A

Project Report

On

Book Your Ambulance

Submitted by

Omkar More

Roll No : 22137

MCA–I 3333

SEM–I

Under the guidance of

Dr.Ramesh Jadhav

For the Academic Year 2022-23

Sinhgad Institutes

Sinhgad Technical Education Society's

Sinhgad Institute of Management

Vadgaon Bk Pune 411041

(Affiliated to SPPU Pune & Approved by AICTE New Delhi)

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FOUNDER PRESIDENT	FOUNDER SECRETARY	DIRECTOR - MCA

Date:

CERTIFICATE

This is to certify that **Mr.Omkar Jeevan More** has successfully completed his project work entitled **"Book Your Ambulance"** in partial fulfillment of MCA – I SEM –I Mini Project for the year 2022-2023. He has worked under our guidance and direction.

Dr.Ramesh Jadhav
Project Guide

Dr. Chandrani Singh
Director, SIOM-MCA

Examiner 1

Examiner 2

Date:

Place: Pune

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DECLARATION

I certify that the work contained in this report is original and has been done by meunder the guidance of my supervisor(s).

- The work has not been submitted to any other Institute for any degree or diploma.
- I have followed the guidelines provided by the Institute in preparing the report.
- I have conformed to the norms and guidelines given in the Ethical Code ofConduct of the Institute.
- Whenever I have used materials (data, theoretical analysis, figures, and text) fromother sources, I have given due credit to them by citing them in the text of the report and giving their details in the references.

Name and Signature of Project Team Members*:*

Sr. No.	Seat No.	Name of students	Signature of students
1		Omkar Jeevan More	

ACKNOWLEDGEMENT

It is very difficult task to acknowledge all those who have been of tremendous help in this project. I would like to thank my respected guide **Dr.Ramesh Jadhav** for providing me necessary facilities to complete my project and also for their guidance and encouragement in completing my project successfully without which it wouldn't be possible. I wish to convey my special thanks and immeasurable feelings of gratitude towards **Dr.Chandrani Singh, Director SIOM-MCA.** I wish to convey my special thanks to all teaching and non-teaching staff members of **Sinhgad Institute of Management, Pune** for their support.

Thank You

Yours Sincerely,

Omkar Jeevan More

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CHAPTER 1: INTRODUCTION

1.1.Abstract

Book Your Ambulance system is helps to get ambulance in case of medical emergency .First aid is required when any person met with an accident so our main aim is to provide instant help. It will also reduce the efforts which is exist in manually maintained system and can handle data easily .The user can search for the ambulance which is located to that area. So without investing too much time first aid and proper treatment can be provided by implementing this project. User can also check status of ambulance (i.e. available or non available) so that they will search and call to another ambulance which is available in near area or city. This system is created for a PC and android based application .this system is user friendly and also provides instant acess to ambulance .Maintenance time and cost are greatly reduced by using this software.

1.2. Existing System and Need for System

The performance of existing system is less, because the response time is not fast. That means the response time have direct relation with performance. All the records associated with in the system are recorded and stored manually, the security that the system provides is not good. The system shouldn't provide sufficient protection for accessing and manipulation of the records associated with the system. Therefore, it is not easily protected and control. The current system is insufficient, because of response time.

• Purpose of Ambulance management is to reduce the efforts which is exist in manually maintained system.

• To provide a smooth flow among pre-hospital providers, emergency medical care providers.
• To reduce maintenance time and cost.

• To generate accurate information easily and quickly at different levels.

• Purpose of this system to provide user-friendly interaction

1.3.Scope of System

User can search ambulance by name of city. This project will overcome the problems associated with the manual system. User can register the user information, check ambulance availability, send patient information to driver. This system helps to generate reports, maintain the patient information and the ambulance information and also allows user to submit feedback. Location tracking of driver and user is out of scope of this project. this system is user friendly and also provides instant access to ambulance Maintenance time and cost are greatly reduced by using this software.

1.4. Operating Environment Hardware and Software

HARDWARE SPECIFICATION -

Processor: Any Processor above 1 GH

RAM: Minimum 2GB.

Hard Disk: Minimum 500 GB.

SOFTWARE SPECIFICATION -

Front End: Java Servlet/ JSP, My SQL, Bootstrap, HTML, Ajax, JavaScript.

Middle Layer: Java, Servlet.

Back-End: MySQL 5.0.

Software: Eclipse Neon.

Operating System: Windows Family.

1.5.Brief Description of Technology used

There are multiple technologies that are widely used for developing software. List of mainly used technologies as follows.

One of the most difficult programming languages for software development, gaining an understanding and knowledge of C makes it simple to learn other languages such as C++. Since it is a machine-level language, a tester who has its knowledge does not find it difficult to test a program written in any other language as well.

Java technology is a high-level programming and a platform independent language. Java is designed to work in the distributed environment on the Internet. Java has a GUI features that provides you better "look and feel" over the C++ language, moreover . Java find its extensive use in the intranet applications and other e-business solutions that are the grassroots of corporate computing. Java , regarded as the most well described and planned language to develop an applications for the Web. Java is a well-known technology which allows you for software designed and written only once for an “virtual machine" to run on a different computer, supports various Operating System like Windows PCs, Macintoshes, and Unix computers. Java is used to create standalone applications which may run on a single computer or in distributed network. It is also be used to create a small application program based on applet, which is further used for Web page.

Regular HTML, that is static HTML, does not contain dynamic information. So, it does not react to user input and is also not fit for accessing server side resources. JSP contains both static and non static content. As static part, it contains HTML.

CHAPTER 2: PROPOSED SYSTEM

2.1. Feasibility Study

A feasibility study is a crucial step in determining the viability of a Book Your Ambulance system for a college project. The feasibility study should consider various aspects such as technical feasibility, economic feasibility, and operational feasibility.

Technical feasibility: The technical feasibility of our system depends on the availability of technical resources, such as the expertise of developers, availability of APIs, etc. The feasibility study should consider the technical expertise required to develope the System and it investigate technical feasibility of each implementation alternative.

Economic feasibility: it evaluating effectiveness of system by using reports and other things The economic feasibility of system depends on the costs involved in developing, maintaining, and supporting the these system. The feasibility study should consider the costs of hardware, software, and personnel required to develop and operate the system. The study should also evaluate the potential benefits and cost savings that the system can provide in the long run.

Operational feasibility: It determines wheather system is operating effectively once its developed and implemented . The operational feasibility of the system depends on the acceptance of the request by the driver and the level of training and support required to ensure effective usage. It also ensures that the computer resources and network architecture of system are workable or not.

2.2. Objectives of the proposed system

The system provides the following: -

• Store & manage patient and ambulance information in the database.

• Increase accessibility and availability of ambulance service.

• To provide urgent pre-hospital treatment and stabilization for serious injuries and illness.

• To provide fast response

• To provide early reporting

• To maintain all the records of patients and ambulance

2.3. Users of the system

Admin:

A special user of the system who can manage the system setup access right for other users/Patients/Drivers. And also, can remove the user information from the database.

For admin –

• Login: This module is responsible to let the user start using the app.

• Register: Admin need to first register using valid details to access the system.

• Forget password: if admin forget his/her password then they need to change the password with valid details.

• Add Ambulance (option): Admin will add ambulance with details like d, Driver name ,city ,state ,phone no.

• Manage ambulance: admin can view ,delete ,edit ambulance • manage users: admin can view, delete, edit user.

• Generate report: admin can generate reports

Patient:

Someone who can access the system and use ambulance service & other things.

