

**Viraj Bhalerao:2022301002**

**Adwait Purao: 2021300101**

**Exp No:10**

**Subject:SE**

## **AIM : Prototype Development**

### **Ship/Ferry Ticketing System:**

The ferry industry plays a pivotal role in transportation, connecting people and goods across waterways efficiently. However, the effectiveness of ferry services is inherently tied to the efficiency of their operational processes, particularly the ticketing system. The current state of ferry ticketing systems presents challenges that impact both passengers and operators, necessitating the development of a robust and advanced solution.

### **Key Features:**

A well-designed ferry ticketing system should incorporate a range of features to meet the needs of passengers, ferry operators, and administrators. Here are key features that can enhance the efficiency and user experience of a ferry ticketing system:

#### **1. User-Friendly Interface:**

Intuitive and easy-to-navigate design for both online and on-site ticket purchasing.

Clear presentation of ferry schedules, routes, and available ticket options.

#### **2. Online Booking:**

Secure and user-friendly online platform for passengers to book and pay for tickets.

Real-time availability updates for different ferry routes and schedules.

### **3. Walk-In Ticketing:**

Streamlined ticket issuance process for walk-in customers at ferry terminals. Quick and efficient manual ticketing for passengers who prefer on-site purchases.

### **4. Seat Selection:**

Seat reservation and selection options for passengers to choose preferred seating arrangements. Visualization of ferry layout with available seats during the booking process.

### **5. Administrative Dashboard:**

Comprehensive dashboard for ferry operators to manage schedules, monitor ticket sales, and track occupancy rates. Reporting tools to analyze key performance indicators and make informed decisions.

### **6. Reporting and Analytics:**

Reporting features for administrators to track sales data, passenger demographics, and other relevant metrics. Analytics tools to identify trends, optimize schedules, and enhance overall system performance.

### **7. Backup and Recovery:**

Regular backups of the MySQL database to prevent data loss.

Procedures for data recovery in case of system failures or errors.

### **8. Logging and Auditing:**

Logging of important events and actions for auditing purposes.

Monitoring and tracking of system activities for security and compliance.

### **9. Third-Party Integrations:**

APIs for potential integration with external systems, such as accounting or CRM software.

## **Technology Used:**

### **Frontend:**

**Html:** HTML is a text file containing specific syntax, file and naming conventions that show the computer and the web server that it is in HTML and should be read as such. By applying these HTML conventions to a text file in virtually any text editor, a user can write and design a basic webpage, and then upload it to the internet.

### **CSS:**

CSS is designed to enable the separation of content and presentation, including layout, colors, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

### **JavaScript:**

JavaScript is a lightweight, cross-platform, single-threaded, and interpreted compiled programming language. It is also known as the scripting language for webpages. It is well-known for the development of web pages, and many non-browser environments also use it. JavaScript is a weakly typed language (dynamically typed). JavaScript can be used for Client-side developments as well as Server-side developments. JavaScript is both an imperative and declarative type of language. JavaScript contains a standard library of objects, like Array, Date, and Math, and a core set of language elements like operators, control structures, and statements.

### **Backend:**

#### **Php:**

PHP is an open-source server-side scripting language that many devs use for web development. It is also a general-purpose language that you can use to make lots of projects, including Graphical User Interfaces (GUIs). PHP is mostly used for making web servers. It runs on the browser and is also capable of running in the command line. So, if you don't feel like showing your code output in the browser, you can show it in the terminal.

#### **MySQL:**

MySQL is an open-source relational database management system (RDBMS) developed by Oracle. It is the most popular DBMS, used by companies with massive data storage needs such as Facebook, Netflix, Shopify, Uber, and more. MySQL falls into the relational database

category. Relational databases divide, organize, and store data across different tables. For example, a relational database backing a blog may have tables for posts, users, and comments.

