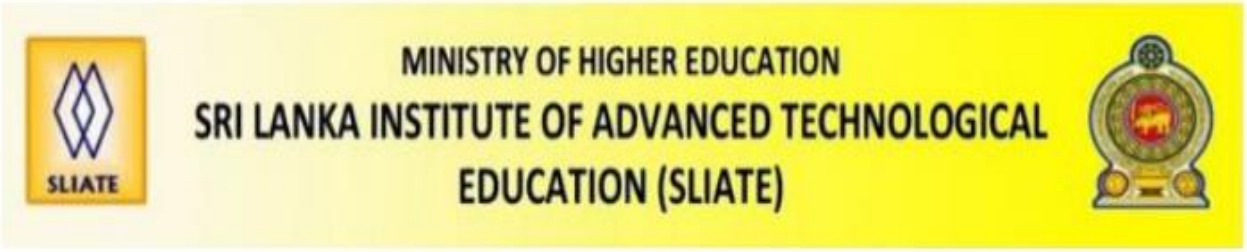

Madu River Safari Service Center Main Management System

(Captain cruise Safari)

Project Report

High National Diploma in Information Technology

ATI - Labuduwa

Developer Details

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At this juncture we feel deeply honored in expressing our sincere thanks to Information Technology department lecturer MRS. Attanayake of supervisor and all the other lecturers of Information Technology department for making this project available at right time and providing valuable insights leading to the successful completion.

We would also like to thank all the HNDIT students of 19th batch for their critical advice and guidance.

DECLARATION

I declare that this report is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education.

Name of Student - N. Lahiru pramod De Silva (gal-it-2019-f-0005)

Date	Signature of Student
2022.01.28	Lahiru pramod

Supervised by:

Name of Supervisor: Mrs. D. N. P. Attanayake (senior Lecturer)

Date	Signature of Supervisor
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ABSTRACT

The objective of the project is to develop a Management System for Madu river boat safari service center to facilitate their management.

The project has been developed in HTML, CSS, JS, PHP, BOOSTRAP FRAMEWORK and consists of Xampp phpmyadmin server which acts as the database (sql) for the project. All the data needed for the Management System is stored in the form of the tables in the SQL server.

The report contains the details of the tasks carried out during the entire Web/Software development life cycle of the Captain cruise management system project. This document depicts all the details of the project.

Content

Contents

1.CHAPTER 1

1.1. Introduction

Madu River is a most beautiful river in Sri Lanka. Madu River is a minor watercourse which originates near Uragasmanhandiya in the Galle District of Sri Lanka, before widening into the Madu River Lake at Balapitiya. The river then flows for a further a 4.4 km (2.7 mi) before draining into the Indian Ocean. It is located 88 km (55 mi) south of Colombo and 35 km (22 mi) north of Galle.

The Buddhist Amarapura Nikaya sect had its first *upasampada* (higher ordination ceremony) on a fleet of boats anchored upon it in 1803. The Buddhist Kothduwa temple is situated on an isolated island in the lake.

Madu River Lake, together with the smaller Randombe Lake, to which it is connected by two narrow channels, forms the Madu River wetland.Its estuary and the many mangrove islets on it constitute a complex coastal wetland ecosystem. It has a high ecological, biological and aesthetic significance, being home to approximately 303 species of plants belonging to 95 families and to 248 species of vertebrate animals. The inhabitants of its islets produce peeled cinnamon and cinnamon oil.

So this area has a major tourist attraction from both local and foreign sectors. And they are in the habit of visiting Madu River to have fun and gain knowledge about environmental diversity.

Then many tourist service centers have been set up in the area to cater to the needs of tourists. Captain cruise safari service center is also one of the medium scale tourist service center among them, and this project is developed for them.

1.2. Background

As described above Captain Cruise Safari service center is medium scale tourist service center. Such a center uses a lot of special data and information every day. So they surely need a computerized system for maintain and manipulated this data and information very easy and safe.

But they still use physical document and journals. It's very risky. Because these are built along river, Physical document and journals can be destroyed due to frequent flooding. Another special thing is the number of errors that occur during physical file processing is very high and fraud can happen.

So considering all the above, it was decided to develop a computerized web based system for the workspace.

1.3. Purpose of Documentation

The main purpose of this vision document is to list the requirements of the Captain Cruise Management System project. This document also helps us to collect and analyze the ideas gathered for the project. This vision document will be subject to charge, if more requirements are added to the project. The document being prepared is the first version of vision document for the Captain Cruise Management System Project.

1.4. Aim and Objective

The main objective of this project (CCMS) is Develop a computerized Management system for maintain and manipulated their data and information very easy and safe without any problem.

Aims –

- To Decreasing the use of physical document.
- To eliminate fraud and corruption.
- To Improving the security of documents.
- To Saving employee costs and time.
- To win the trust of tourists.

1.5. Scope of the project

This project (CCMS) is a computerized web based Management system for maintain and manipulated their data and information very easy and safe without any problem for Captain Cruise safari service center.

The system consist of several main modules and functions:

- Billing Module is a one of the main modules. It has main three functions: bill search function, bills prices automatic generate function and bill print and delete function. The main purpose of this is to issue the required bills to the customers. The system stores customer details, Traveling date and time, the number of passengers attending the tour, automatically calculated cost of tour and Details of the tour guide participating in the tour (this details are used to manage their salaries) .

- Prices Control Module is controlling all updates related to the bill pricing and payroll charges of the entire system. It has main two functions: Normal and Package price change function and Employee salary range change function. This function can only be used by authorized persons. For that reason this section has a special login system.

- Booking Module is used to record the details of the customers who have made advance reservation for a tour. It has main three functions: booking search function, Available date and time search function and move booking record to billing section and booking cancel function. The system stores customer details, Booking date and time, the number of passengers attending the tour.

1.6. User and System Requirement

The minimum hardware and software requirements should be there in the computer system to deploy and operate the developed system successfully. These minimum requirements have been mentioned below,

- *Minimum Software Requirement*
    - Any Browser (Chrome)
    - Good Internet Facilities.

- *Minimum Hardware Requirement*
    - Desktop with intel i3 processor
    - 2gb ram , 1gb VGA
    - Wide screen monior , UPS

2.CHAPTER 2

2.1 Literature review

Yala Park online ticket booking web system

Yala National Park is the most visited and second largest national park in Sri Lanka. Lots of tourists come for visit yala park. So they have published a website their own for before booking ticket to them. It's very attractive website and has some facilities. Such as animal details, yala history , beautiful wild animal photos and etc.

