Major Project Report

On

AMBULANCE MANAGEMENT SYSTEM

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In partial fulfilment for the award of the degree of

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CERTIFICATE

This is to certify that the dissertation entitled "Ambulance Management System" submitted by Mr. Swastick Dey University Roll no: 30901220081, Mr. Tejodeep Mitra Roy University Roll no: 30901220059, Mr. Soubhagya Naskar University Roll no: 30901220052, Mr. Sushanta Karmakar University Roll no: 30901220113, Mr. Subhra Roy University Roll no: 30901220114, Mr. Swagnik Sarkar University Roll no: 30901220072

as

Assigned Project for the partial fulfilment of degree of BCA is worth of acceptance.

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Examiner

_____
Examiner

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Examiner

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We have great pleasure in acknowledging the help we received from all those who favoured in giving shape to this project, a sincere thanks to:

All the samples who filled out our questionnaires.

The Smart people out there who invented the Internet and Google.

Full Signature of the Candidates

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

ABSTRACT

The ambulance management system is a crucial component in the effective and efficient operation of emergency medical services (EMS). This system aims to streamline and automate various processes involved in ambulance dispatching, tracking, and resource allocation. By leveraging technology and real-time data, the system enables quick and accurate decision-making, leading to improved response times and patient outcomes.

The key features of the ambulance management system include incident reporting, call-taking, and dispatching capabilities. When an emergency call is received, the system captures essential information such as the caller's location, nature of the emergency, and medical requirements. This data is then analyzed to determine the appropriate response and dispatch the nearest available ambulance equipped with the necessary resources.

Resource management is another critical aspect of the system. It maintains a comprehensive database of available ambulances, medical equipment, and personnel, including their availability and skill sets. Through automated scheduling and resource allocation algorithms, the system optimizes resource utilization, minimizes idle time, and maximizes the efficiency of ambulance operations.

Overall, the ambulance management system serves as a vital tool in modernizing and enhancing emergency medical services. By leveraging technology and data-driven decision-making, it empowers EMS agencies to deliver prompt, efficient, and high-quality care to those in need.

CONTENTS

INTRODUCTION

Project Title:

AMBULANCE MANAGEMENT SYSTEM

Purpose:

The purpose of an ambulance management system is to effectively manage the process of dispatching and tracking emergency medical services (EMS) vehicles, such as ambulances, to respond to medical emergencies. This includes managing the entire ambulance fleet, including the allocation of resources, tracking of vehicle locations, and coordination of emergency medical services.

An effective ambulance management system enables emergency medical service providers to respond quickly and efficiently to medical emergencies, thereby increasing the chances of saving lives. It also helps to optimize the use of resources by ensuring that ambulance vehicles are deployed to the most urgent and critical situations.

Additionally, an ambulance management system can provide real-time data and analytics, allowing for better decision-making and resource allocation in emergency situations. It can also help to streamline communication between EMS personnel and hospital staff, improving the overall efficiency of the emergency medical services system.

System Scope:

The system scope of an ambulance management system encompasses a range of features and functions that enable the effective management and coordination of emergency medical services. Some of the key components of the system scope may include:

1. **Ambulance dispatch:** The system should have a centralized dispatch function that receives emergency calls and dispatches the appropriate ambulance to the scene of the emergency.

2. **Resource allocation:** The system should be able to allocate resources, including ambulances and medical personnel, based on the severity and urgency of the medical emergency.
3. **Vehicle tracking:** The system should be able to track the location and status of each ambulance in real-time, allowing for efficient routing and coordination.
4. **Patient data management:** The system should be able to manage patient data, including medical history, vital signs, and treatment information, allowing medical personnel to provide appropriate care on-site and during transport.
5. **Communication:** The system should provide efficient communication channels for EMS personnel, hospital staff, and other stakeholders, allowing for effective coordination and information sharing.
6. **Reporting and analytics:** The system should provide real-time data and analytics, allowing for better decision-making and resource allocation in emergency situations.

FUNCTIONAL REQUIREMENTS

This section provides a high-level overview of Ambulance Management System.

Application Overview:

An ambulance management system is an application designed to manage and track ambulance services, from receiving requests to dispatching vehicles and tracking their movements. The system aims to streamline the process of delivering emergency medical services and ensure that patients receive timely and efficient care.