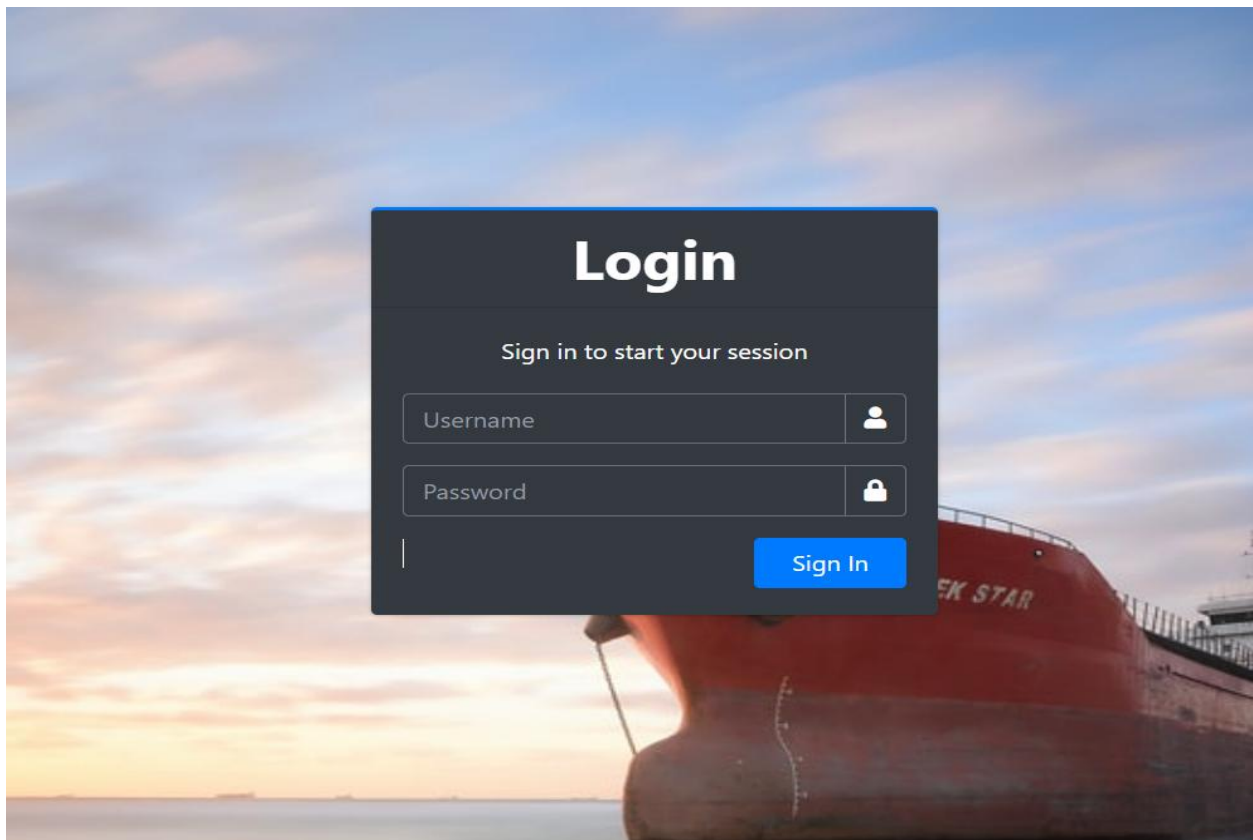
### **Software used:**

**Visual Studio:** To run the all frontend code.

**Xampp:** XAMPP stack of software is an open-source localhost server providing a number of functionalities through the package of software it contains. The software, which is part of XAMPP is started/stopped using the XAMPP Control Panel. It is used for testing the projects and modifications offline before launching it on the global web. One such very important functionality provided by XAMPP is the creation of the MySQL database. This is done by using phpMyAdmin.

### **Implementation Screenshots:**

#### **Login page:**



## DashBoard:

SFTRS

Dashboard

Schedule List

Reservation List

Report

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Welcome to Ship/Ferry Ticket Reservation System

Active Reservations  
1

Active Schedules  
2

## Schedule Ferry List:

SFTRS

Dashboard

Schedule List

Reservation List

Report

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

List of Schedule

+ Add New

Show 10 entries

Search:

#	Schedule	Vessel	Route	Passengers	Action
1	Departure: Sep 02,2021 11:00 PM Arrival: Sep 03,2021 02:00 AM	65499 - Vessel 102	From: Sample Port 102[Location 2] To: Sample Port 101[Location 1]	Max: 190 Booked: 1	Action
2	Departure: Nov 27,2023 01:00 PM Arrival: Nov 28,2023 01:00 PM	78954 - Vessel 101	From: Sample Port 102[Location 2] To: Sample Port 101[Location 1]	Max: 340 Booked: 1	Action

Showing 1 to 2 of 2 entries

Previous 1 Next

## Add Ferries:

SFTRS

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Dashboard

Schedule List

Reservation List

Report

Add New Schedule

Departure Date/Time

dd-mm-yyyy --:--

arrival Date/Time

dd-mm-yyyy --:--

Vessel

Please Select here

From

Please Select here

Destination

Please Select here

Accommodation

Please Select here

Add to list

Accommodation	Net Fare	Max Passenger	Action
---------------	----------	---------------	--------

Save

Cancel

## Update Ferries List:

SFTRS

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Dashboard

Schedule List

Reservation List

Report

Update Schedule

Departure Date/Time

02-09-2021 23:00

arrival Date/Time

03-09-2021 02:00

Vessel

65499 - Vessel 102

From

Sample Port 102[Location 2]

