

# MINI PROJECT

Group 7 - S6 A.D

## HOUSEBOAT DIGITAL MANAGER

Project Guide:

Mr.Tinku Soman Jacob

Group Members:

Betteena Thankachan

Rethin Krishna T R

Ronakk Jaiin

Sreyas

# INTRODUCTION

The houseboat tourism industry in Kerala is a captivating and sought-after experience for travelers, offering serene journeys through picturesque backwaters. However, despite its popularity, the industry faces significant gaps that hinder its full potential. This mini project aims to address these gaps by focusing on two key areas: the absence of a centralized booking system and the lack of proper safety protocols with certification system.

# Problem Statement

The problem is compounded by the absence of a comprehensive platform that connects various houseboat operators, making it challenging for tourists to find and book suitable houseboats.

# APPLICATIONS

**Streamlined Booking Process:** The houseboat booking system provides tourists with a convenient and efficient way to book houseboats in Kerala. By offering a user-friendly interface and real-time availability information, tourists can easily browse through various houseboat options, compare prices, and make reservations according to their preferences.

**Improved Resource Management:** The booking system allows houseboat operators to effectively manage their resources. By having a centralized platform, operators can efficiently manage their boat availability, track bookings, and optimize their scheduling.

**Quality Certification:** The booking system can integrate a certification process wherein houseboats undergo a thorough evaluation to meet specific quality standards. This evaluation can include criteria such as boat condition, cleanliness, safety equipment, trained staff, and compliance with environmental regulations. Houseboats that meet these standards will receive a quality certification or rating.

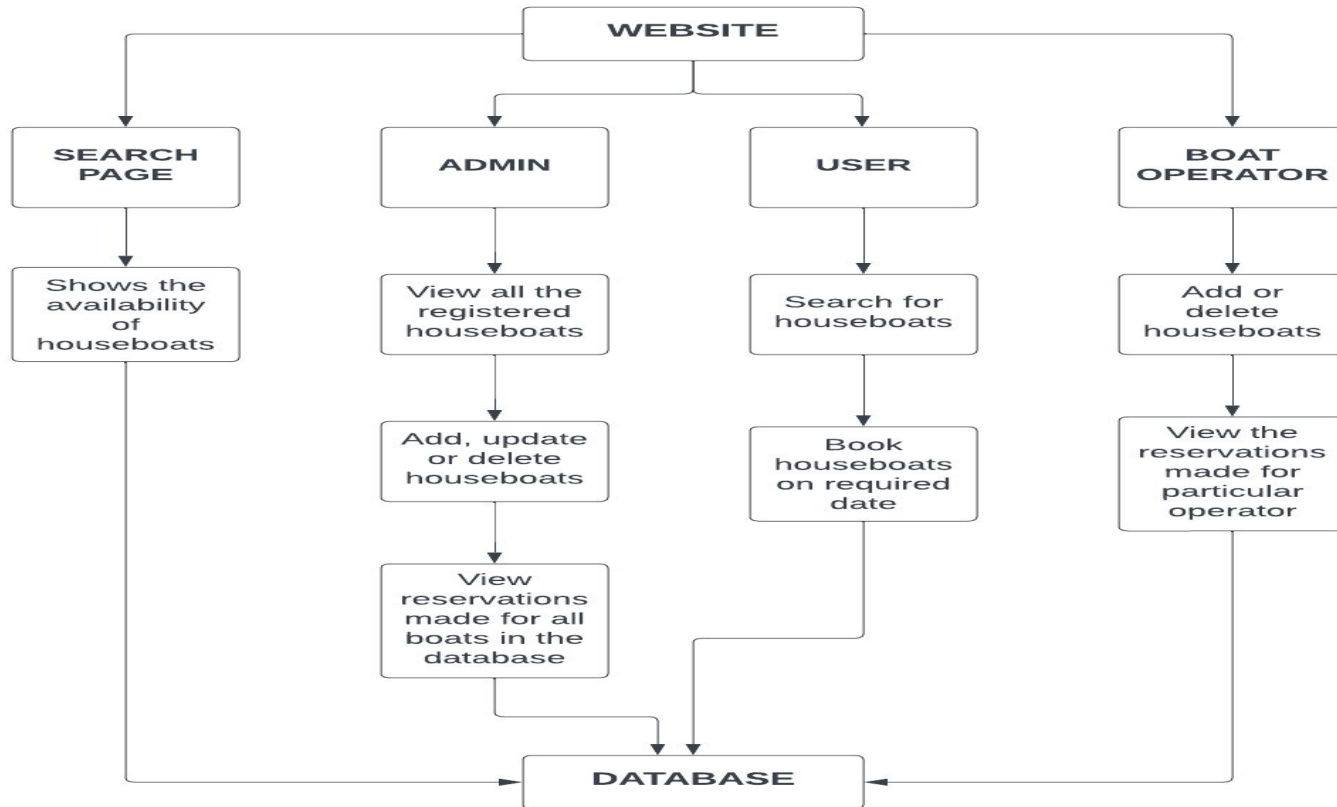
# Existing Works

- [www.keralatourism.org](http://www.keralatourism.org)
- [www.keralabackwater.com](http://www.keralabackwater.com)
- [www.paradise-kerala.com](http://www.paradise-kerala.com)
- [www.keralahouseboatclub.com](http://www.keralahouseboatclub.com)