The ambulance management system must be user-friendly, efficient, and reliable, ensuring that ambulance services can deliver timely and effective care to patients in need. The system should be accessible via a mobile application, allowing ambulance drivers to receive real-time information about incoming requests and patient details. It should also provide secure user authentication and authorization, ensuring that only authorized personnel can access sensitive information.

Application Scope/ High Level Requirements:

The Application scope of an ambulance management system includes the following high-level requirements:

- Registration and Profile Management: The system should allow ambulance services to register and create a profile, which should include contact information, vehicle details, and driver details.
- Request Management: The system should allow individuals to request ambulance services via phone, web, or mobile application. The system should also allow dispatchers to receive and manage requests in real-time.
- Dispatch Management: The system must provide dispatchers with a dashboard to view all incoming requests, prioritize requests based on urgency, assign ambulance resources to each request, and track ambulance movements.

- Resource Management: The system must allow ambulance services to manage their fleet of vehicles, including maintenance schedules, fuel consumption, and driver schedules.
- Reporting and Analytics: The system should generate reports and analytics on ambulance usage, response times, and resource utilization to enable ambulance services to identify areas for improvement.
- Communication and Collaboration: The system should enable communication and collaboration between ambulance services, dispatchers, and hospitals to provide seamless patient care.
- Compliance and Regulations: The system should comply with all local and national regulations and guidelines related to ambulance services.
- User Authentication and Authorization: The system should provide secure user authentication and authorization, ensuring that only authorized personnel can access sensitive information.

SYSTEM REQUIREMENTS

System Interface:

The software is to be developed in J2EE environment using JSP and JDBC.

User Interface:

The client interacts with the system through a HTML/JSP pages.

Communication Interface:

The communication between the front-end and the back-end is through JDBC.

Hardware Requirement Specification:

Processor: x86 or x64

RAM: 512 MB (minimum), 1 GB (recommended)

Hard disk: up to 300 MB of available space may be required.

However, 90 MB free space is required in boot drive even if you are installing in other drive.

Software Requirement Specification:

Operating Systems- Windows 7/8/10/11or Linux or Unix or Mac
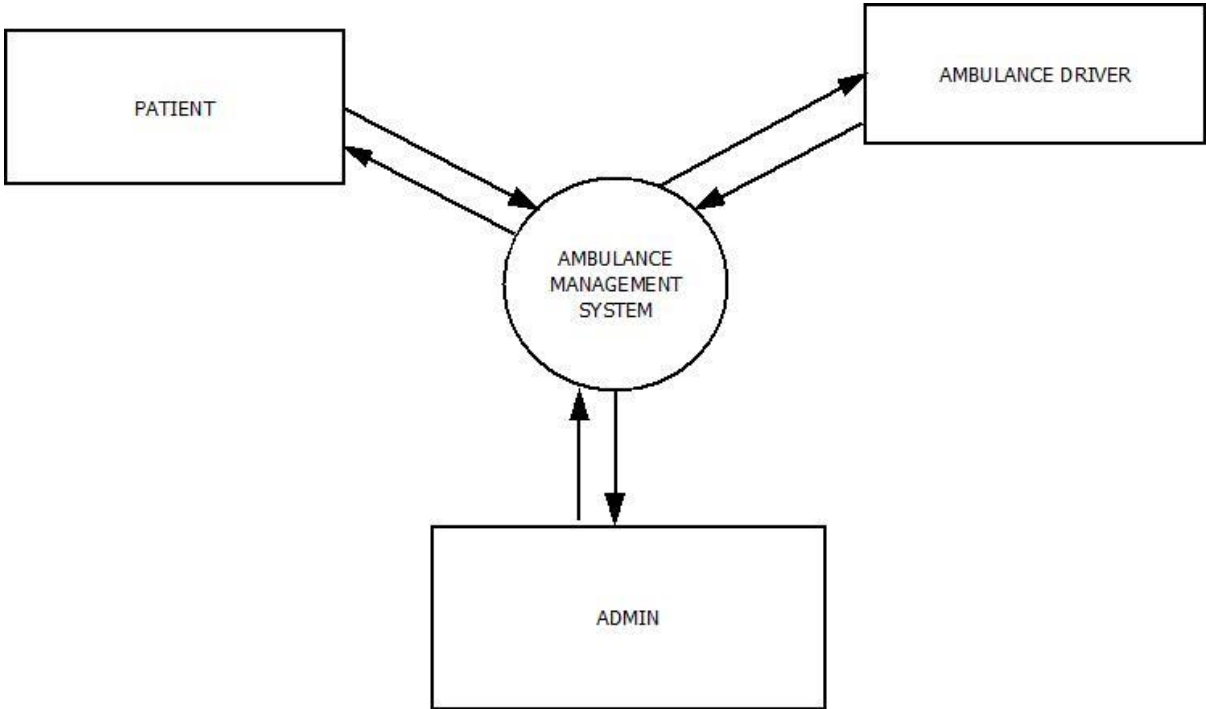
JDK 8.2.0 or above