Destination

Sample Port 101[Location 1]

Accommodation

Please Select here

Add to list

Accommodation	Net Fare	Max Passenger	Action
CABIN FOR 4	1500	40	<div></div>
CABIN FOR 6	1300	0	<div></div>
TOURIST CLASS	900	150	<div></div>

Save

Cancel

## Reservation List:

SFTRS

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Dashboard

Schedule List

Reservation List

Report

List of Reservations

+ Create New

Show 10 entries

Search:

#	Date Created	Passenger	Price	Status	Action
1	Nov 26,2023	Ticket #: 24001689605614 Name: Adwait	2,000	Confirmed	Action
2	Aug 29,2021	Ticket #: 2147483647 Name: Claire Blake	900	Confirmed	Action
3	Aug 28,2021	Ticket #: 2147483647 Name: George Wilson	1,600	Cancelled	Action

Showing 1 to 3 of 3 entries

Previous 1 Next

## Create New Reservation:

SFTRS

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Dashboard

Schedule List

Reservation List

Report

Create New Reservation

Schedule

Nov 27,2023 01:00 PM [Route: Sample Port 102[Location 2] - Sample Port 10...

	Accomodation	Description	Net Fare
<input type="radio"/>	CABIN FOR 4	Accom 103	2,000
<input checked="" type="radio"/>	CABIN FOR 6	Accom 101	1,600
<input type="radio"/>	TOURIST CLASS	Accom 102	1,300

Passenger/s Details

Name

viraj

Contact #

123456789

Gender

Male

Address

Abcscsfdd

Date of Birth

dd -11-2023

Remove

Add Passenger

## Update the reservation:

SFTRS

Dashboard

Schedule List

Reservation List

Report

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Update Reservation

Schedule

Nov 27,2023 01:00 PM [Route: Sample Port 102[Location 2] - Sample Port 10...

	Accomodation	Description	Net Fare
<input type="radio"/>	CABIN FOR 4	Accom 103	2,000
<input type="radio"/>	CABIN FOR 6	Accom 101	1,600
<input checked="" type="radio"/>	TOURIST CLASS	Accom 102	1,300

Passenger/s Details

Name

Claire Blake

Contact #

09123989456

Gender

Female

Address

Sample address

Date of Birth

07-12-1997

Status

Confirmed

## Print the Reservations Details:

Dashboard

Schedule List

Reservation List

Report

List of Reservations

Create New

Showing 10 entries

Search:

#	Status	Action	
1	2,000	Confirmed	Action
2	900	Confirmed	Action
3	1,600	Cancelled	Action

Showing 1 t

Reservaton Details

Ticket #: 24001689605614

Departure Port (Date & Time):

Sample Port 102 [Location 2] Nov 27, 2023 01:00 PM

Destination Port (Date & Time):

Sample Port 101 [Location 1]Nov 28, 2023 01:00 PM

Vessel:

78954 - Vessel 101

Passenger Name:

Adwait

Gender:

Male

DOB:

Oct 27, 2003

Contact #:

98746521230

Address:

xyz



Generate the report:

SFTRS

Dashboard

Schedule List

Reservation List

Report

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Reservation Report

Date Start

19-11-2023

Date End

30-11-2023

Filter

Print

Ship/Ferry Ticket Reservation System

Reservation Report

Date Between 2023-11-19 and 2023-11-30

#	Schedule	Vessel	Route	Accommodation	Details
1	Departure: Nov 27,2023 13:00 Arrival: Nov 28,2023 13:00	78954 - Vessel 101	Departure: Sample Port 102[Location 2] Destination: Sample Port 101[Location 1]	TOURIST CLASS Net Fare: 900	Ticket #: 2147483647 Passenger: Claire Blake
2	Departure: Nov 27,2023 13:00 Arrival: Nov 28,2023 13:00	78954 - Vessel 101	Departure: Sample Port 102[Location 2] Destination: Sample Port 101[Location 1]	CABIN FOR 4 Net Fare: 2,000	Ticket #: 24001689605614 Passenger: Adwait

Print the report:

about:blank

11/26/23, 6:59 PM

about:blank

Ship/Ferry Ticket Reservation System  
Reservation Report  
Date Between 2023-11-19 and 2023-11-30