For Patient/User

• Login: This module is responsible to let the user start using the app.

• Find ambulance(search):user in emergency find ambulance by city. There is given status of ambulance available or not. if available then user can call driver or request for an ambulance.

• Send Request : This module allows user to request for an ambulance

• Fill form: user can also fill form which contain details like name of patient, source, destination, phone no.

Driver:

Someone who can access system and he/she drive ambulance to give ambulance service for the society i.e. transport patient from incident site/Home to hospital.

For Driver

• Login: This module is responsible to let the user start using the app.

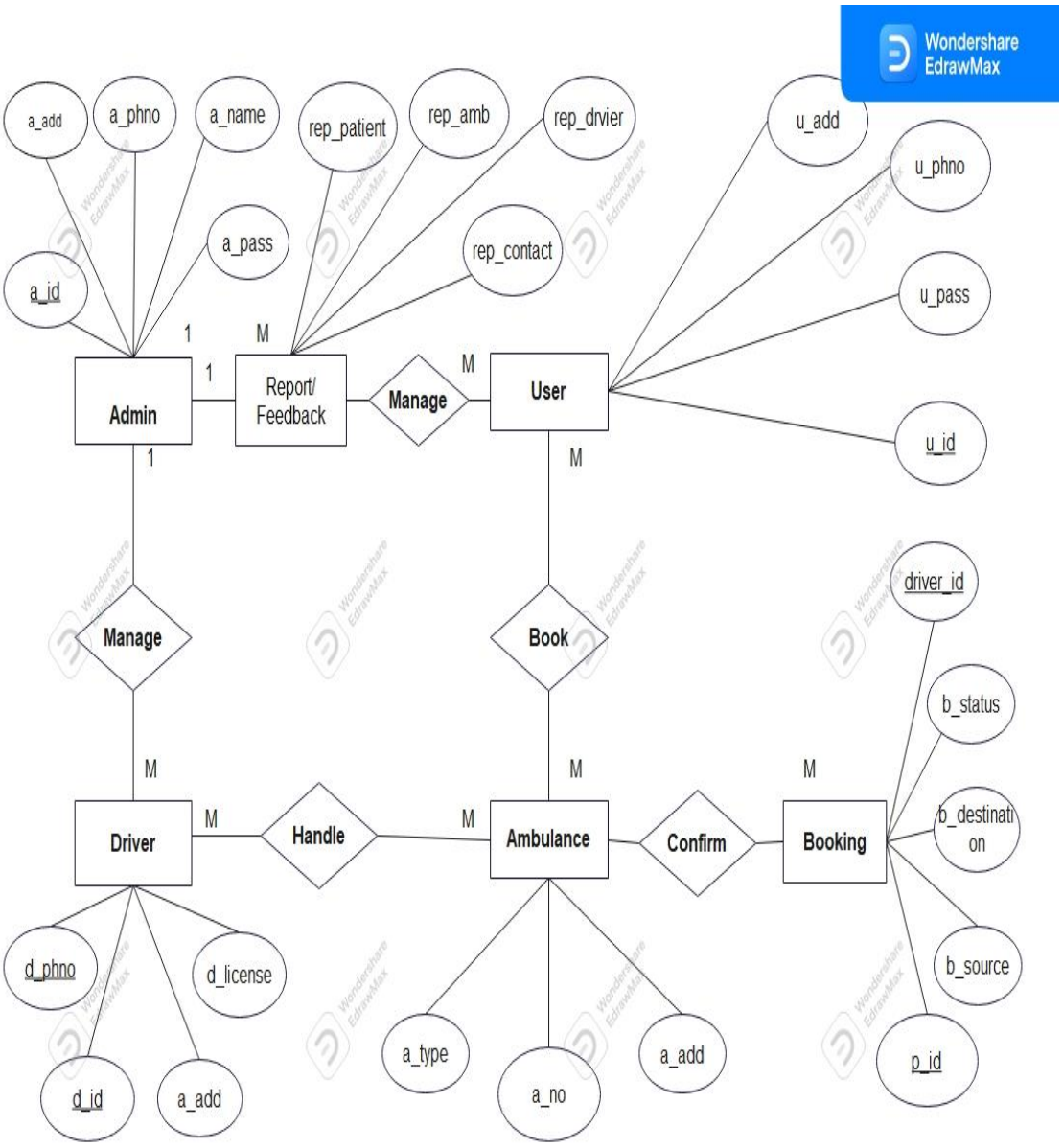
• View User Information: address, phone no name

• Request admin to Add ambulance: driver or owner of ambulance can request to admin to verify documents of ambulance and add it.

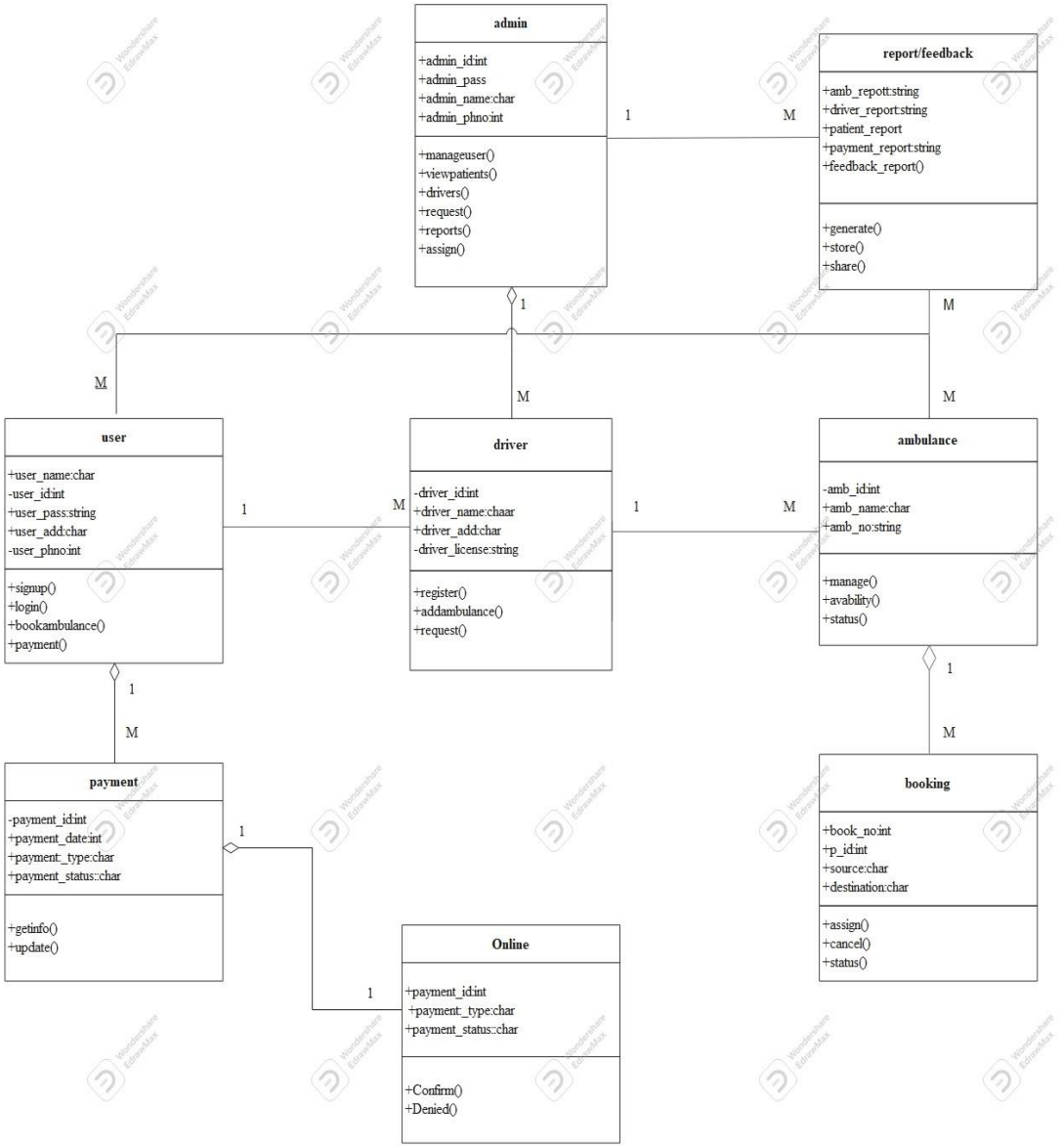
• Change status: driver can change status of ambulance i.e. available to not available once any user book it.

