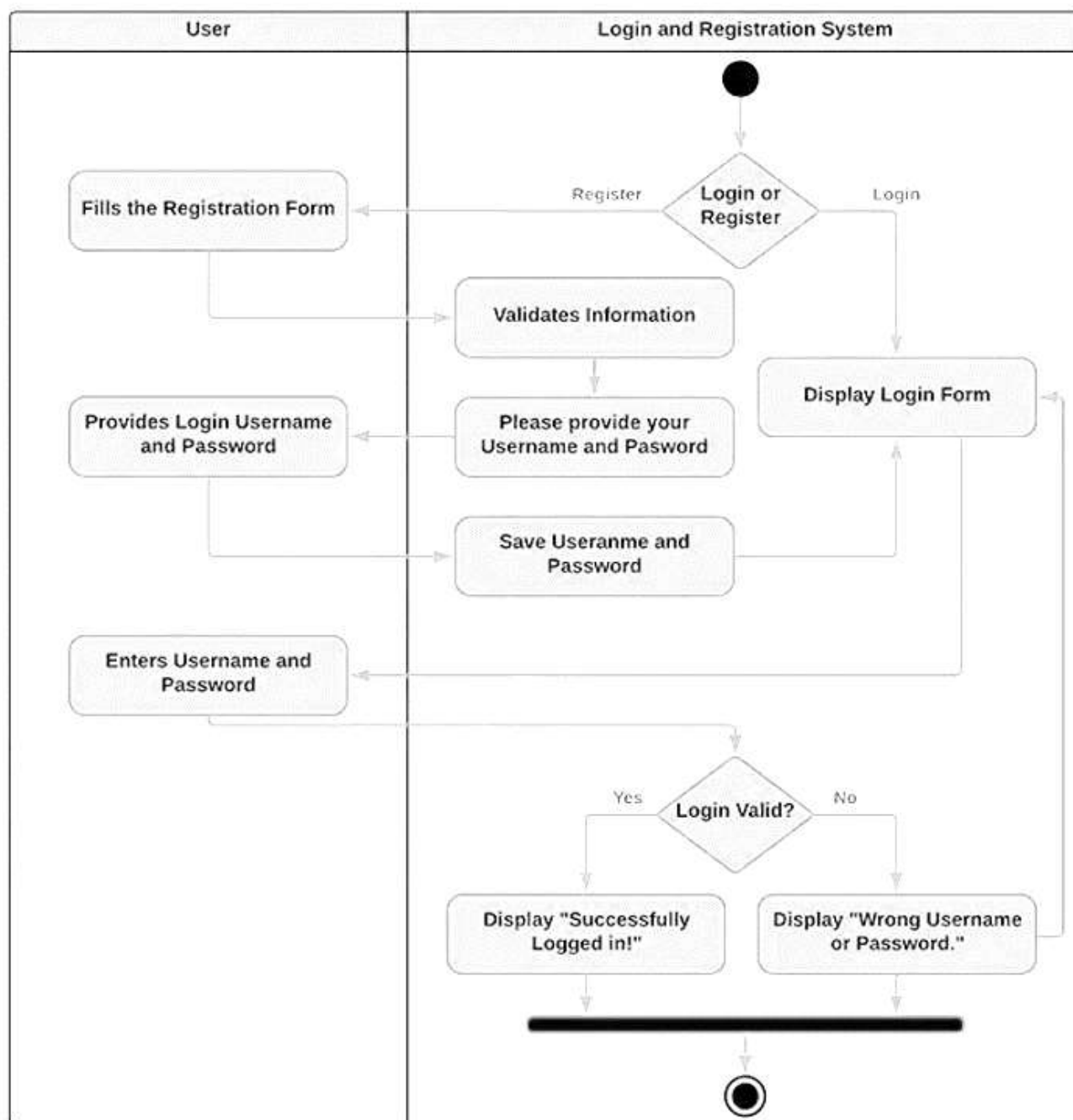


Use Case Diagram – Payment System

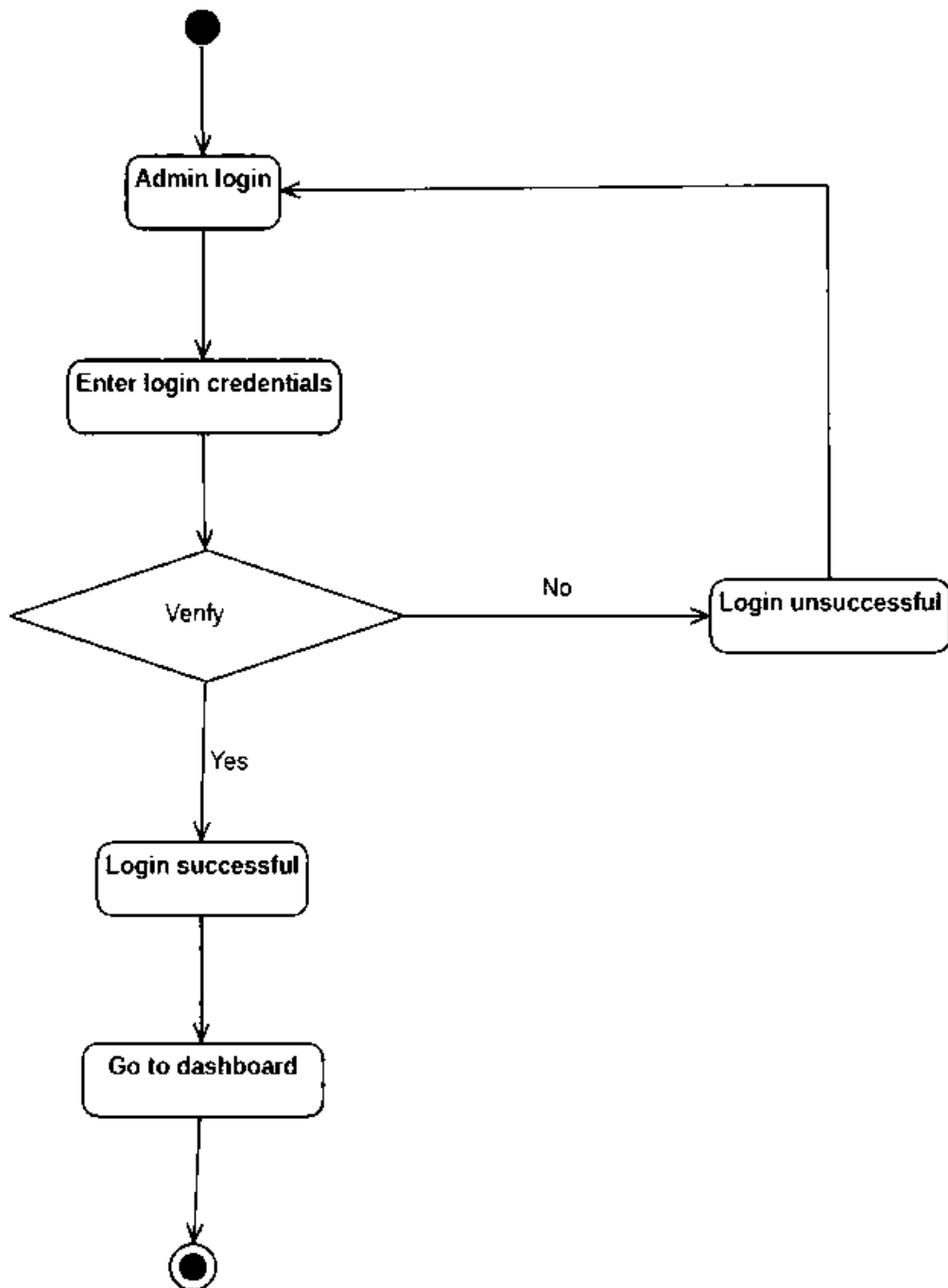


5.4 Activity Diagrams





- **Activity Diagrams Admin Login**



5.5 Entity Relationship Diagram