ORACLE 10G

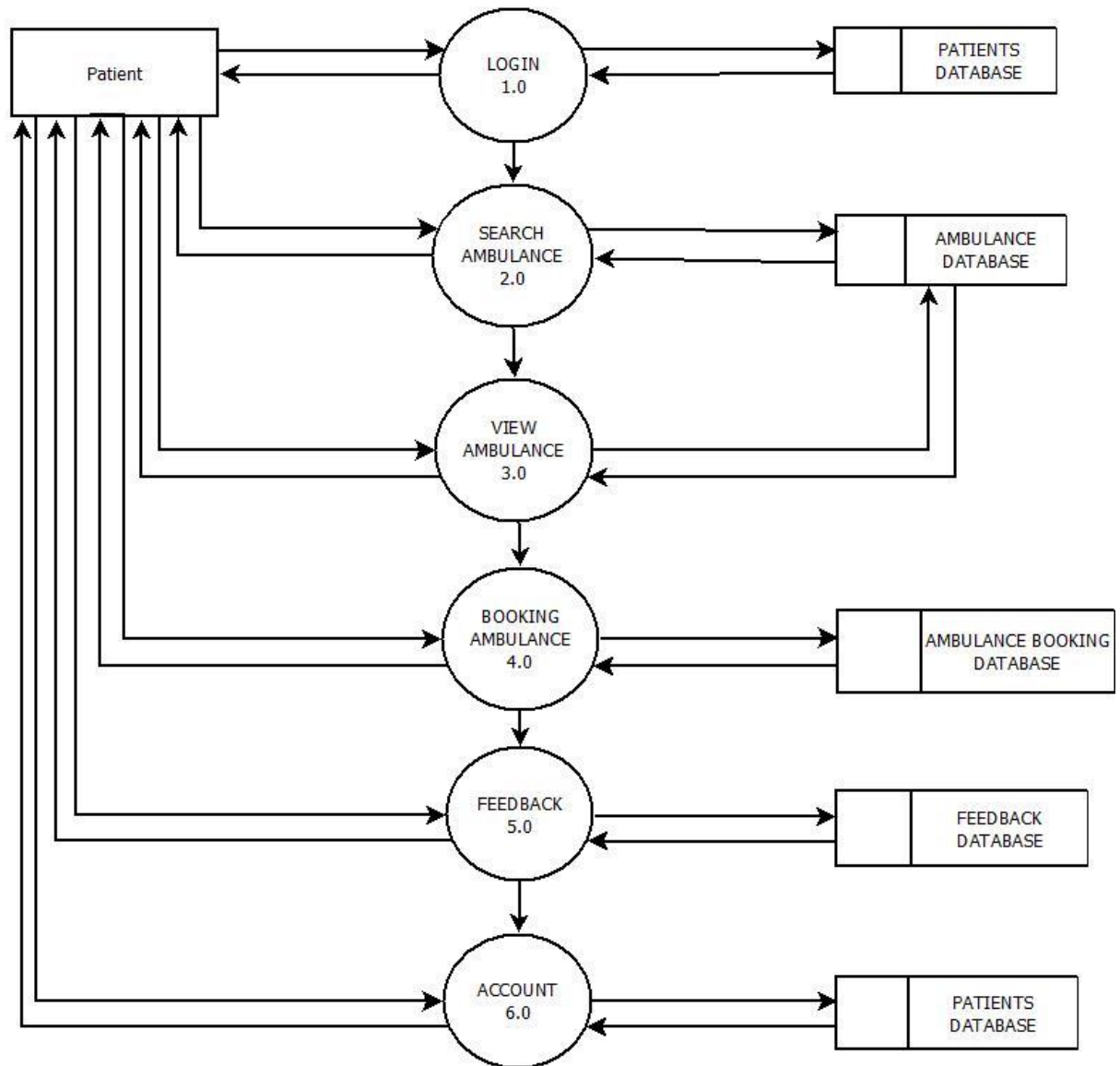Apache Netbeans IDE 8.2

ER DIAGRAM