Their ticket booking system has,

- Automatic available booking date finder
- Calendar option with local holidays
- Map location services
- Hotel also can book with booking tickets.

What are the features have Madu gaga boat safari management system more than yala system?

- Customers can check out how much cost will be going to book their package before confirmed it with automatic cost generator.
- Meals also can book with booking boat ride. It cost generate automatically.
- System indicates future come bookings in dashboard with their phone numbers.

3.CHAPTER 3

3.1 System Analysis

3.1.1 Introduction

System analysis is defined as the process of identifying problems and organizing the facts and details of a system. System analysis can also be described as the meticulous breakdown of a system into its organized components or parts. It's important to know what works with what, what causes something to work or fail, and what can work independently.

This process helps you to know the ins and outs of a system. System analysis can occur in either the developmental stage of a system or it can be conducted on an existing system in which observations are made on the running system for troubleshooting and system improvement purposes. In either case, it serves the same purpose.

3.1.2 Analysis existing system

There wasn't any computerized system. They are using a physical documentation maintain base system.

We found some drawbacks from this existing system

- Documentation cost and security issues are very high
- When we find some data or records, it's really hard to find and collect.
- Annual report generation is more complex with this physical documentation maintain base system

3.1.3 Identification system main activates

- ✓ Create a bill
- ✓ Create a booking
- ✓ Easy Packages prices change function
- ✓ New employee registration
- ✓ Maintain employee profile
- ✓ Easy report generation
- ✓ Calculations

3.1.4 Stakeholder analysis

Stakeholder analysis is finding details about who interacts and work with the computer system.

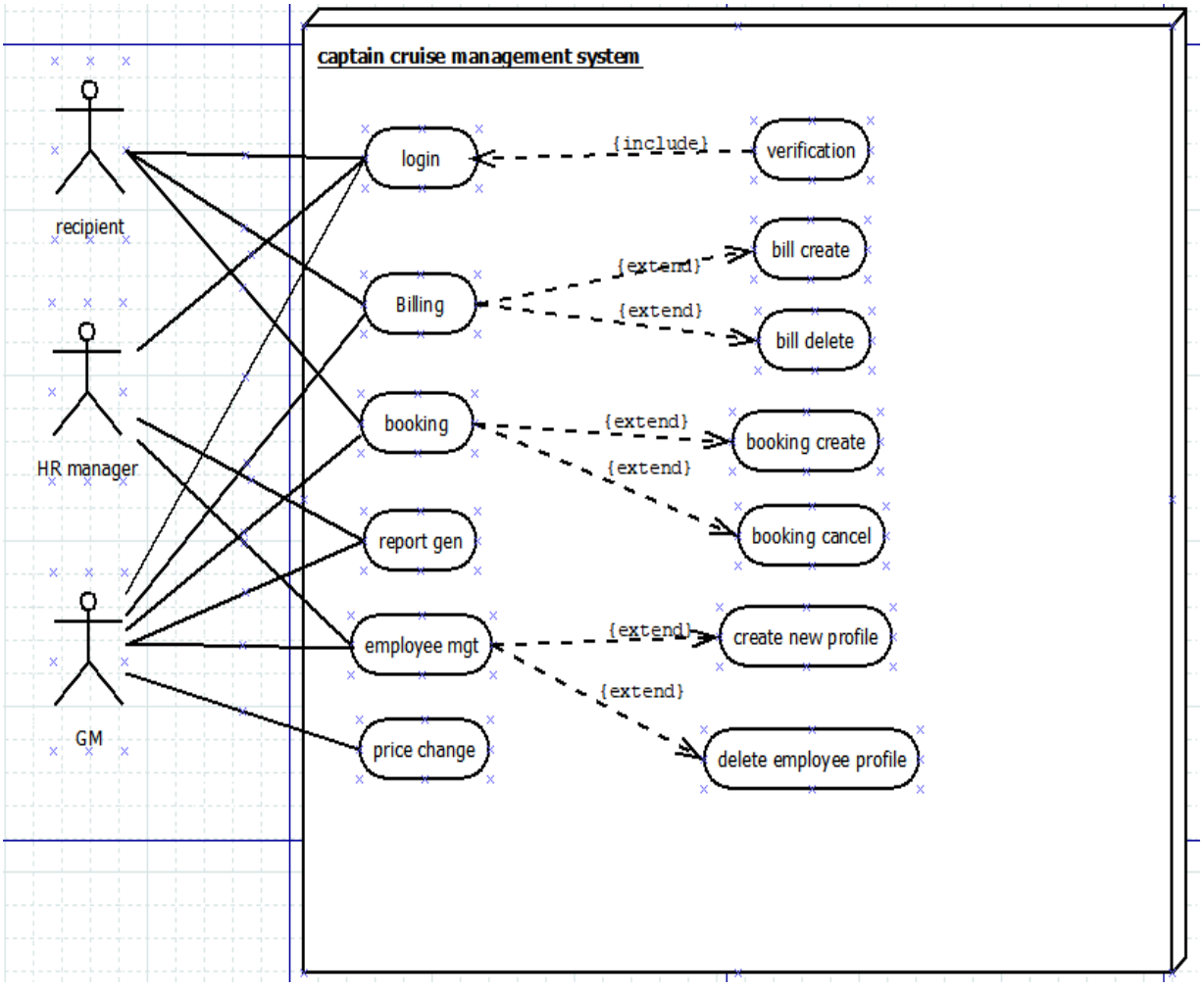
- ✓ Recipient (Bill and Booking)
- ✓ HR manager (employee)
- ✓ DM (Reports)

Explain relationship between stakeholders and main system with diagrams In "Appendances "