CHAPTER 3: ANALYSIS AND DESIGN

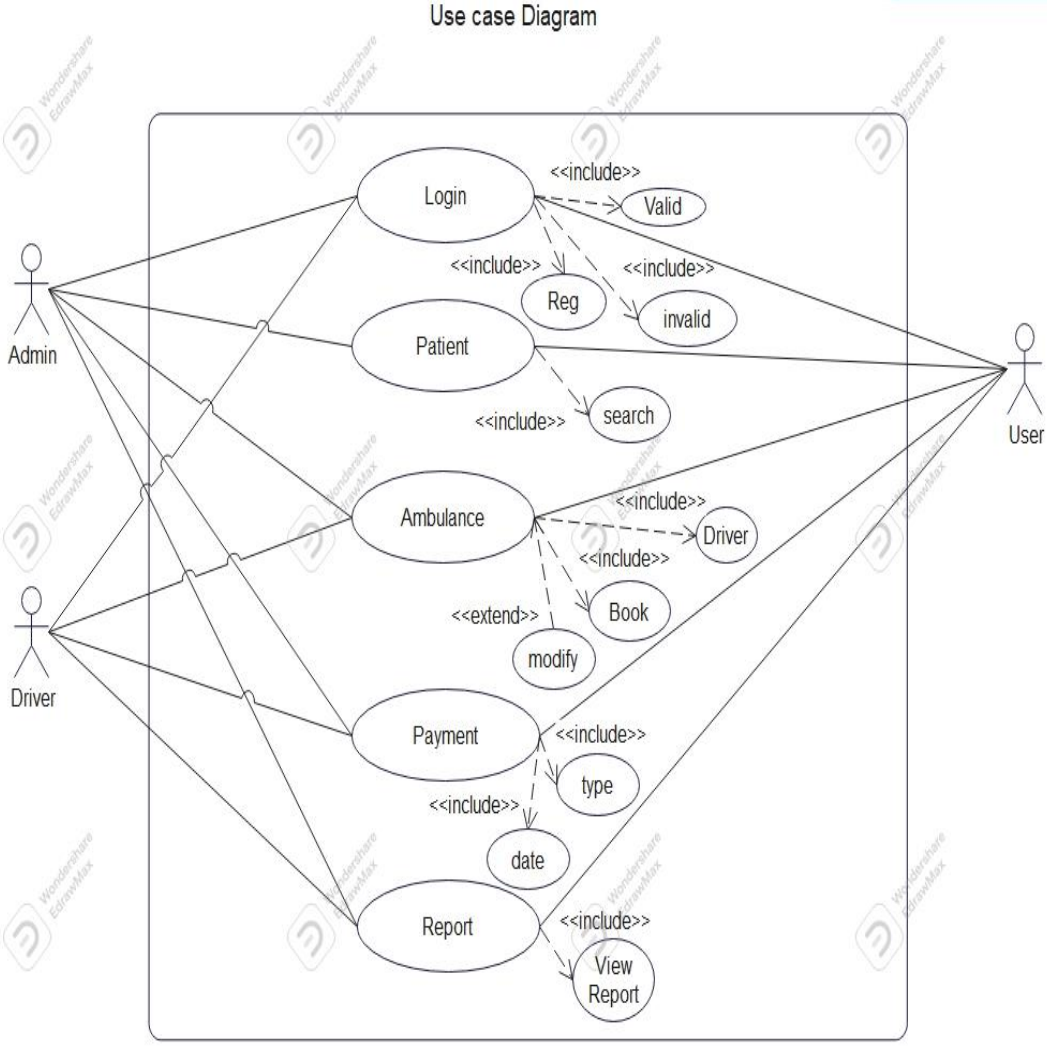
3.1.ERD



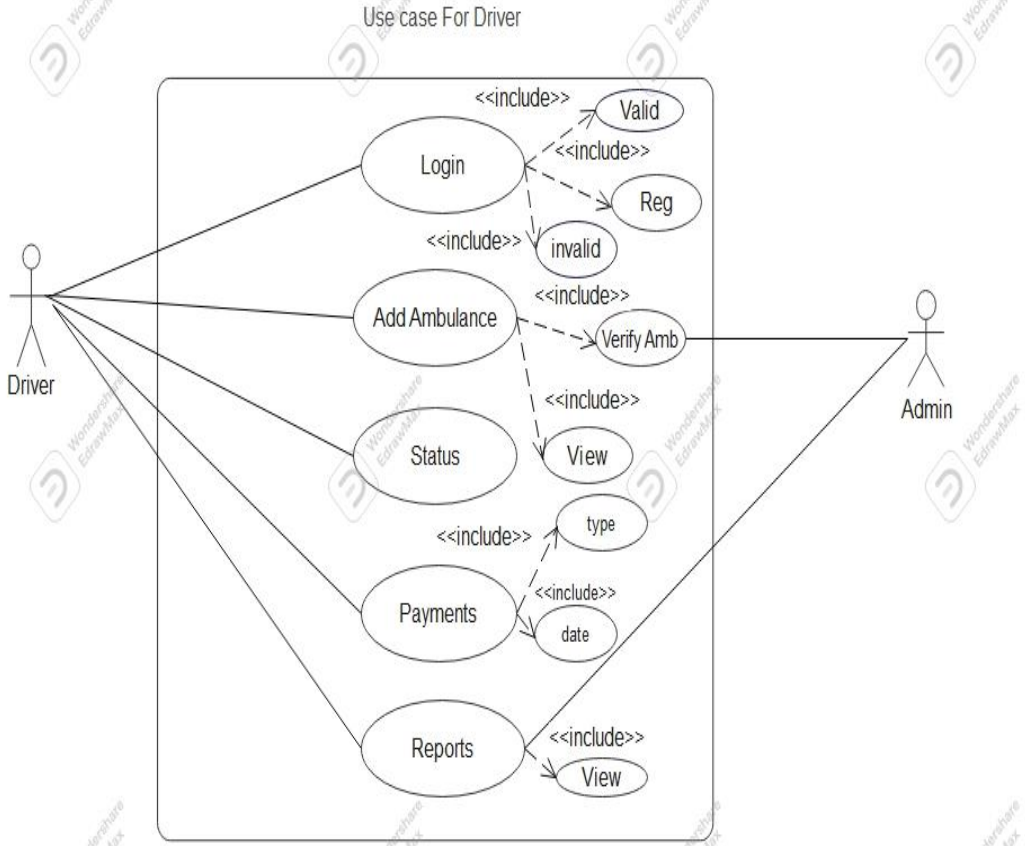
3.2.Class Diagram



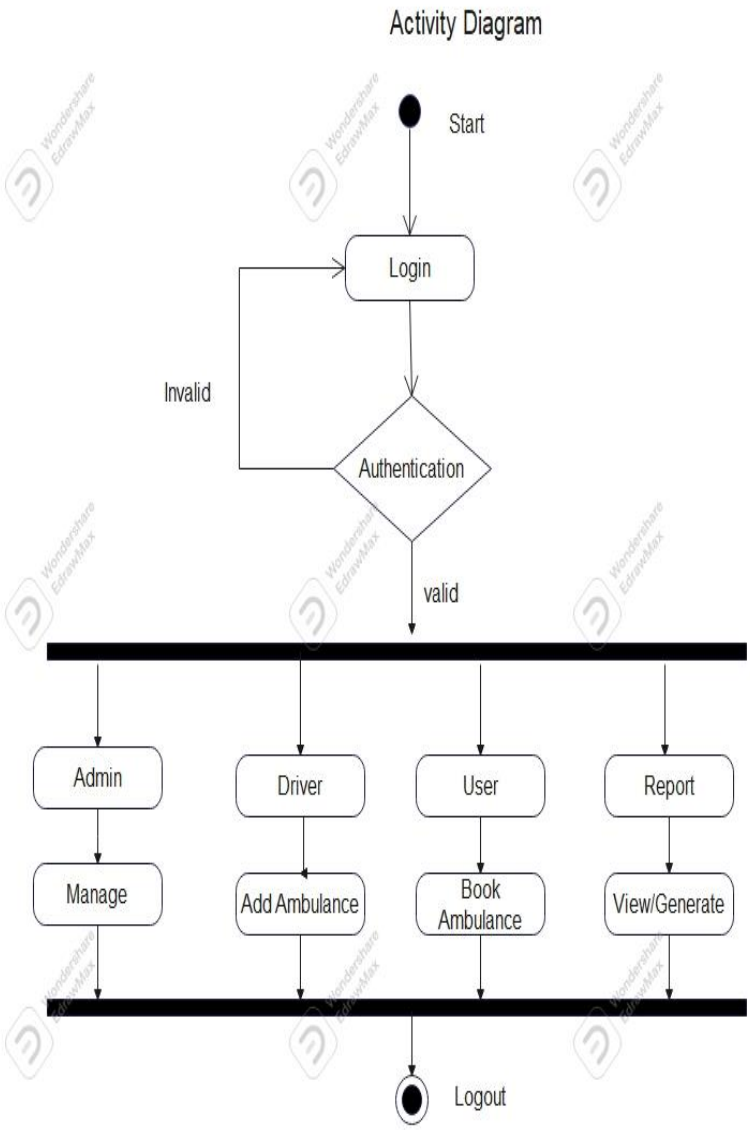