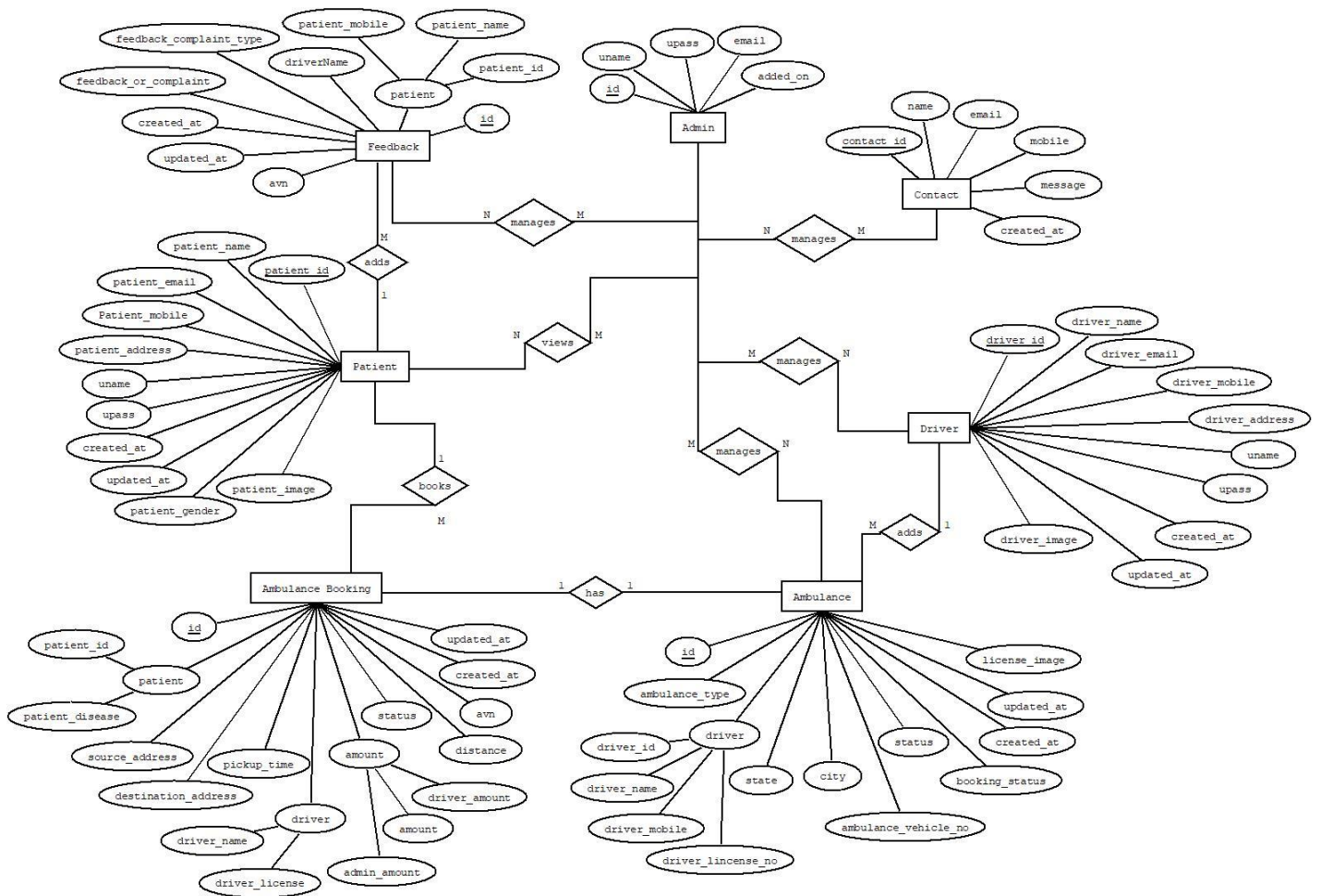
DATA FLOW DIAGRAM

Level 0 DFD

1ST LEVEL PATIENT DFD