# Challenges In Developing HDM

- **Data Integration:** One of the challenges is gathering accurate and up-to-date information from various houseboat operators and consolidating it into a centralized database.
- **Real-time Updates:** Providing real-time availability and pricing information requires continuous synchronization between the booking system and the houseboat operators' inventory management systems. Ensuring the timely and accurate updating of availability status and pricing can be challenging, especially when dealing with multiple operators and fluctuating demand.
- **User Adoption:** Encouraging users to adopt and utilize the booking system requires effective marketing and user education. Overcoming user resistance to change and promoting the benefits and convenience of using the platform can be a challenge, particularly in regions where traditional booking methods are prevalent.

# BLOCK DIAGRAM

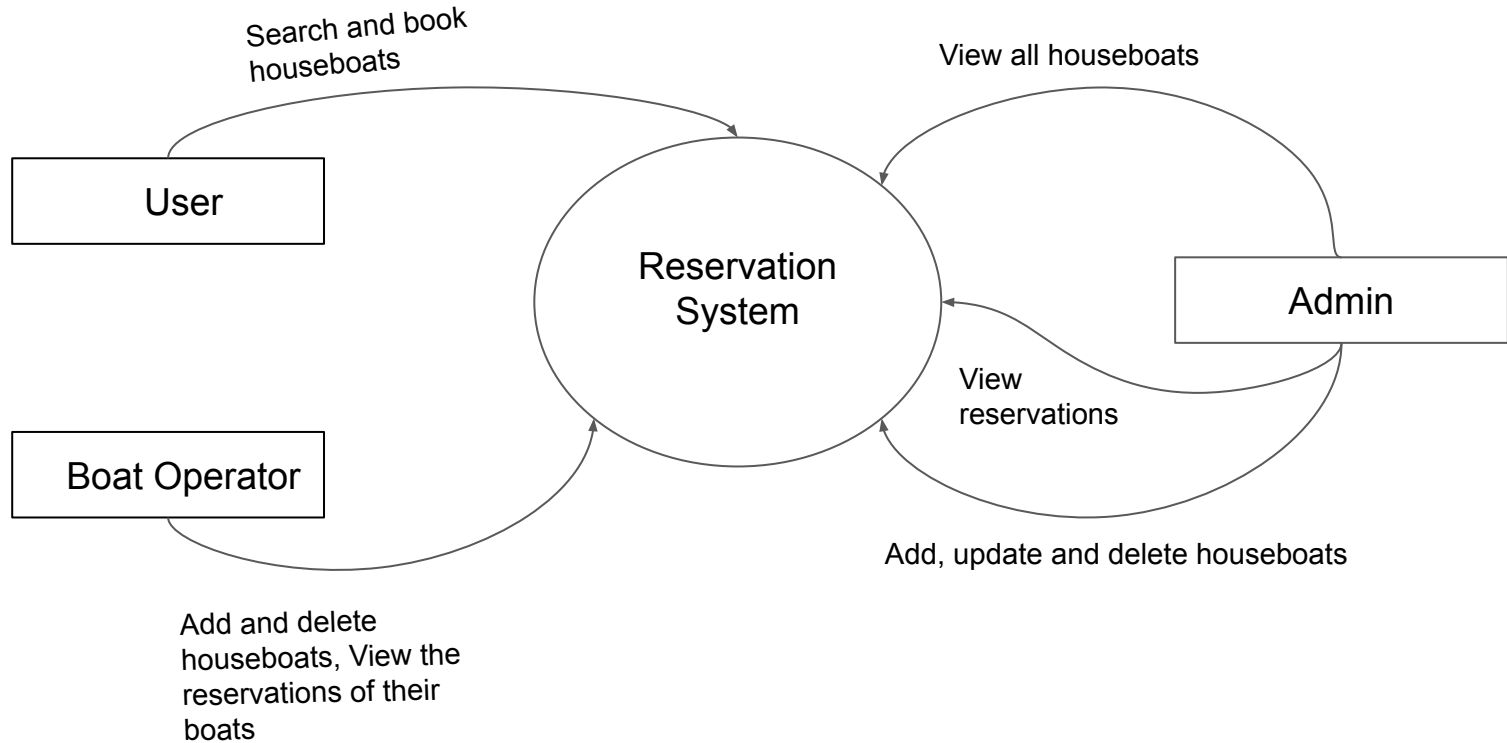


# Modules Used

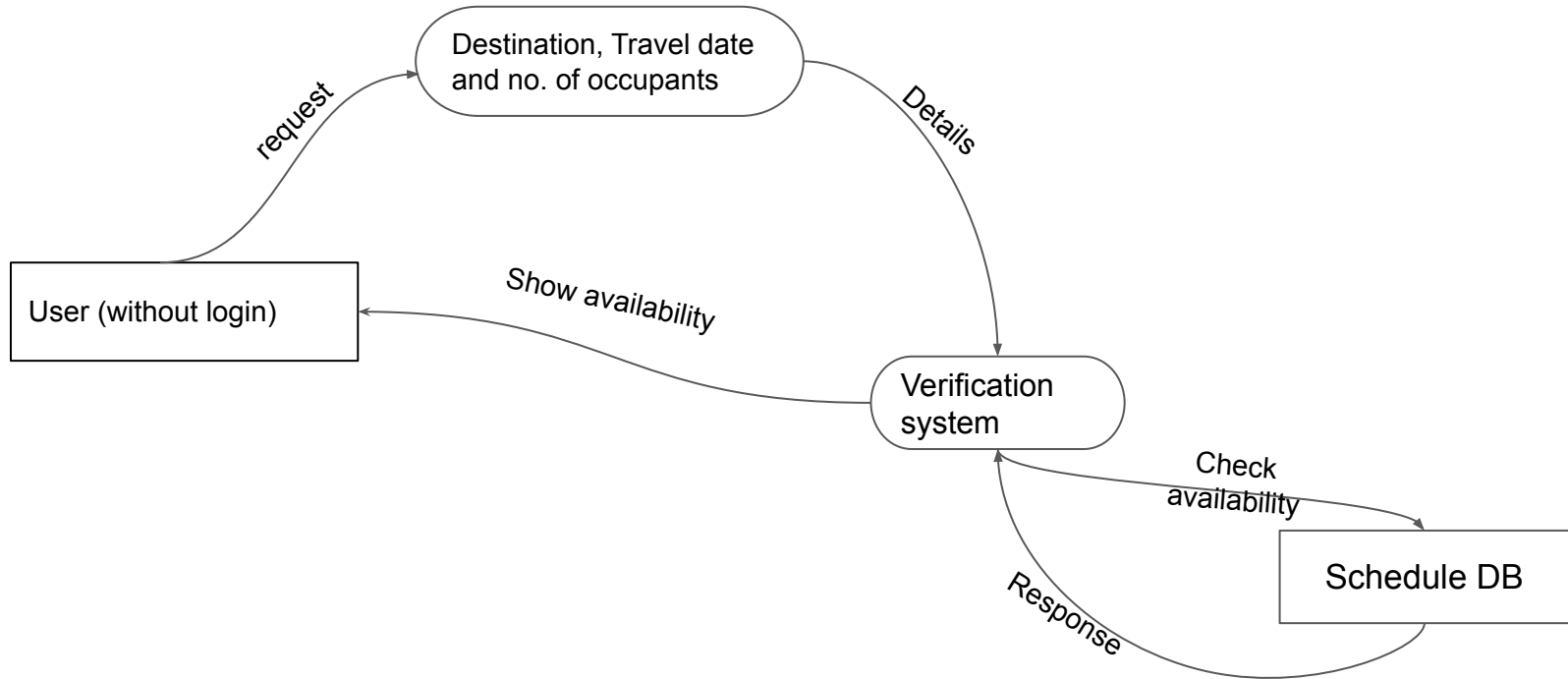
<u>Admin</u>	<u>User</u>	<u>Boat Operator</u>
<ul style="list-style-type: none"><li>• View all the houseboats registered</li><li>• Add, Update and Delete houseboats</li><li>• View all reservations made</li></ul>	<ul style="list-style-type: none"><li>• Search for houseboats with provided data</li><li>• Book houseboat accordingly</li></ul>	<ul style="list-style-type: none"><li>• Add and Delete houseboat</li><li>• View reservations of their boats</li></ul>