3.3.Use Case Diagram



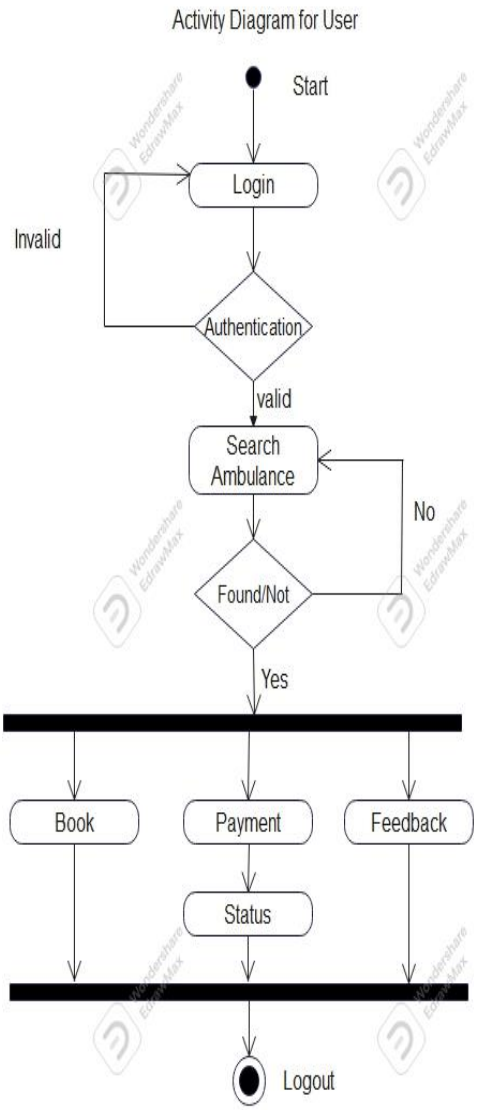
Use case diagram for Driver



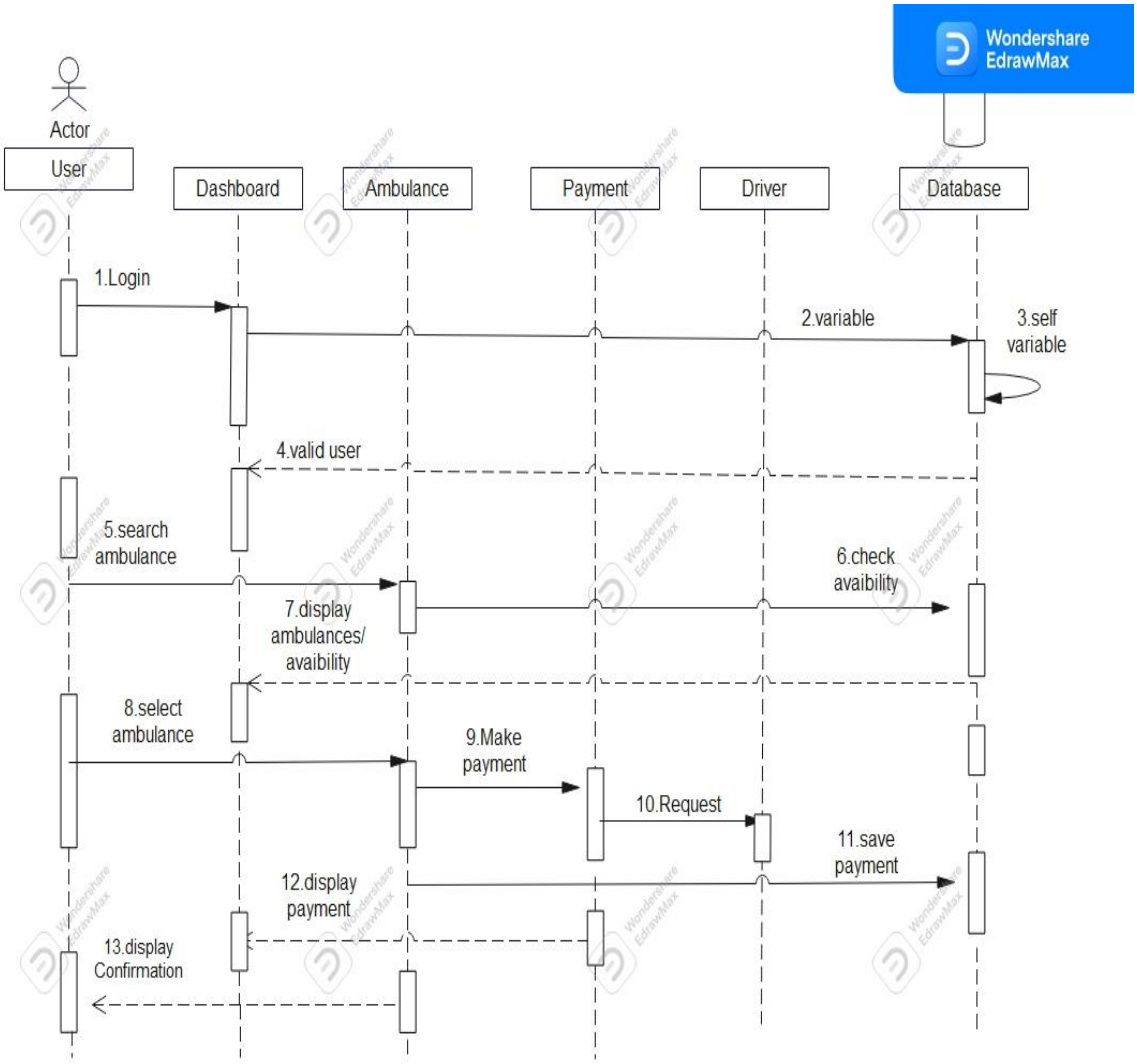
3.4.Activity Diagram



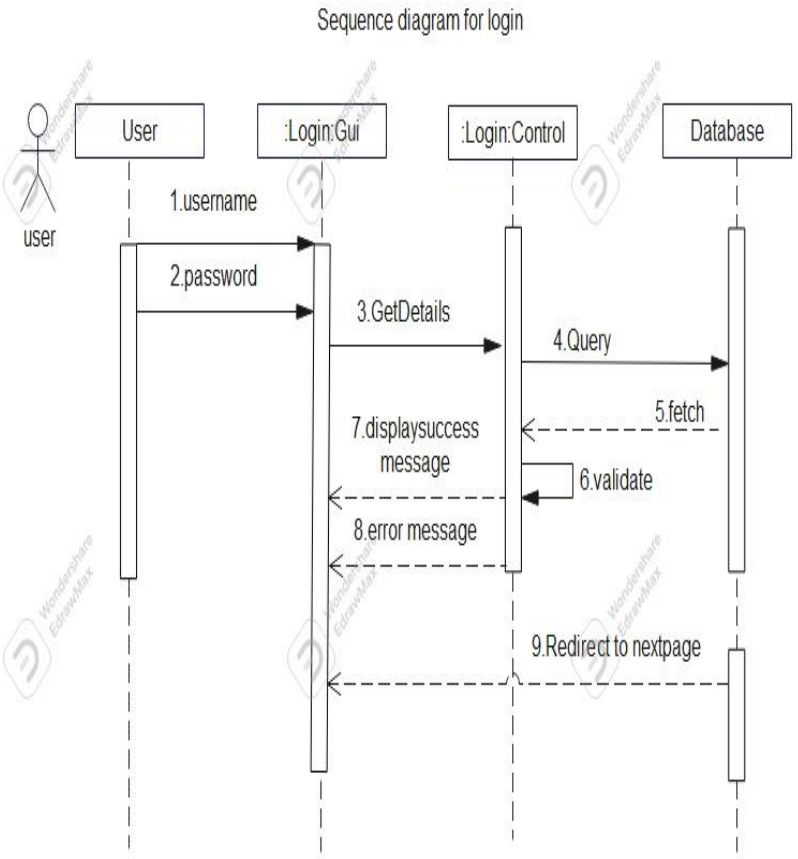