3.2 Appendix 1: use case diagram

Use case Diagram of system

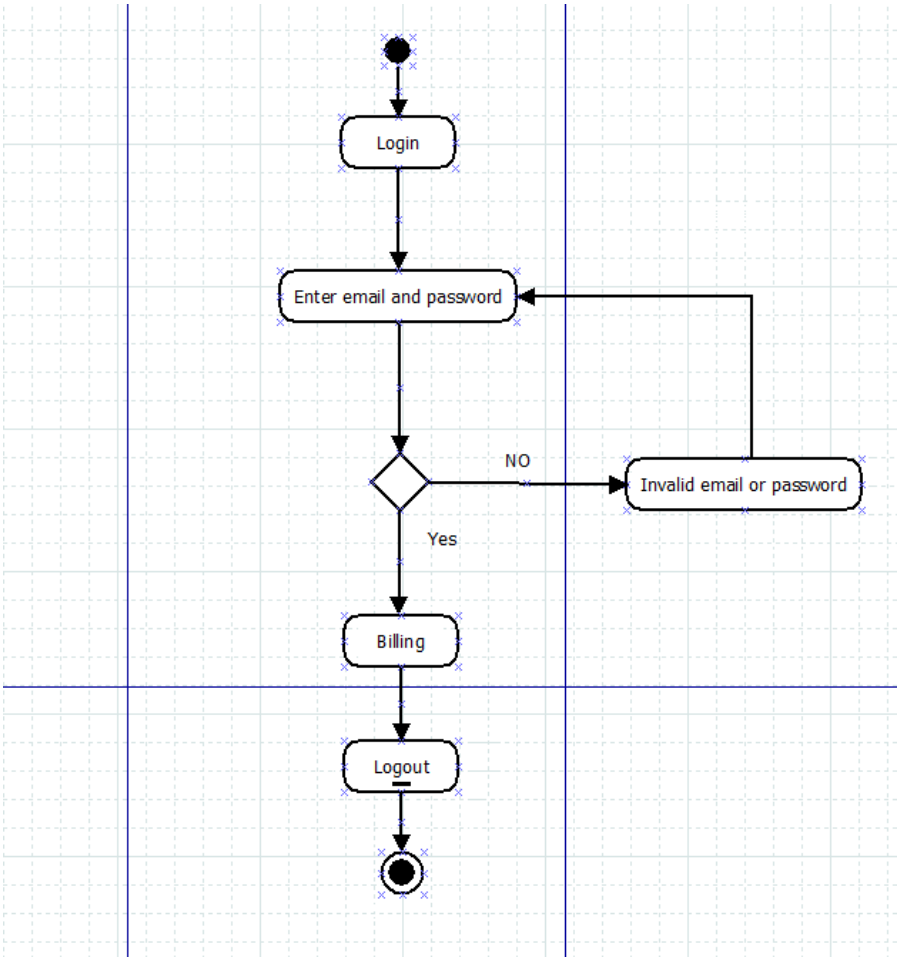
A use case diagram is used to represent the dynamic behavior of a system. It encapsulates the system's functionality by incorporating use cases, actors, and their relationships. It models the tasks, services, and functions required by a system/subsystem of an application. It depicts the high-level functionality of a system and also tells how the user handles a system.



3.3 Appendix 2: activity diagram

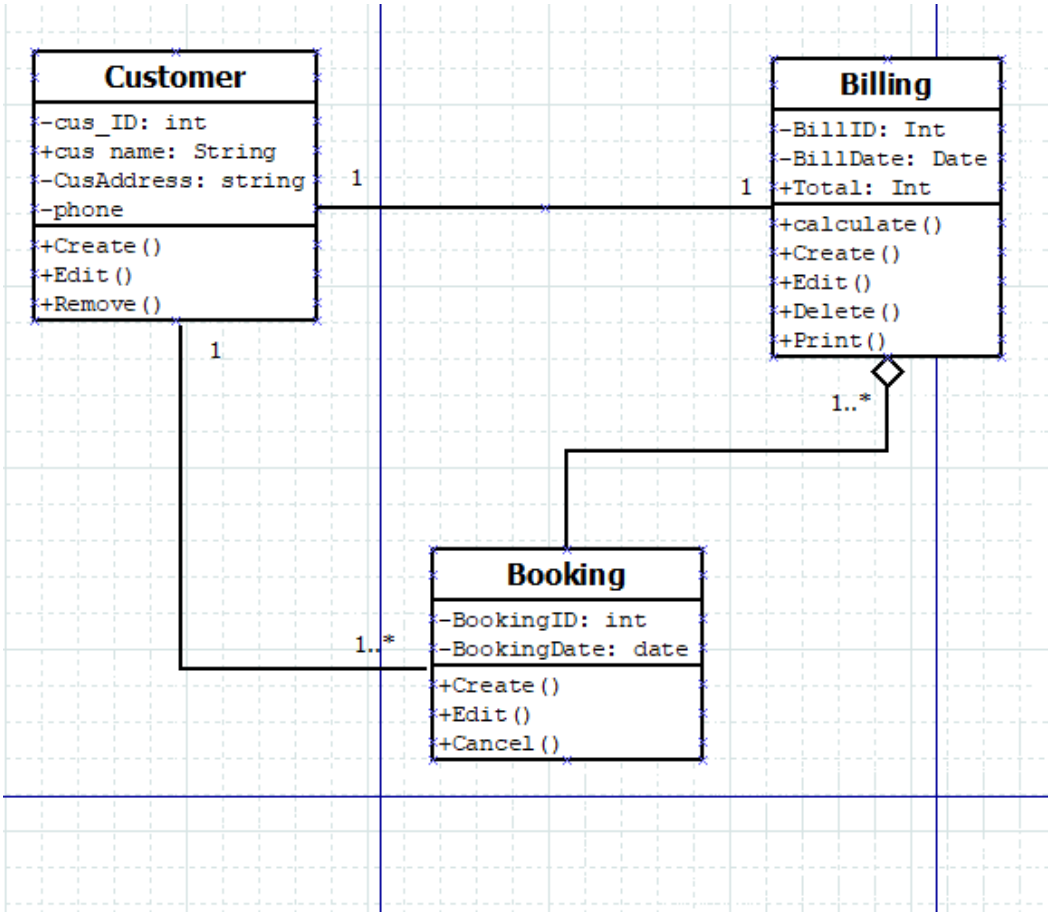
Activity Diagram of system

An activity diagram shows business and software processes as a progression of actions. These actions can be carried out by people, software components or computers. Activity diagrams are used to describe business processes and use cases as well as to document the implementation of system processes.