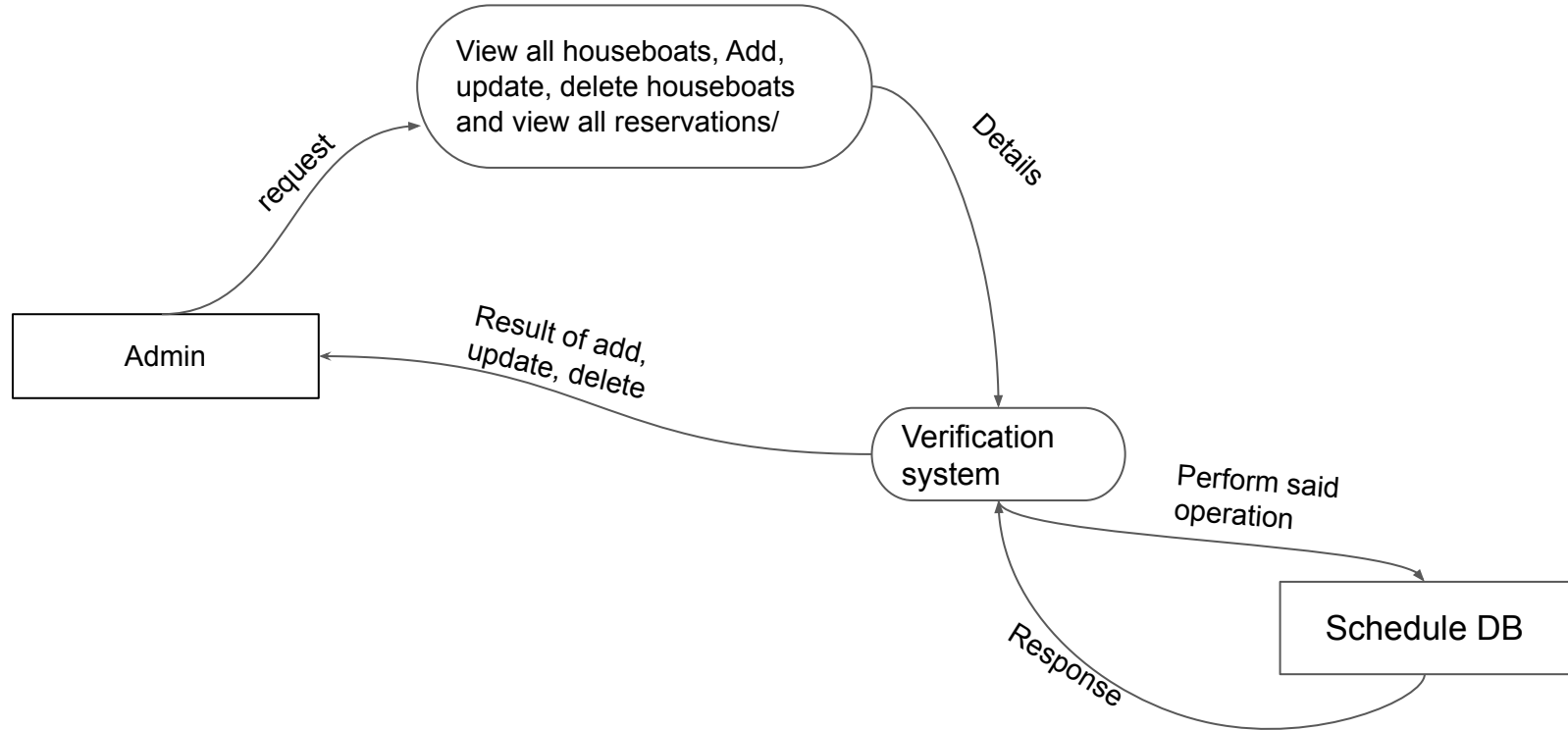
# DATA FLOW DIAGRAM (DFD)