2ND LEVEL PATIENT DFD(2.0)
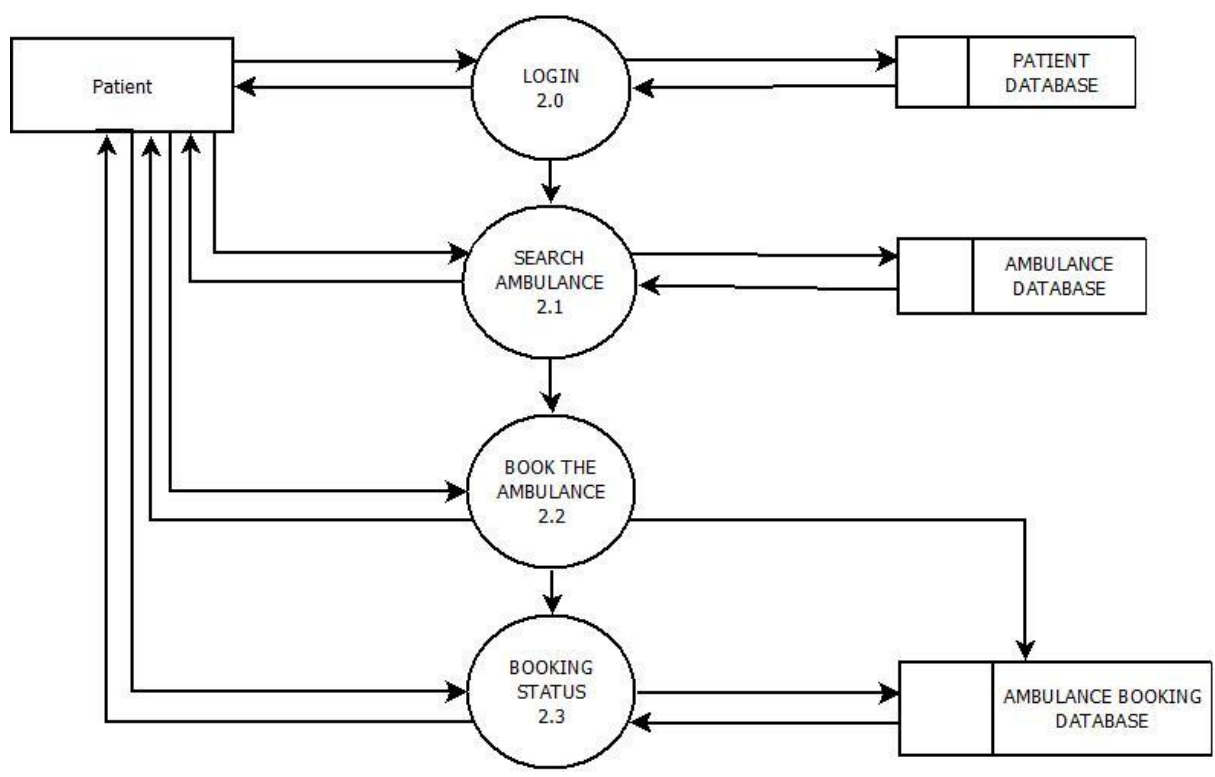
1ST LEVEL DRIVER DFD