Activity Diagram for User :



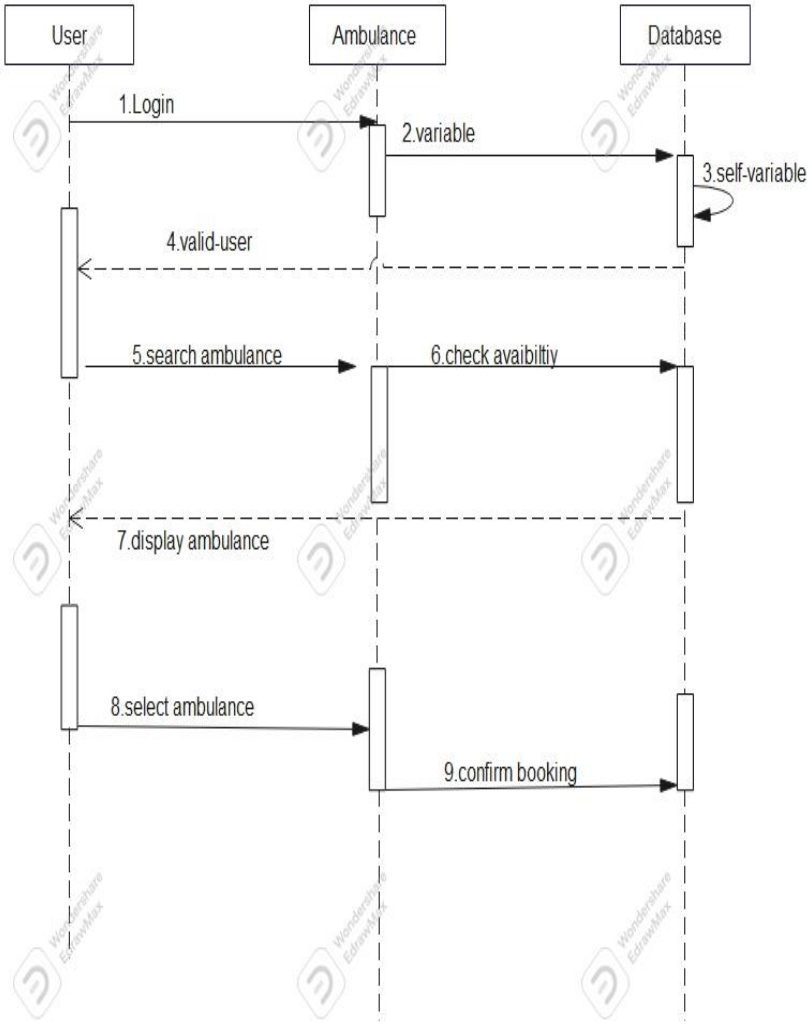
3.5 .Sequence Diagram



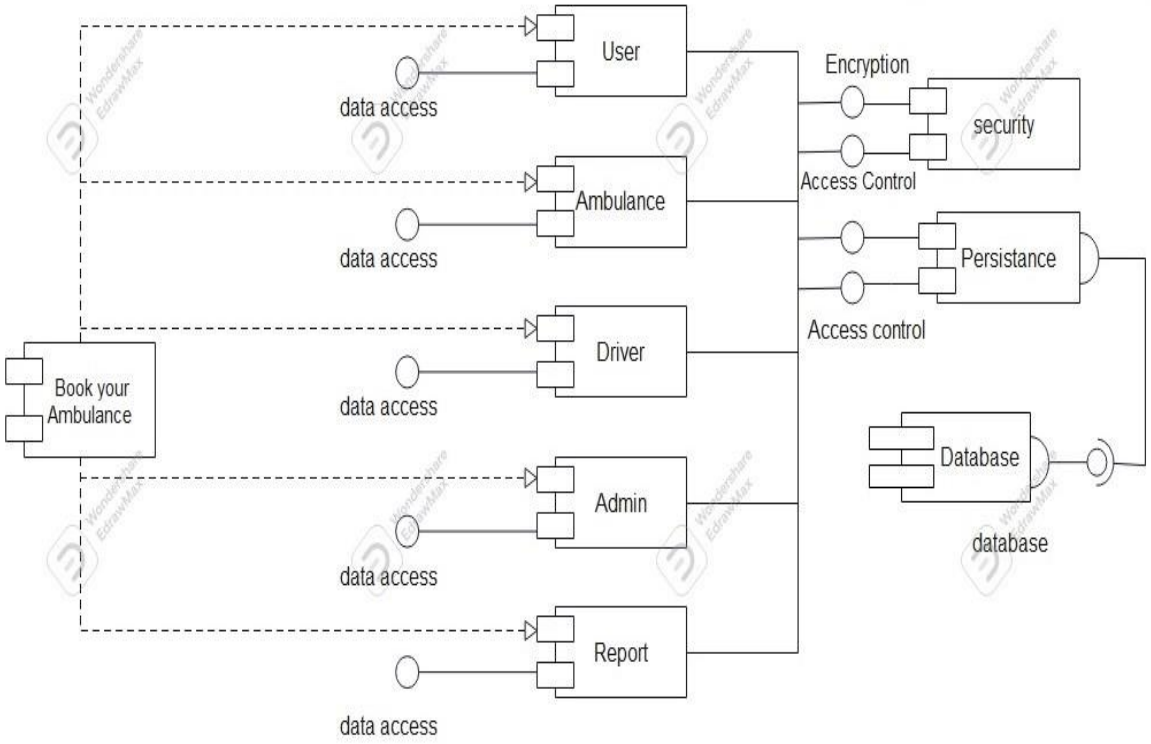
Sequence Diagram for Login:



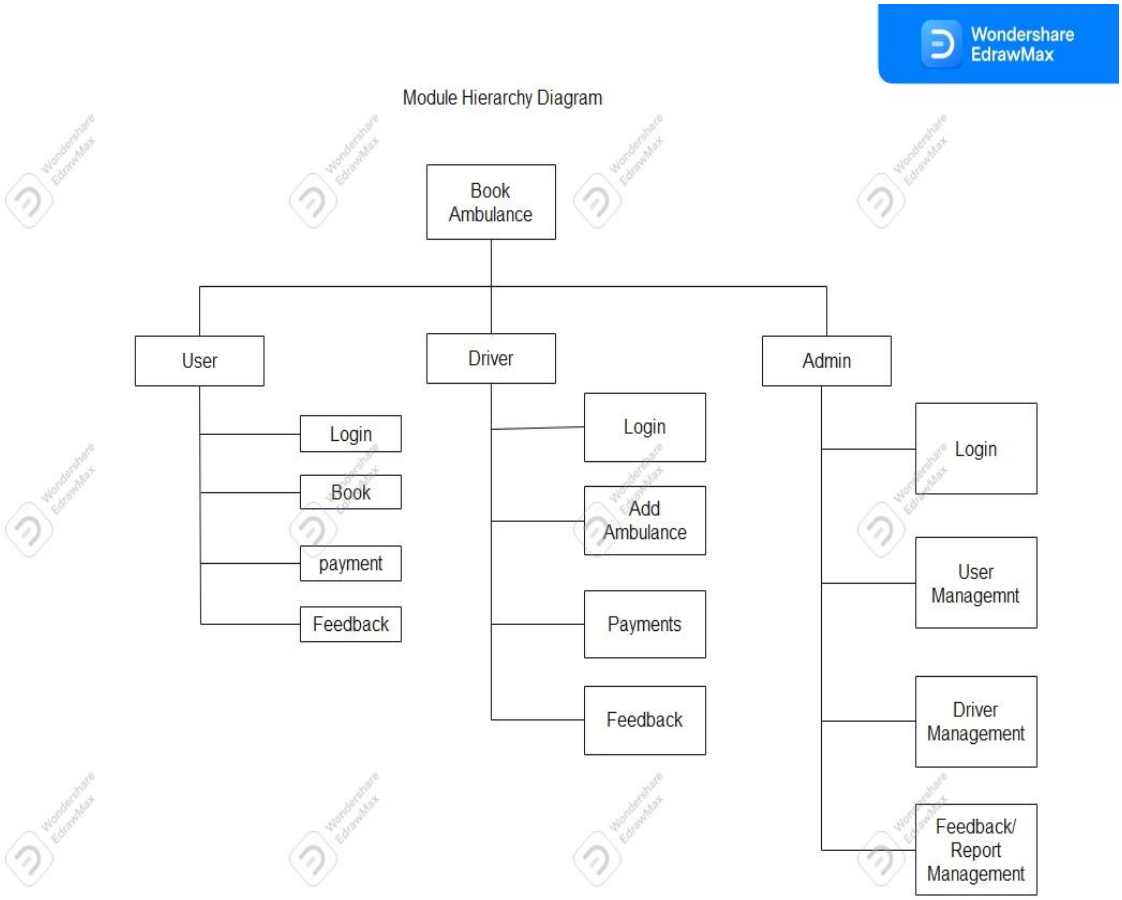
Sequence Diagram for User :



3.6. Component Diagram



3.7. Module & Hierarchy Diagram



3.8.Table Design

Table Specification

1. Table Name - tbladmin

Field Name	Data Type	Size	Constraint	Description
a_id	int	15	Primary key	Unique ID of admin
a_name	Varchar	20	Not null	Admin Name
a_pass	String	15	Not null	Password of Admin
a_add	String	20	Not null	Address of admin
a_email	String	15	Not null	Email Id

2. Table Name- tblpatient

Field Name	Date Type	Size	Constraint	Description
patient_id	int	10	Primary key	Unique Id of patient
patient_name	varchar	15	Not null	Patient Name
patient_email	varchar	15	Not null	Email Id
patient_mobile	int	10	Not null	Patient Mobile No
patient_address	varchar	15	Not null	Address of patient
patient_disease	varchar	20	Not null	Disease Name

3. Table Name - tbldriver

Field Name	Date Type	Size	Constraint	Description
driver_id	int	10	Primary key	Unique Id of driver
driver name	Varchar	15	Not null	Driver Name
driver_email	Varchar	15	Not null	Email Id
driver_mobile	Int	10	Not null	Driver Mobile No
driver_address	varchar	15	Not null	Address of driver
driver_licence_no	varchar	20	Not null	Licencse of driver
P_id	int	15	Foreign key	Id of Patient

4. Table Name - tblambulance

Field Name	Date Type	Size	Constarints	Description
ambulance_id	Int	15	Primary key	Unique Id
ambulance_vehicle_no	Varchar	10	Not null	Ambulance Vehicle No
ambulance_type	Varchar	15	Not null	Type Of Ambulance
driver_lincense_no	Varchar	20	Foreign key	Driver License No
driver_name	Varchar	15	Foreign key	Driver Full Name
driver_mobile	varchar	10	Foreign key	Driver Mobile No
Patient_id	varchar	15	Foreign key	ID of Patient

5.Table Name - tblpayment

Field Name	Date Type	Size	Constraints	Description
payment_id	int	15	Primary key	Unique Id
Card_holder_name	varchar	25	Not null	Card Holder Name
debit_card_number	varchar	15	Not null	Debit Card Number
expiration_month_year	int	20	Not null	Debit Card Expiration Year
patient_name	varchar	20	Foreign key	Patient Name
patient_mobile	int	10	Foreign key	Mobile no of patient
ambulanceid	varchar	15	Foreign key	Ambulance Id
driver_name	varchar	15	Foreign key	Driver Name
payment_date_time	timestamp	25	Not null	Payment Date & Time