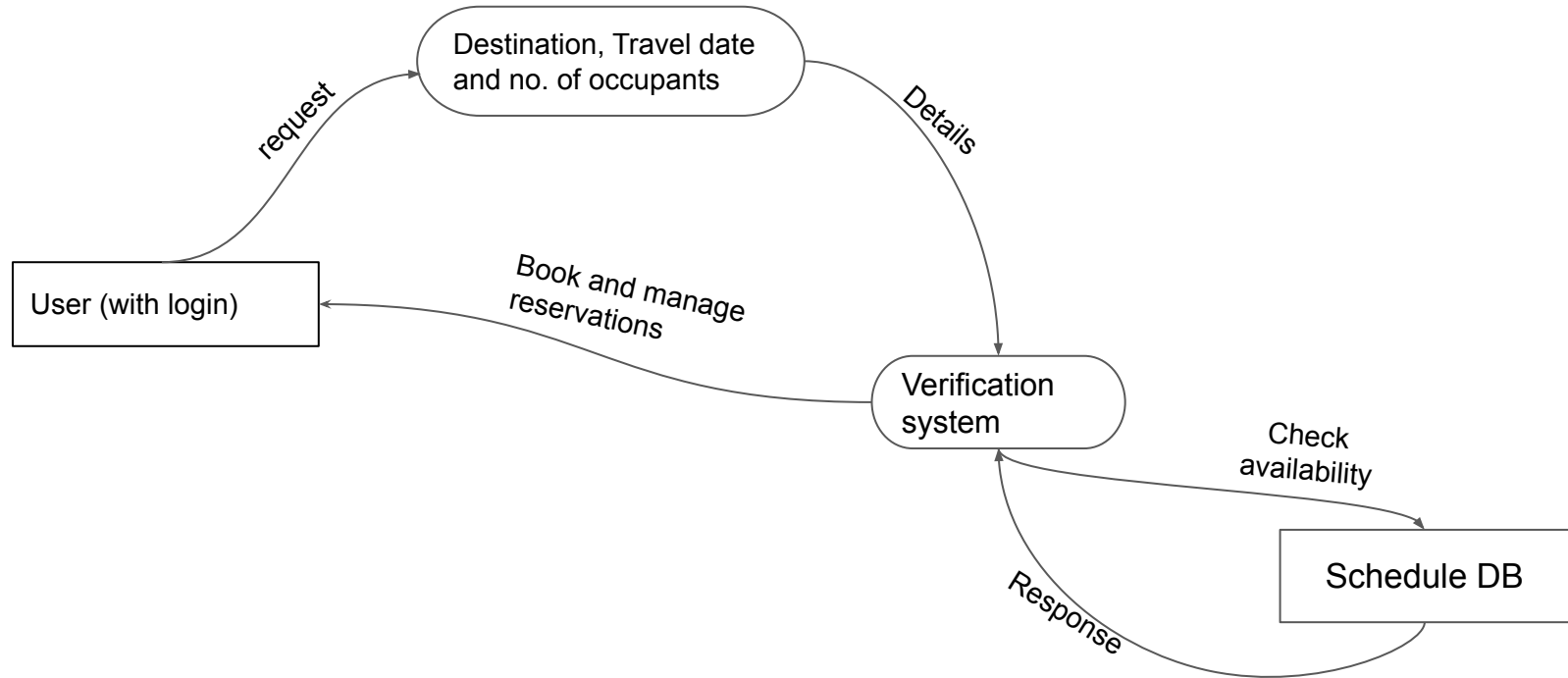
## LEVEL 1.1



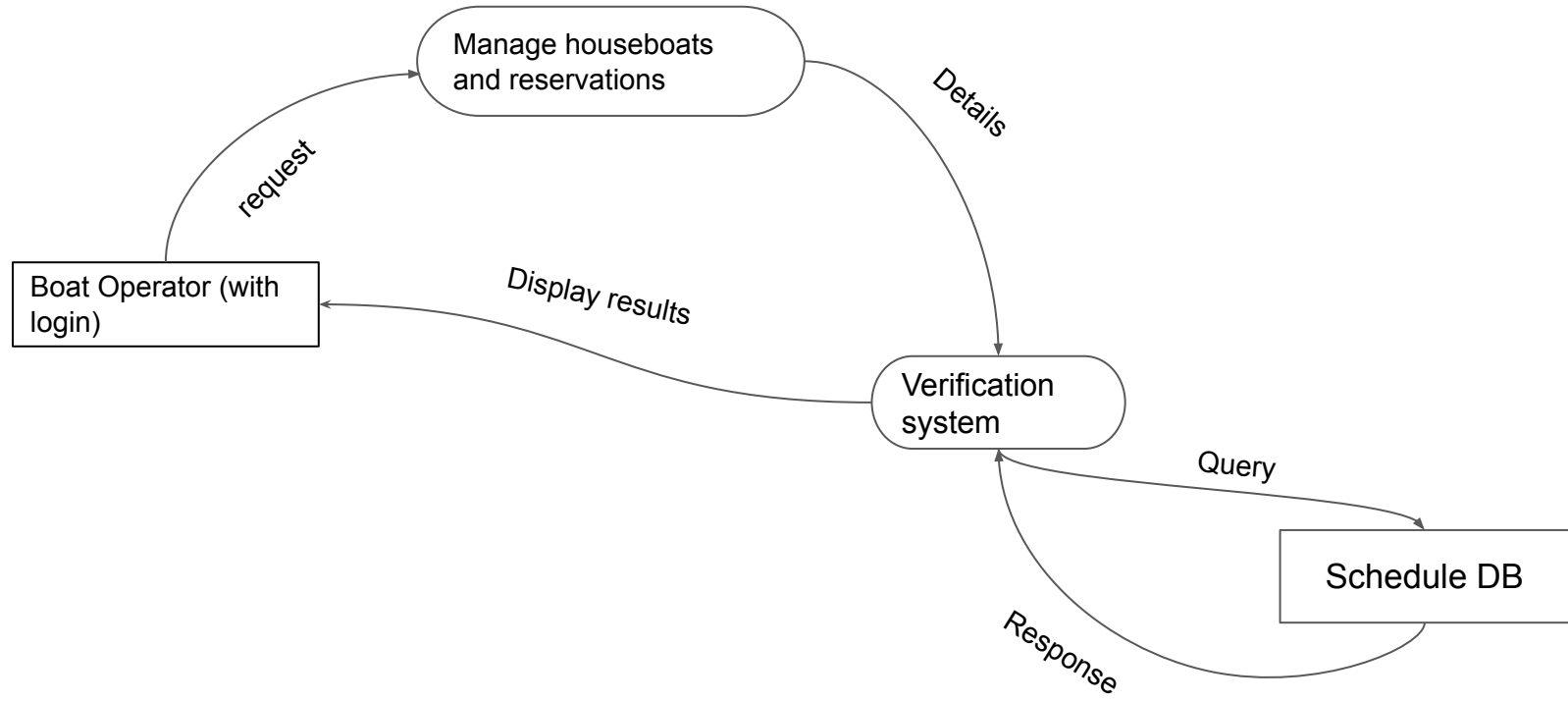
## LEVEL 2.1



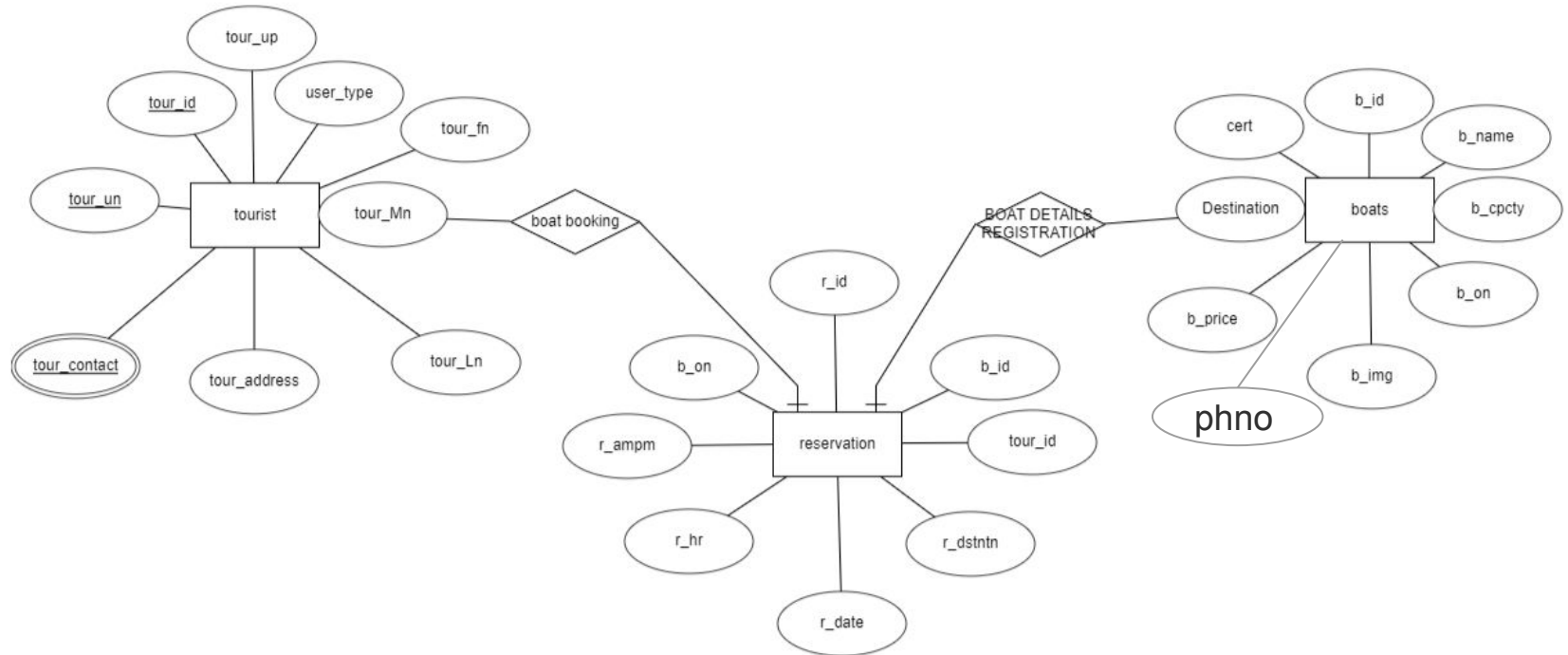
## LEVEL 2.2



## LEVEL 2.3



# ER DIAGRAM



# Implementation Details

- Html, Java, CSS – Website
- MariaDB– Database
- PHP – Back end programming

# Database Design

boats tourist	
🔑	tour_id : int(11)
📄	tour_fN : varchar(50)
📄	tour_mN : varchar(50)
📄	tour_IN : varchar(50)
📄	tour_address : varchar(255)
📄	tour_contact : varchar(15)
📄	tour_un : varchar(50)
📄	tour_up : varchar(35)
📄	user_type : varchar(1)

boats reservation	
🔑	r_id : int(11)
#	b_id : int(11)
#	tour_id : int(11)
📄	r_dstntn : varchar(35)
📄	r_date : varchar(35)
📄	b_on : varchar(35)
#	n_tickets : int(11)

boats boats	
🔑	b_id : int(11)
📄	b_name : varchar(35)
📄	b_cpcty : varchar(35)
📄	b_on : varchar(35)
📄	b_img : varchar(255)
#	b_price : double
📄	Destination : varchar(20)
📄	cert : varchar(255)
#	b_phno : double



# FUNCTIONALITIES

- Functionalities available :
- Login for Admin
- Admin can
  - ◆ View all the houseboats registered
  - ◆ Add, Update and Delete houseboats
  - ◆ View all reservations made
- Users can
  - ◆ Search for houseboats with provided data
  - ◆ Book houseboat accordingly
- Boat Operator can
  - ◆ Add and Delete houseboat
  - ◆ View reservations of their boats



#### Your Destination

#### Date

#### Adults

#### Children

 [Check availability](#)

# MAKE YOUR RESERVATION

Experience the beauty of Kerala's backwaters like never before with our innovative houseboat booking platform. Discover a seamless and hassle-free way to plan your dream houseboat vacation. From serene rivers to enchanting backwaters, we bring you a curated selection of houseboats that offer unparalleled comfort and mesmerizing views.

keralatour



## Get in Touch with Us

We value your feedback and inquiries. Our dedicated team is here to assist you with any questions or concerns you may have. Whether you want to inquire about our services, provide feedback on your experience, or seek assistance with a specific issue, we encourage you to reach out to us.

Name:

Email:

Message:

Submit



## Houseboat Booking FAQ

Can I bring my pet along?



Unfortunately, pets are not allowed on our houseboats for hygiene and safety reasons.

What are the check-in and check-out times?



Are meals included in the booking?



Is smoking allowed on the houseboats?