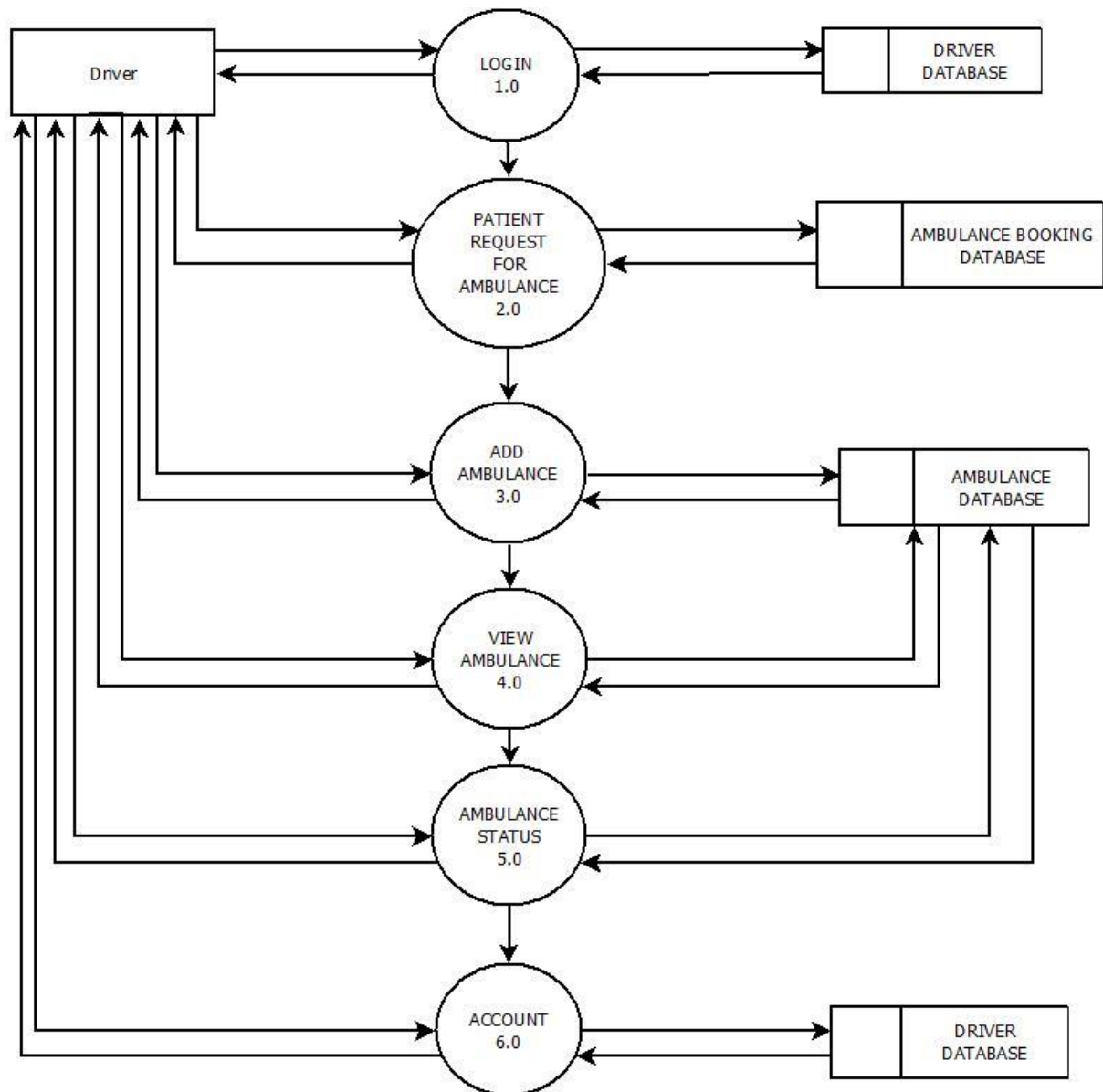
2ND LEVEL DRIVER DFD(2.0)
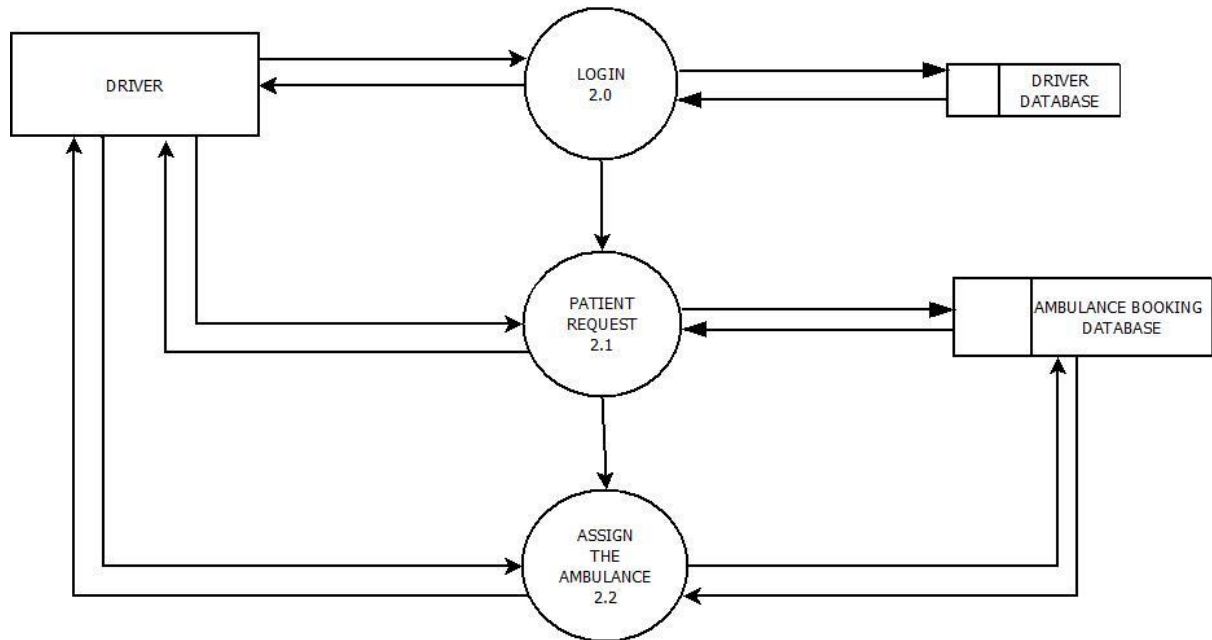