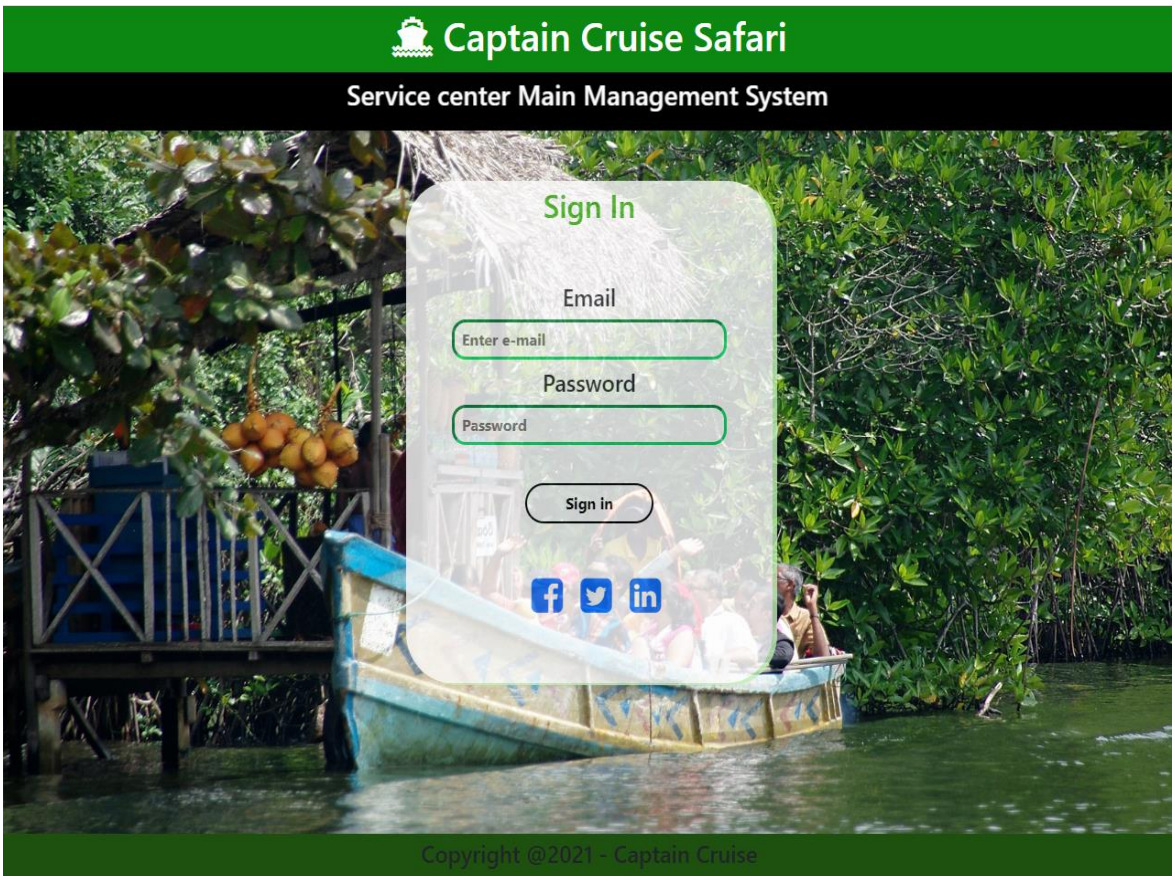
3.4 Appendix 3: Class diagram

The class diagram is the main building block of object-oriented modeling. It is used for general conceptual modeling of the structure of the application, and for detailed modeling, translating the models into programming code. Class diagrams can also be used for data modeling.



4.CHAPTER 4

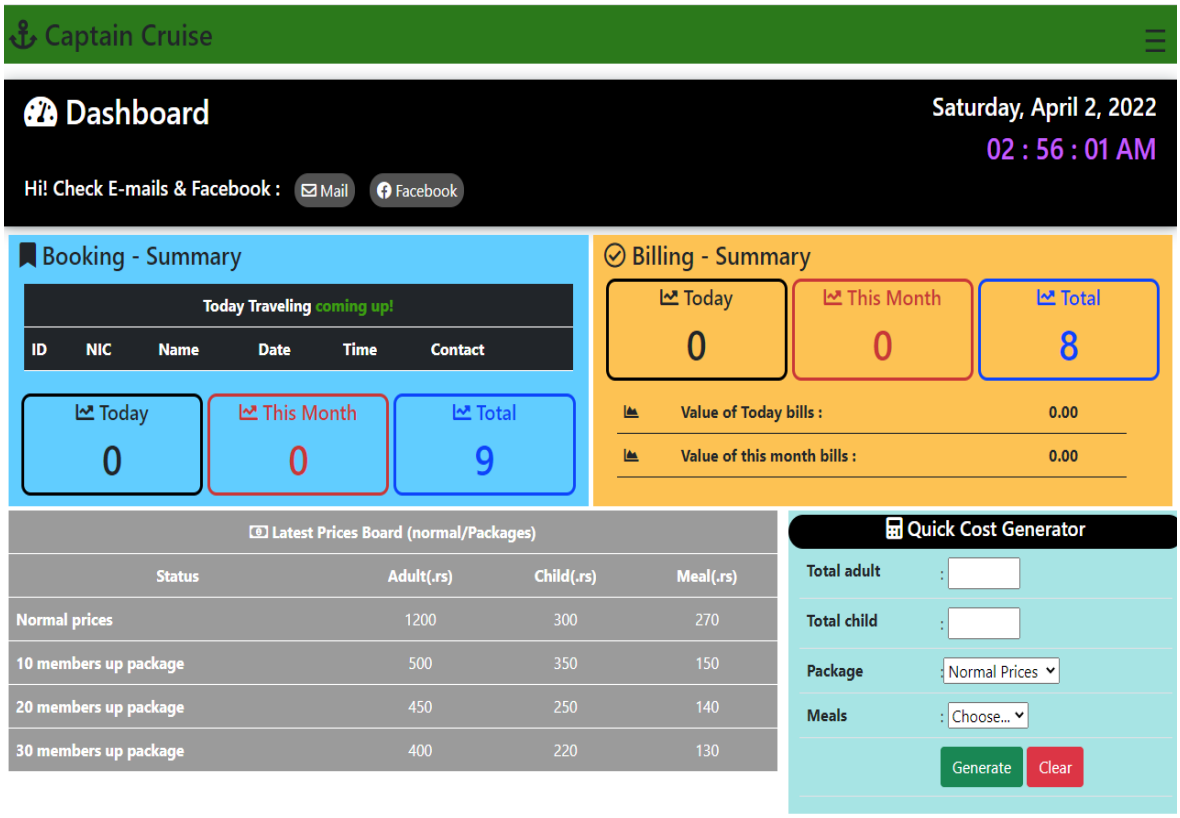
4.1 System Design



HOME PAGE

This is the system home page before working with system user should have to login with correct email and password.