Login | [here](#)

**Username:**

**Password:**

Login ↗



### Registration Process

First Name:

Middle Name:

Last Name:

Address:

Contact #:

Username:

Password:

Confirm Password:

Account Type:

☒ User ☐ Boat Operator

Submit 

## Safety Measures for Passengers

### Life Jackets

Ensure that there are enough life jackets on board for every passenger, and make sure everyone wears them while on deck or when near the water. Life jackets should be properly fitted and in good condition.

### Safety Briefing

Before departing, the captain or crew should provide a safety briefing, explaining the location of safety equipment, emergency procedures, and potential hazards to be aware of while on the houseboat.

### No Overcrowding

Follow the capacity guidelines of the houseboat and avoid overcrowding. Overloading can cause stability issues and increase the risk of accidents.

### Children and Non-Swimmers

Extra care should be taken with children and non-swimmers. They should wear life jackets at all times and be supervised by adults when near the water.

### Avoid Alcohol

Avoid excessive alcohol consumption while on the houseboat. Alcohol impairs judgment and reaction times, increasing the risk of accidents.

### Watch Your Step

Be cautious when moving around the boat, especially on wet surfaces. Houseboat decks can become slippery, so walk carefully and hold on to handrails when available.

### Fire Safety

Follow all fire safety protocols on board. Avoid open flames in enclosed spaces and do not smoke inside the boat.

### Emergency Contacts

Carry a list of emergency contacts and radio frequencies to communicate with local authorities or rescue services if needed.

### First Aid Kit

Have a well-stocked first aid kit on board and know how to use its contents in case of minor injuries.

By following these safety measures, passengers can enjoy a safe and enjoyable houseboat experience. Always remember that safety should be a top priority, and being prepared for potential emergencies is essential for everyone on board.

[Back](#)

Boat Name:

Boat Capacity:

Ticket price:

Destination:

Phone number:

Boat Picture:

Boat Certificate:

[Save](#)



[Back](#)**Boat Name:****Boat Operator Name:****Boat Capacity:****Ticket price:****Boat Certificate:** No file chosen[Save](#)



## List of Boats Available



### EZHIMALA BACKWATER CRUISE

**Capacity:** 30

**Price:** 1500

**Operator Name:** Dineshan. T

**Destination:** Kasargod

[Book Now](#)

### Janaki

**Capacity:** 35

**Price:** 2000

**Operator Name:** Sreekumar.N

**Destination:** Kasargod

[Book Now](#)

### SNEHATHEERAM

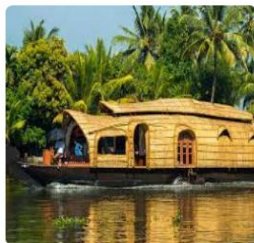
**Capacity:** 40

**Price:** 1700

**Operator Name:** Pavithran. P.P

**Destination:** Kasargod

[Book Now](#)



## Angel

**Capacity:** 30

**Price:** 1200

**Operator Name:** binul

**Destination:** Alleppey

**Phone Number:** 7736959675

**Number of Tickets Available:** 29

**Number of Tickets:**

0 ▾

Book Now



## Aqua Jumbo

**Capacity:** 20

**Price:** 4000

**Operator Name:** Josekutty Joseph

**Destination:** Kollam

**Phone Number:** 8848360244




**Number of Tickets Available:** 20

**Number of Tickets:**

0 ▾

Book Now

[New](#)Show  entriesSearch: 

BOAT NAME	BOAT CAPACITY	BOAT OPERATOR NAME	BOAT IMAGE	PRICE	Phone No	ACTION
Angel	30	binul		1200	7736959675	<a href="#">Delete</a>
merlin	50	binul		2500	7654321098	<a href="#">Delete</a>
test2	40	binul		1000	9870123456	<a href="#">Delete</a>

Showing 1 to 3 of 3 entries

[Previous](#) [1](#) [Next](#)



**Date:**





















**Tickets Booked:**

[Update Reservation](#)



# Boat Reservation











[Boats](#)[Reservation](#)[Logout](#)Show  entriesSearch: 

BOAT NAME	BOAT CAPACITY	BOAT OPERATOR NAME	BOAT IMAGE	PRICE	CERTIFICATE	ACTION
Angel	30	binul		1200		<a href="#">Edit</a> <a href="#">Delete</a>
Aqua Jumbo	20	Josekutty Joseph		4000		<a href="#">Edit</a> <a href="#">Delete</a>
aquajumbo	25	jaffer		2000		<a href="#">Edit</a> <a href="#">Delete</a>
Casino	50	Johnson E		1000		<a href="#">Edit</a> <a href="#">Delete</a>
EZHIMALA BACKWATER CRUISE	30	Dineshan. T		1500		<a href="#">Edit</a> <a href="#">Delete</a>
INLAND CRUISE	50	Damodaran. K.K.		3000		<a href="#">Edit</a> <a href="#">Delete</a>
Janaki	35	Sreekumar.N		2000		<a href="#">Edit</a> <a href="#">Delete</a>
JK Royal Cruise	40	Joseph Francis		3000		<a href="#">Edit</a> <a href="#">Delete</a>
merlin	50	binul		2500		<a href="#">Edit</a> <a href="#">Delete</a>
Shivaganga	25	P. Asokan		4000		<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 10 of 13 entries

[Previous](#) [1](#) [2](#) [Next](#)