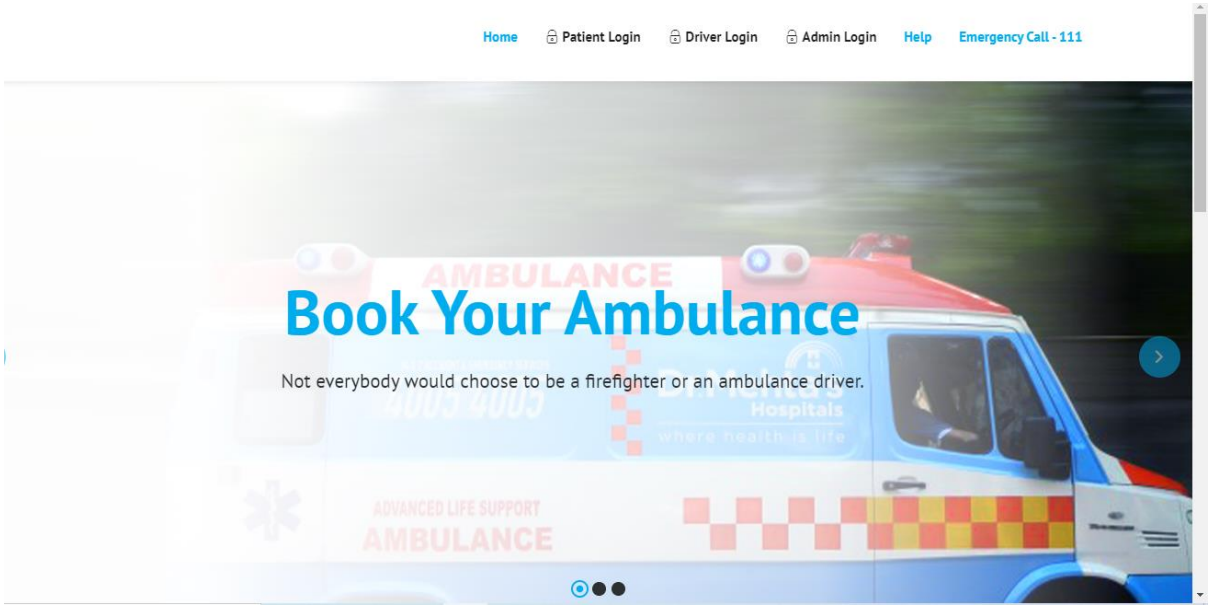
6.Table Name - tblfeedback

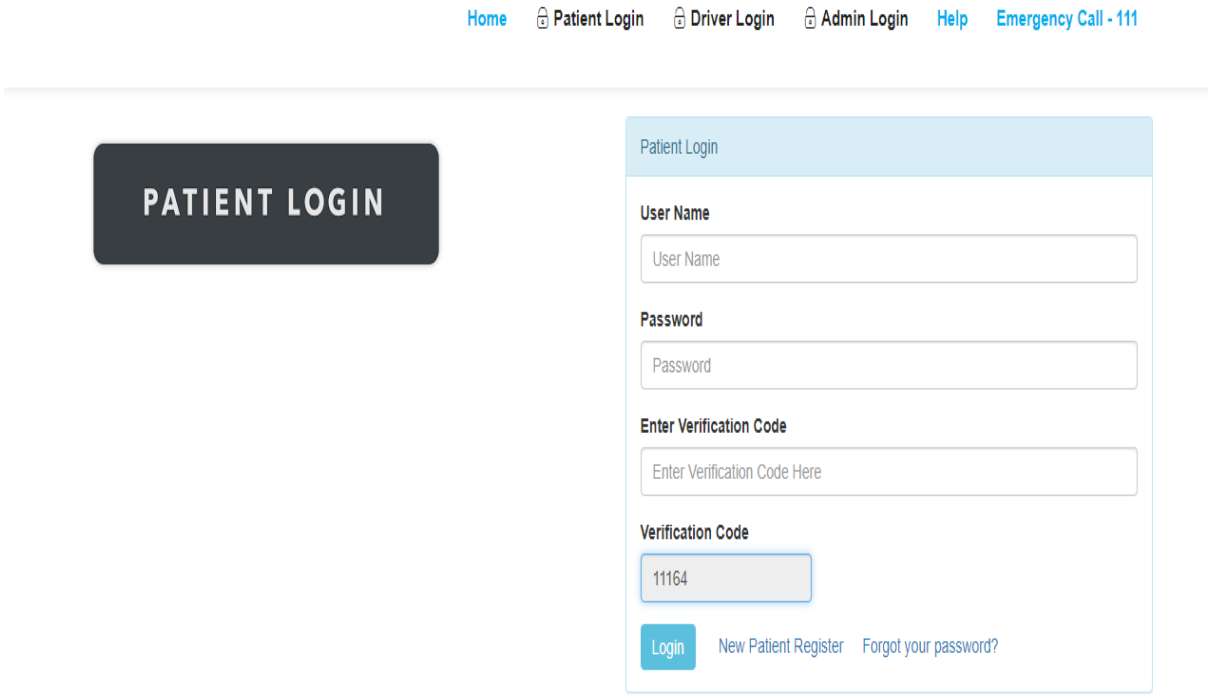
Field Name	Date Type	Size	Constraints	Description
patient_id	int	15	Foreign key	Id of Patient
patient_name	varchar	15	Foreign key	Name of patient
patient_mobile	int	10	Foreign key	Patient Mobile No
ambulance_vehicle_no	varchar	15	Foreign key	Ambulance Vehicle No
driver_name	varchar	15	Foreign key	Driver Full Name
feedback_complaint_type	varchar	10	Not null	Type of complaint or feedback
feedback_or_complaint	varchar	25	Not null	Patient Feedback/complaint

3.9.Data Dictionary

Field Name	Data Type	Size	Constraint	Table
a_add	String	20	Not null	tbladmin
a_email	String	15	Not null	tbladmin
a_id	int	15	Primary key	tbladmin
a_name	Varchar	20	Not null	tbladmin
a_pass	String	15	Not null	tbladmin
ambulance_type	Varchar	15	Not null	tblambulance
ambulance_vehicle_no	Varchar	10	Not null	tblambulance
ambulance_vehicle_no	varchar	15	Foreign key	tblfeedback
ambulanceid	varchar	15	Foreign key	tblpayment
Card_holder_name	varchar	25	Not null	tblpayment
debit_card_number	varchar	15	Not null	tblpayment
driver name	Varchar	15	Not null	tbldriver
driver_address	varchar	15	Not null	tbldriver
driver_email	Varchar	15	Not null	tbldriver
driver_id	int	10	Primary key	tbldriver
driver_licence_no	varchar	20	Not null	tbldriver
driver_lincense_no	Varchar	20	Foreign key	tblambulance
driver_mobile	Int	10	Not null	tbldriver
driver_mobile	varchar	10	Foreign key	tblambulance
driver_name	Varchar	15	Foreign key	tblambulance
driver_name	varchar	15	Foreign key	tblpayment
driver_name	varchar	15	Foreign key	tblfeedback
expiration_month_year	int	20	Not null	tblpayment
feedback_complaint_type	varchar	10	Not null	tblfeedback
feedback_or_complaint	varchar	25	Not null	tblfeedback
P_id	int	15	Foreign key	tbldriver
patient_address	varchar	15	Not null	tblpatient
patient_disease	varchar	20	Not null	tblpatient
patient_email	varchar	15	Not null	tblpatient
patient_id	int	10	Primary key	tblpatient
Patient_id	varchar	15	Foreign key	tblambulance
patient_id	int	15	Foreign key	tblfeedback
patient_mobile	int	10	Not null	tblpatient
patient_mobile	int	10	Foreign key	tblpayment
patient_mobile	int	10	Foreign key	tblfeedback
patient_name	varchar	15	Not null	tblpatient
patient_name	varchar	20	Foreign key	tblpayment
patient_name	varchar	15	Foreign key	tblfeedback
payment_date_time	timestamp	25	Not null	tblpayment