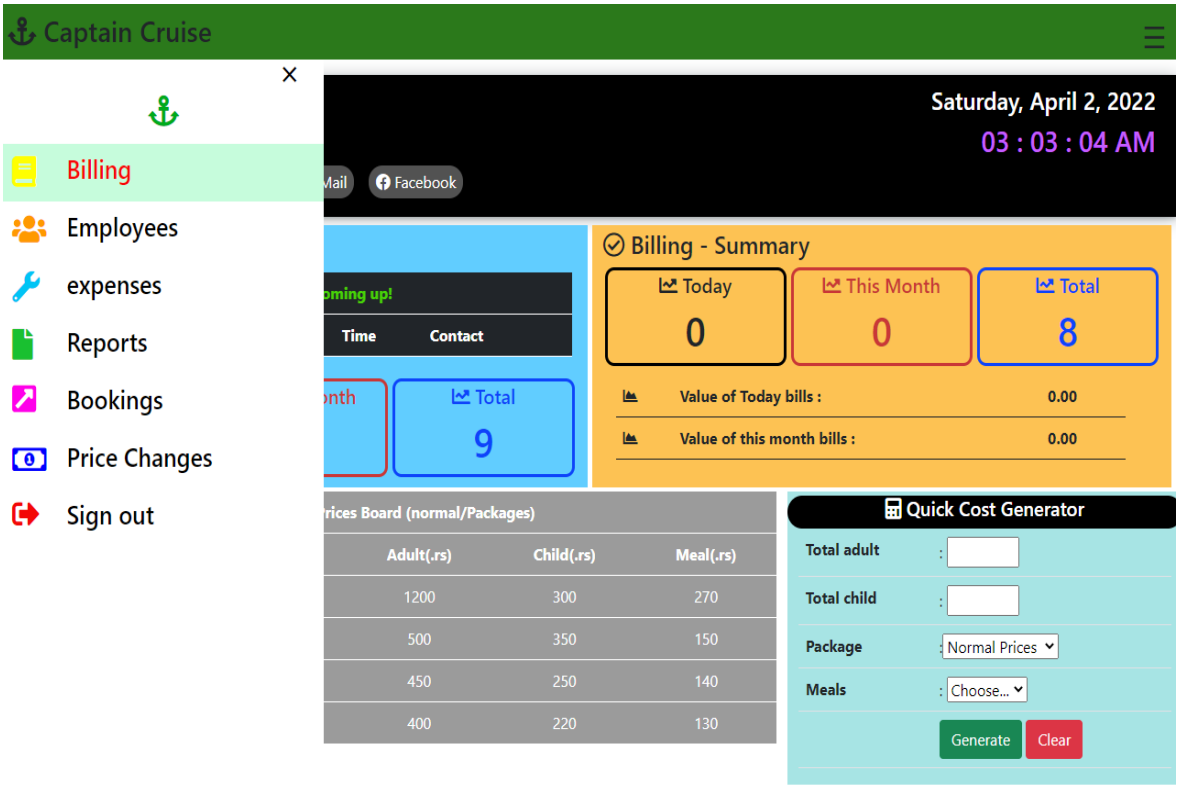
- Email validation Included.
- Password validation included



SYSTEM DASHBOARD

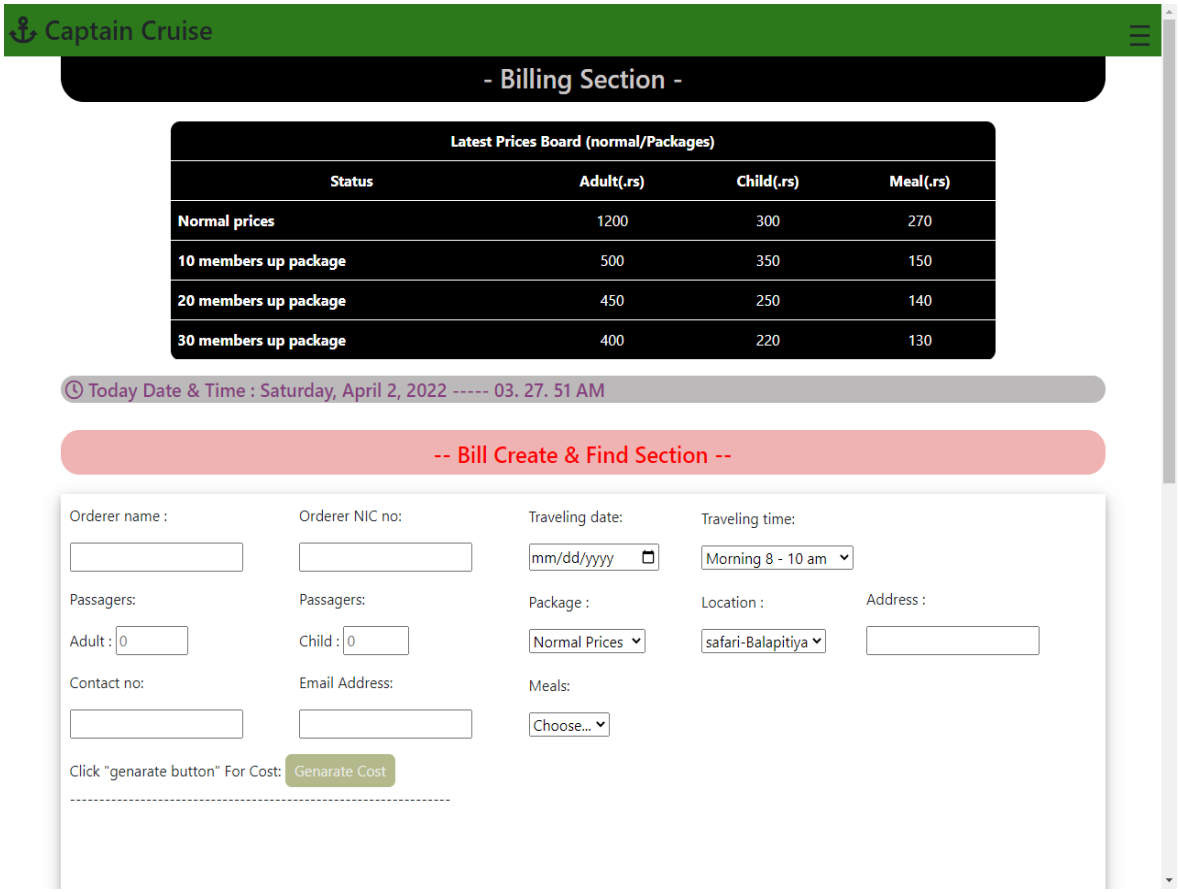
After logging, you will be redirected to the System Dashboard. There are lot of information indicating about system such as

- Current date and time
- Booking summary (Today / This month / Total)
- Billing summary (Today / This month / Total)
- Packages Latest prices table
- Quick Cost Generator.