#	Schedule	Vessel	Route	Accommodation	Details
1	Departure: Nov 27,2023 13:00 Arrival: Nov 28,2023 13:00	78954 - Vessel 101	Departure: Sample Port 102[Location 2] Destination: Sample Port 101[Location 1]	TOURIST CLASS Net Fare: 900	Ticket #: 2147483647 Passenger: Claire Blake
2	Departure: Nov 27,2023 13:00 Arrival: Nov 28,2023 13:00	78954 - Vessel 101	Departure: Sample Port 102[Location 2] Destination: Sample Port 101[Location 1]	CABIN FOR 4 Net Fare: 2,000	Ticket #: 24001689605614 Passenger: Adwait

about:blank

Print

1 sheet of paper

Destination

Microsoft Print to PDF

Pages

All

Layout

Portrait

Color

Color

More settings

Print

Cancel

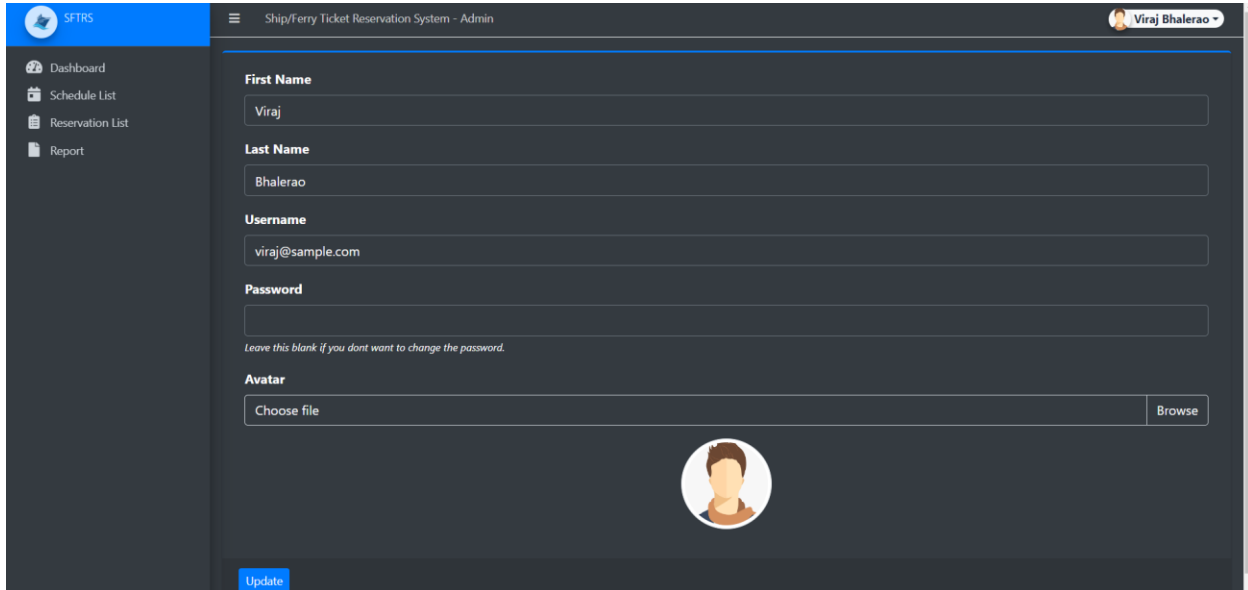
Filter

Print

Reservation System  
n Report  
19 and 2023-11-30

	Accommodation	Det
Sample Port 102[Location 2]	TOURIST CLASS	Ticke
Sample Port 101[Location 1]	Net Fare: 900	Pass
Sample Port 102[Location 2]	CABIN FOR 4	Ticke
Sample Port 101[Location 1]	Net Fare: 2,000	Pass

## Manage and update admin details:



The screenshot displays the 'Ship/Ferry Ticket Reservation System - Admin' interface. On the left is a sidebar with a blue header containing the 'SFTRS' logo and a menu with 'Dashboard', 'Schedule List', 'Reservation List', and 'Report'. The main content area has a dark background and contains a form for updating admin details. The form fields are: 'First Name' (Viraj), 'Last Name' (Bhalerao), 'Username' (viraj@sample.com), 'Password' (with a note 'Leave this blank if you dont want to change the password.'), and 'Avatar' (with a 'Choose file' button and a 'Browse' button). Below the form is a circular profile picture placeholder. At the bottom left of the form area is an 'Update' button. The top right of the interface shows the user's name 'Viraj Bhalerao' with a dropdown arrow.

SFTRS

Ship/Ferry Ticket Reservation System - Admin

Viraj Bhalerao

Dashboard

Schedule List

Reservation List

Report

**First Name**

Viraj

**Last Name**

Bhalerao

**Username**

viraj@sample.com

**Password**

Leave this blank if you dont want to change the password.

**Avatar**

Choose file

Browse

Update

## Conclusion:

In conclusion, the ferry ticketing management system aims to streamline the entire ticketing lifecycle, from reservation and booking to payment processing and notification delivery. By leveraging technologies such as HTML, CSS, JavaScript, PHP, and MySQL, the system ensures a seamless and secure experience for users across different devices.