3.10. Input/Output Screens





Home | Patient Login | Driver Login | Admin Login | Help | Emergency Call - 111

Admin Login

Admin Login

User Name

User Name

Password

Password

Enter Verification Code

Enter Verification Code Here

Verification Code

11164

Login Cancel

Home | Search Ambulance | View Ambulances | Booking Ambulance Status | Feedback/Complaints | My Payments | My Account

Patient Feedback/Complaint

Patient Feedback/Complaint

Patient Id

P20221220054932

Patient Name

Omkar Jeevan More

Mobile No

9921977413

Ambulance Vehicle No

Ambulance Vehicle No

Driver Name

Driver Name

Select Feedback Or Complaint

- Select -

Home View Drivers View Ambulances Patient Complaints/Feedback View Patients Generate Reports View Contacts/Inquiry My Account

ll Reports

All Ambulances Report	Generate Reports
All Drivers Report	Generate Reports
All Patients Report	Generate Reports
Patients Ambulance Booking Report	Generate Reports
Contact/Inquiry Report	Generate Reports
Feedback & Complaint Report	Generate Reports
Payments Report	Generate Reports

Home Patients Request For Ambulance Add Ambulance View Ambulance Ambulance Status Patients Payment My Account

Patients Request For Ambulance

Patients Request For Ambulance

Patient Id	Name	Email Id	Mobile	Address	Disease	Ambulance Id	Source Address	Destination Address	Status	Action
P20221214075731	Kishor Kadam	kadamk33@gmail.com	7276763516	Ahmednagar	Corona disease	AVN20210221121303	Chichwad,Pune.	Tata Hospital, Mumbai.	Pending	Assign
P20221220054932	Omkar Jeevan More	ommore5410@gmail.com	9921977413	at post pachwad tal wai dist satara	Corona serious symptoms	AVN20210221121303	Katraj , Sntoshnagar	Swarget	Assigned	Cancel

4. CHAPTER 4: CODING Sample code

```
package com.patient;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import com.connection.DatabaseConnection;

@WebServlet("/AccountCreate")

public class AccountCreate extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String patientId=request.getParameter("patientId");

String pname = request.getParameter("patientName");

String pemail = request.getParameter("emailId");

String pmobile = request.getParameter("mobile");

String paddress = request.getParameter("address");

String uname = request.getParameter("uname");

String upass = request.getParameter("upass");

HttpSession hs = request.getSession();
```

```
try {
int patientAccount=DatabaseConnection.insertUpdateFromSqlQuery("insert into tblpatient(patient_id,patient_name,patient_email,patient_mobile,patient_address,uname,upass)
values('"+patientId+"','"+pname+"','"+pemail+"','"+pmobile+"','"+paddress+"','"+uname+"','"+upass+"')");
if(patientAccount>0) {
String message="Patient account created successfully.";
hs.setAttribute("success-message", message);
response.sendRedirect("patient-register.jsp");
}else {
response.sendRedirect("patient-register.jsp");
}
}catch(Exception e) {
e.printStackTrace();
}

}

}

package com.admin;

import java.io.IOException;
import java.sql.Connection;
```

```
import java.sql.ResultSet;

import java.sql.Statement;

import java.util.Random;

import java.util.UUID;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;


import com.connection.DatabaseConnection;

/**

* Servlet implementation class AdminLogin

*/

@WebServlet("/AdminLogin")

public class AdminLogin extends HttpServlet {


protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

try {

String uname = request.getParameter("uname");

String pass = request.getParameter("upass");

String vercode = request.getParameter("vercode");

String captchaDB = null;
```

```
HttpSession hs = request.getSession();

String tokens = UUID.randomUUID().toString();

Random random = new Random();

int newRandomCaptcha = random.nextInt(9000) + 10000;

Connection con = DatabaseConnection.getConnection();

Statement st = con.createStatement();

ResultSet captchResultSet = DatabaseConnection.getResultFromSqlQuery("select * from tblcaptcha");

if (captchResultSet.next()) {

captchaDB = captchResultSet.getString(1);

}

if (captchaDB.equals(vercode)) {

ResultSet resultset = st.executeQuery("select * from tbladmin where uname='" + uname + "' AND upass='" + pass + "'");

if (resultset.next()) {

hs.setAttribute("uname",resultset.getString("uname") );

int update = DatabaseConnection.insertUpdateFromSqlQuery("update tblcaptcha set captcha='"+ newRandomCaptcha + "'");

response.sendRedirect("admin-dashboard.jsp?_tokens='" + tokens + "'");

} else {

String message = "You have enter wrong credentials";

hs.setAttribute("credential", message);

response.sendRedirect("admin-login.jsp");

int update = DatabaseConnection.insertUpdateFromSqlQuery("update tblcaptcha set captcha='"+ newRandomCaptcha + "'");
```

```
}

} else {

String message = "You have enter invalid verification code";

hs.setAttribute("verificationCode", message);

response.sendRedirect("admin-login.jsp");

int update = DatabaseConnection.insertUpdateFromSqlQuery("update tblcaptcha set captcha='"+ newRandomCaptcha + "'");

}

} catch (Exception e) {

// TODO: handle exception

}

}


}
```

5. CHAPTER 5: LIMITATONS OF SYSTEM

Some of the limitations of a telegram chat bot system for a college project can include:

• Limited functionality:

The systems are limited in functionality compared to web or mobile applications. They may not be able to perform complex tasks.

• Technical limitations:

The system's capabilities are limited by the available technology and infrastructure. The system may not be able to handle large volumes of data or users, leading to performance issues.

• Dependence on internet connectivity:

The system relies on internet connectivity to function. Poor connectivity can affect the system's performance, resulting in delayed or inaccurate information.

• Security concerns:

The system may be vulnerable to cyber threats such as hacking or data breaches. It is crucial to implement adequate security measures to safeguard user data and prevent unauthorized access. Overall, while a system can provide several benefits, it is essential to consider its limitations and address them adequately to ensure that users have a positive experience.

6. CHAPTER 6: PROPOSED ENHACEMENTS

Some proposed enhancements of system for a college project could include:

• **Integration with other systems:**

This integration can provide more comprehensive and accurate information to users.

• **Personalization:**

The system can be enhanced by incorporating personalization features, such as user profiles and preferences. This can help provide more customized and relevant information to users.

• **Natural language processing:**

The system can be enhanced by incorporating natural language processing capabilities. This can help the system understand user queries better and provide more accurate and relevant responses.

• **Multilingual support:**

The system can be enhanced by incorporating multilingual support, allowing users to interact with the system in their preferred language. Overall, these enhancements can help improve the functionality, usability, etc.

7. CHAPTER 7: CONCLUSION

With all the accumulated effort invested, there are reasons to believe that at the end of the project for " System of Book Your Ambulance" for any user finds it self in a better way. We summarize the progress with respect to the main objectives of the project. We the team members can conclude the following perceptional views as we have done the project throughout system supports to manage ambulance and patient information to User or Driver. Moreover the system can also be used for send the user request to the ambulance driver, generate report and perform management activity. The new system will changes the current manual system of ambulance management to computerized manner. It is more flexible and secure when it compared within the current system. Our project solves the current ambulance management problem or issues and problem of ambulance service for Indian Local society.

8. CHAPTER 8: BIBLIOGRAPHY

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