HIDDEN STICKY MENU BAR

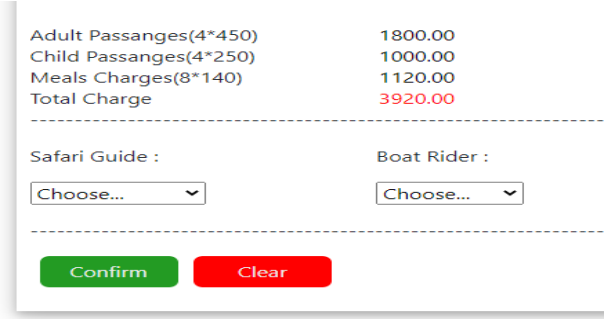
This system has attractive and very usable hidden sticky side menu bar. That helps to get more space to dashboard to indicate more information. It's really helps to redirecting another modules of system easily.



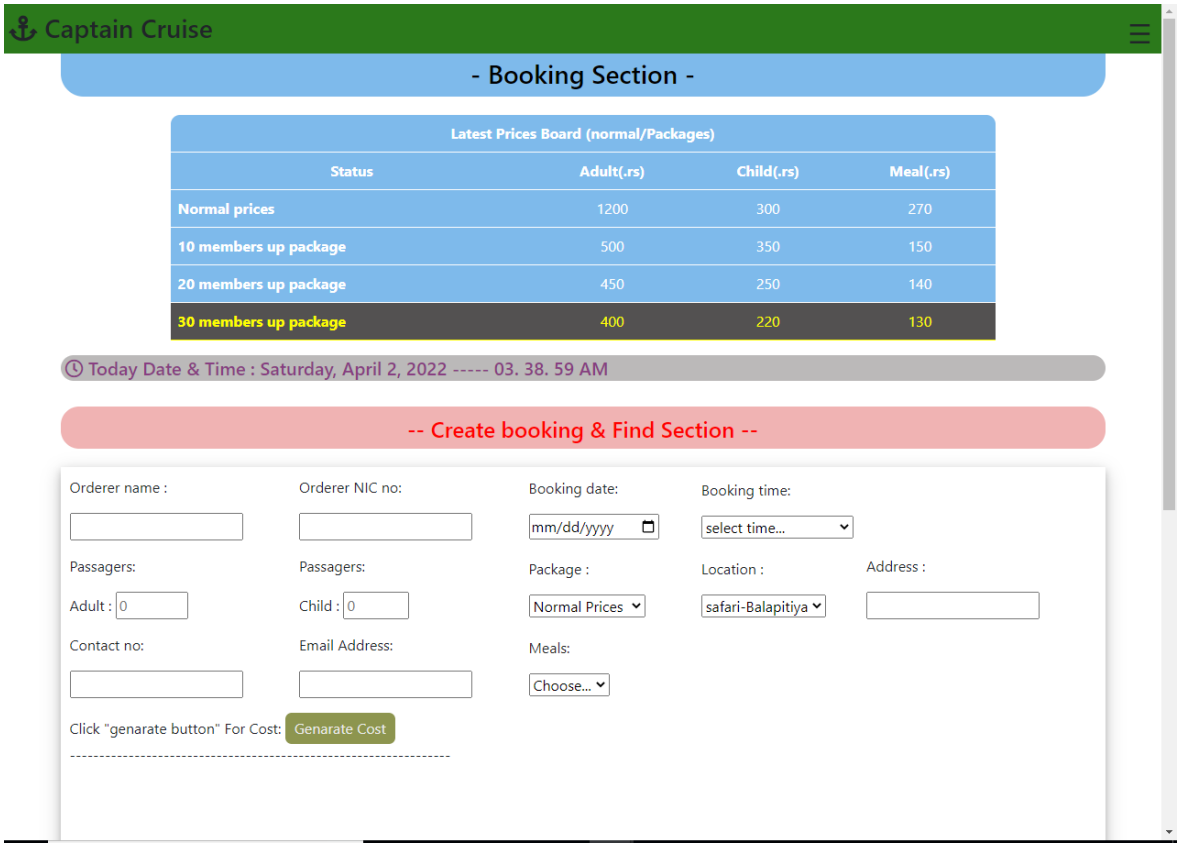
BILLING SECTION

This is the one main part of system. It helps to create a bill for customers. There are more features such as

- Automatic bill counting.
- Display bill details.
- Find and Search option for bill details.
- Current date and time.
- View of Latest prices of packages.
- Bill Printing option has.



Automatic bill total generate



BOOKING SECTION

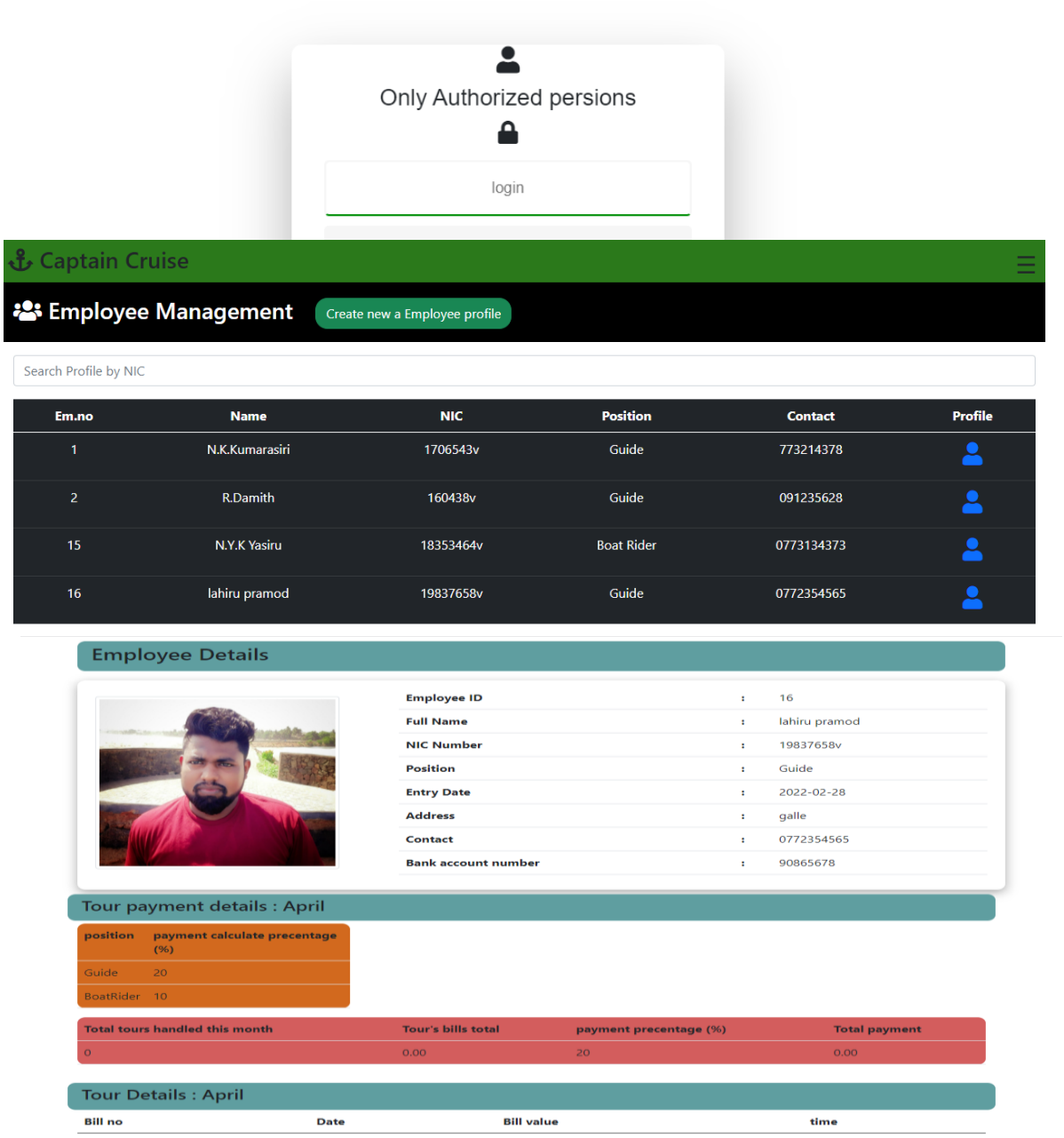
This is the one main part of system. It helps to create a booking for customers. There are more features such as