Show  entriesSearch: 

TOURIST	CONTACT	ADDRESS	IMAGE	BOAT NAME	OPERATOR NAME	DESTINATION	DATE	PRICE
philip sabu R	2378939823	wgdhgd		test2	binul	Kollam	2023-07-19	1000
philip sabu R	2378939823	wgdhgd		Aqua Jumbo	Josekutty Joseph	Kollam	2023-07-19	4000
philip sabu R	2378939823	wgdhgd		Aqua Jumbo	Josekutty Joseph	Kollam	2023-07-19	4000
philip sabu R	2378939823	wgdhgd		Aqua Jumbo	Josekutty Joseph	Kollam	2023-07-24	4000
philip sabu R	2378939823	wgdhgd		test2	binul	Kollam	2023-07-24	1000
philip sabu R	2378939823	wgdhgd		Angel	binul	Alleppey	2023-07-26	1200
philip sabu R	2378939823	wgdhgd		Angel	binul	Alleppey	2023-07-28	1200
philip sabu R	2378939823	wgdhgd		Angel	binul	Alleppey	2023-07-25	1200
philip sabu R	2378939823	wgdhgd		Casino	Johnson E	Alleppey	2023-07-26	1000
raahul h k	85678	ugdbuasbdjd		Aqua Jumbo	Josekutty Joseph	Kollam	2023-07-27	4000

Showing 1 to 10 of 12 entries

[Previous](#) [1](#) [2](#) [Next](#)

## Phase - 1

<u>Activities</u>	<u>People Assigned</u>	<u>Start Date</u>	<u>End Date</u>	<u>Progress</u>
Project research	All members of the group	Apr 28,2023	May 05,2023	<div><div></div></div> 100%
Project discussion with experts	All members of the group	May 05,2023	May 08,2023	<div><div></div></div> 100%
Project abstract preparation and submission	All members of the group	May 08,2023	May 12,2023	<div><div></div></div> 100%
Web framework selection	All members of the group	May 12, 2023	May 15,2023	<div><div></div></div> 100%



## Phase - 2

<u>Activities</u>	<u>People Assigned</u>	<u>Start Date</u>	<u>End Date</u>	<u>Progress</u>
Front Page and logo	Sreyas,Rethin	Jun 3,2023	June 15,2023	<div><div></div></div> 100%
FAQ page	Rethin	Jun 4,2023	June 11,2023	<div><div></div></div> 100%
Contact us page	Betteena	Jun 4,2023	June 20,2023	<div><div></div></div> 100%
Sign in and register page	Sreyas,Ronakk	May 25, 2023	June 15,2023	<div><div></div></div> 100%

## Phase - 3

<u>Activities</u>	<u>People Assigned</u>	<u>Start Date</u>	<u>End Date</u>	<u>Progress</u>
Database	Betteena	June 28,2023	July 25,2023	<div><div></div>100%</div>
Admin page	Sreyas	June 25,2023	July 25,2023	<div><div></div>100%</div>
User booking page	Sreyas	June 25,2023	July 25,2023	<div><div></div>100%</div>
Boat operator page	Ronakk	June 15, 2023	July 25,2023	<div><div></div>100%</div>

# RESULTS AND DISCUSSION

- **Centralized Booking System:** The developed website successfully provides a centralized platform for booking houseboats. Users can access real-time information about availability, rates, and ratings of various houseboats, allowing them to make informed decisions and conveniently book their desired experiences. The system effectively connects multiple houseboat operators, streamlining the booking process for tourists.
- **Safety Protocols and Certification:** The implemented safety protocols, including safety briefings and guidelines for passengers, contribute to enhancing the overall safety standards in the houseboat tourism industry. Passengers receive essential safety instructions and guidelines for a secure and enjoyable journey. Moreover, the certification system incentivizes operators to maintain and improve their services, resulting in an elevation of safety measures and overall standards.

The results and outcomes achieved through this mini project contribute to bridging the existing gaps in the houseboat tourism industry in Kerala. The developed solutions provide a comprehensive platform for booking, prioritize safety protocols, and enhance the overall tourist experience.

The project's success showcases the value of leveraging technology and student initiatives in improving and innovating the tourism sector, benefiting both tourists and the houseboat industry as a whole.

# LIMITATIONS

- **Data Accuracy and Reliability:** The accuracy and reliability of the information provided by houseboat operators, such as availability, rates, and ratings, may vary. Ensuring the accuracy of data displayed on the booking system requires proper validation and verification mechanisms.
- **Infrastructure Limitations:** The availability and reliability of internet connectivity and mobile network coverage in the remote areas where houseboat tourism operates may pose challenges. Ensuring seamless online booking and real-time information updates may be limited by infrastructure constraints.
- **Continuous Maintenance and Support:** The project requires ongoing maintenance, updates, and technical support to address any issues, enhance system performance, and adapt to changing user needs. Allocating resources for long-term maintenance is crucial for sustained success.

# REFERENCES

- [W3Schoolscool](#)
- [Codeacademy](#)
- [Mysql.com](#)
- [Mytrip](#)
- [Crusekerala.in](#)
- [kasargod.nic.in](#)

THANK YOU