- Automatic booking cost counting.
- Display booking details.
- Find and Search option for booking details.
- Current date and time.
- View of Latest prices of packages.
- Automatic booking reminder option.

Employee management module

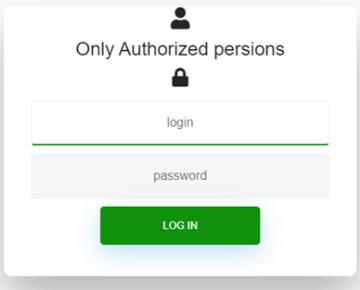
Employee management module controls details and payments about boat riders and guides. This module cannot be access every one authorized person only.

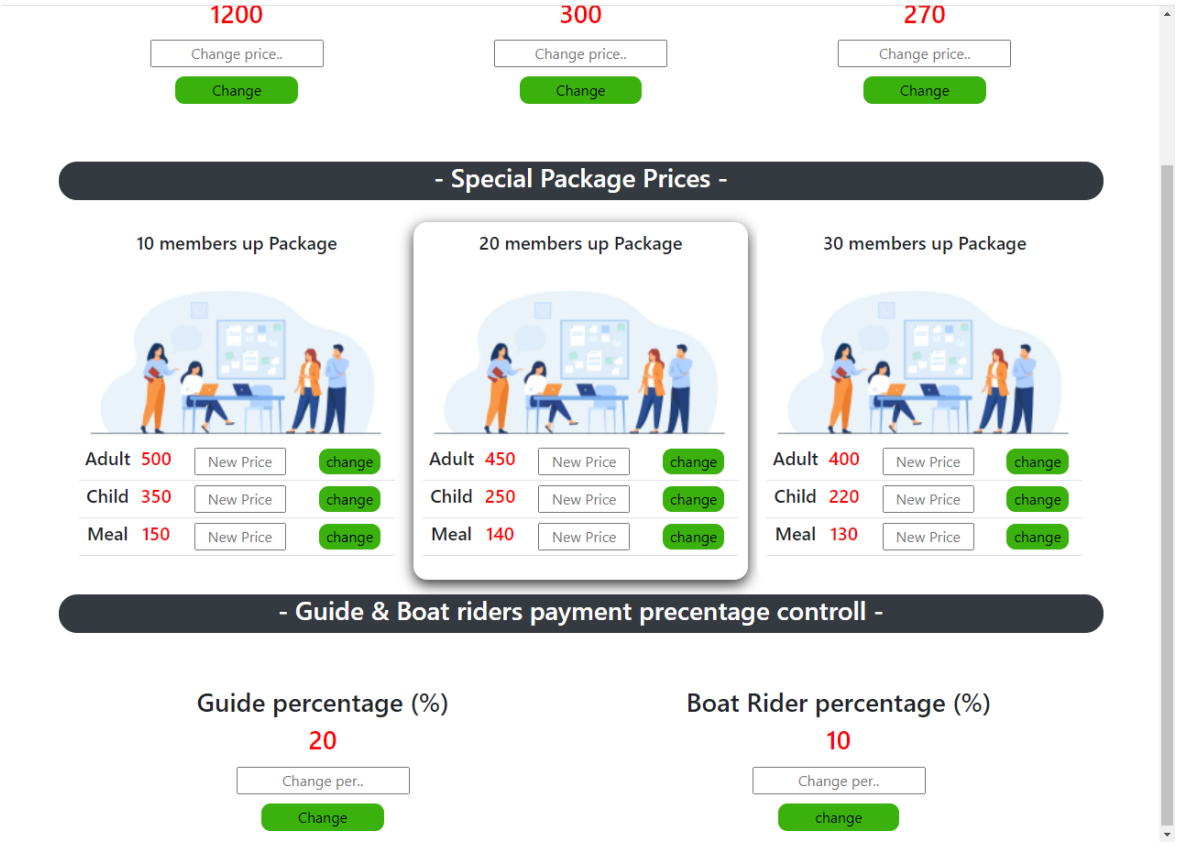
This module has special log in –



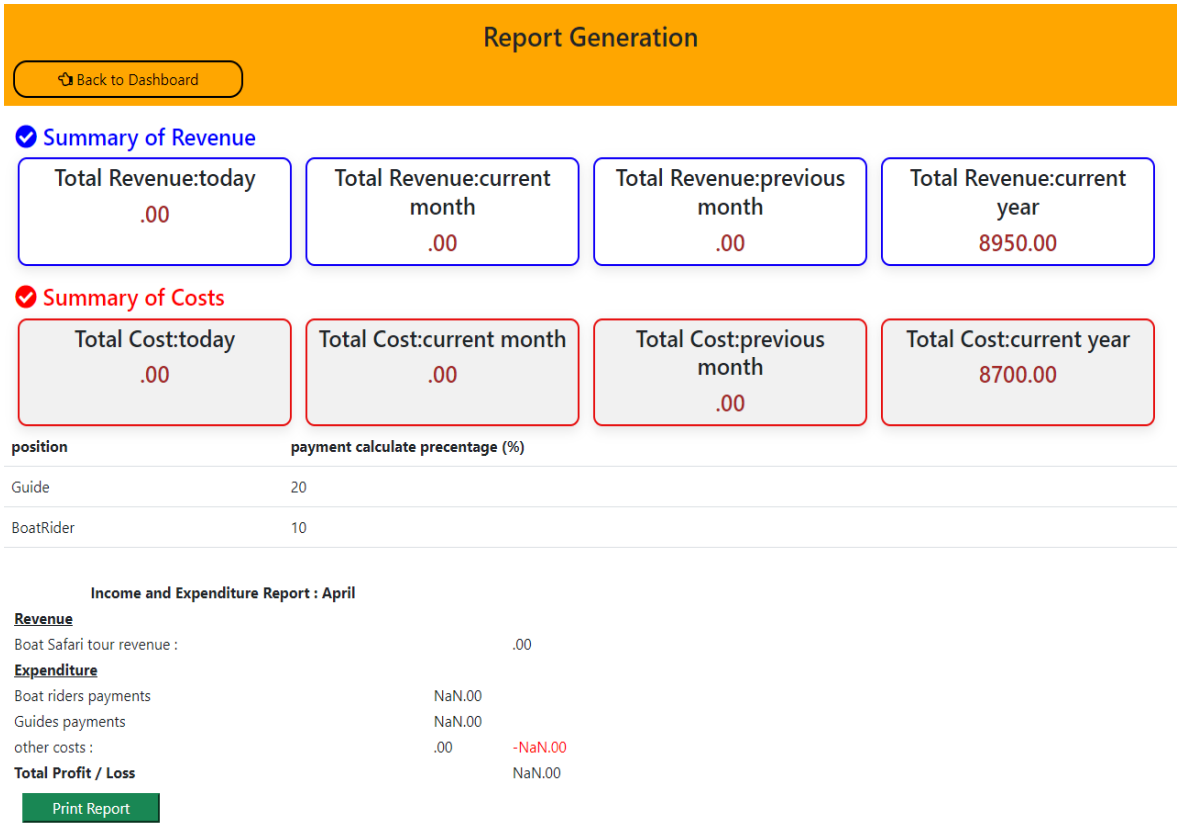
Price changing module

This also has special log in and authorized persons only can access. Because this is the “Major part of the system”. That controls all prices and percentages in system, which rates are used for bill calculations and employee payment calculations.





Report generation module



REPORT GENERATION

That module helps to find out business revenue and cost for current day , month , or year

- Summary of revenue
- Summary of costs
- Print report option

5.CHAPTER 5

5.1 System Code Development

5.1.1 Front – end technologies

Front end development is a style of computer programming that focuses on the coding and creation of elements and features of a website that will then be seen by the user. It's about making sure the visual aspects of a website are functional. You can also think of front end as the "client side" of an application. This means your job is to code and bring to life the visual elements of a website. You'd be more focused on what the user sees when they visit a website or app. And, you'd want to make sure the site is easy to interact with while also running smoothly.

Front end build elements like:

- Buttons
- Layouts
- Navigation
- Images
- Graphics
- Animations
- Content organization

Used Technologies:

- HTML
- SCSS
- Java Script
- Ajax

5.1.2 Back – end technologies

It's what makes a site interactive. You can also refer to the back end as the "server side" of a website. For instance, let's say you're running a social media website. You need an accessible place to store all of your users' information. This storage center is called a database and a few widely used examples include Oracle, SQL Server, and MySQL. Databases are run from a server,

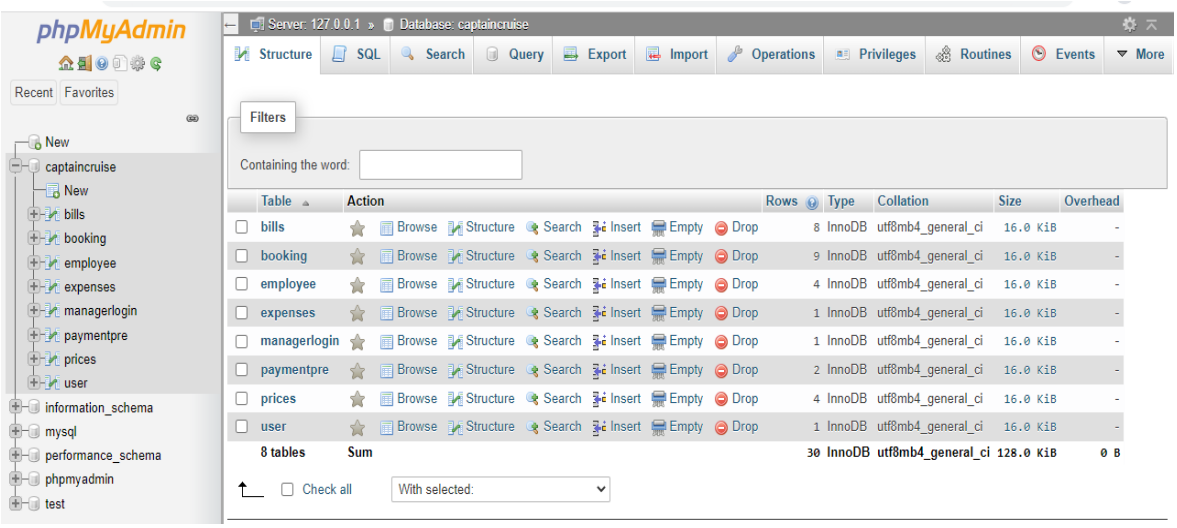
Back end web development work on tasks like:

- Building code
- Troubleshooting and debugging web applications
- Database management
- Framework utilization

Used Backend Technologies:

- PHP
- MYSQL
- WEB SERVER

DATABASES ON PHPMYADMIN SEVER



6.CHAPTER 6

6.1 System Testing

Software testing is the process of evaluating and verifying that a software product or application does what it is supposed to do. The benefits of testing include preventing bugs, reducing development costs and improving performance.

This system checked with below testing techniques:

- Acceptance testing: Verifying whether the whole system works as intended.
- Integration testing: Ensuring that software components or functions operate together.
- Unit testing: Validating that each software unit performs as expected. A unit is the smallest testable component of an application.
- Usability testing: Validating how well a customer can use a system or web application to complete a task.

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THANK YOU