2ND LEVEL DRIVER DFD (3.0)
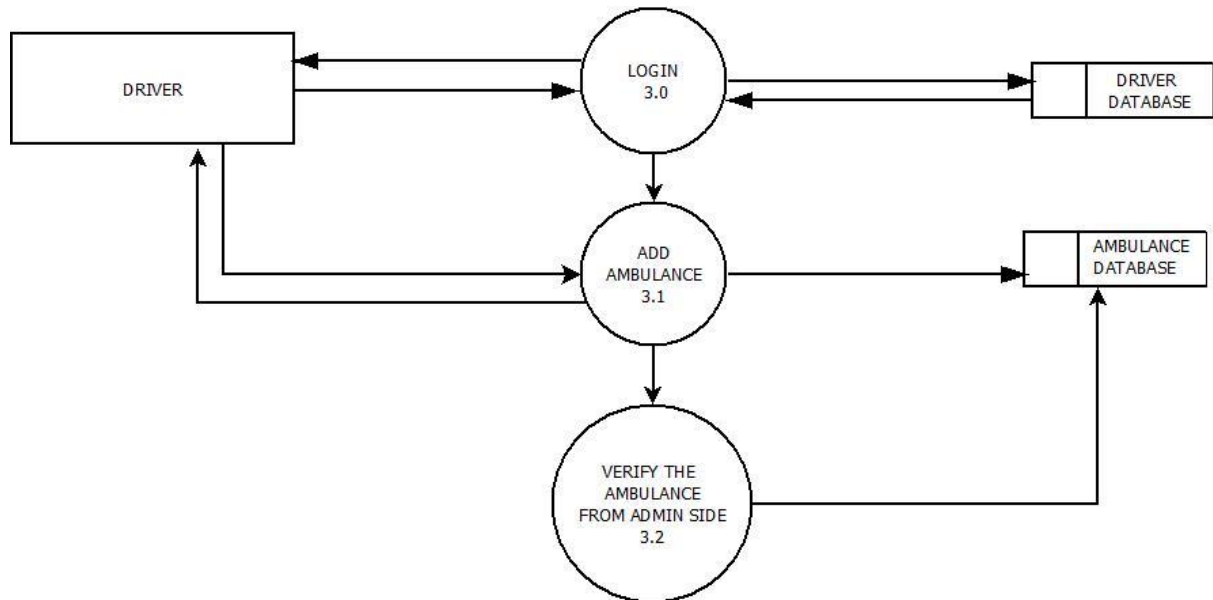
1ST LEVEL ADMIN DFD
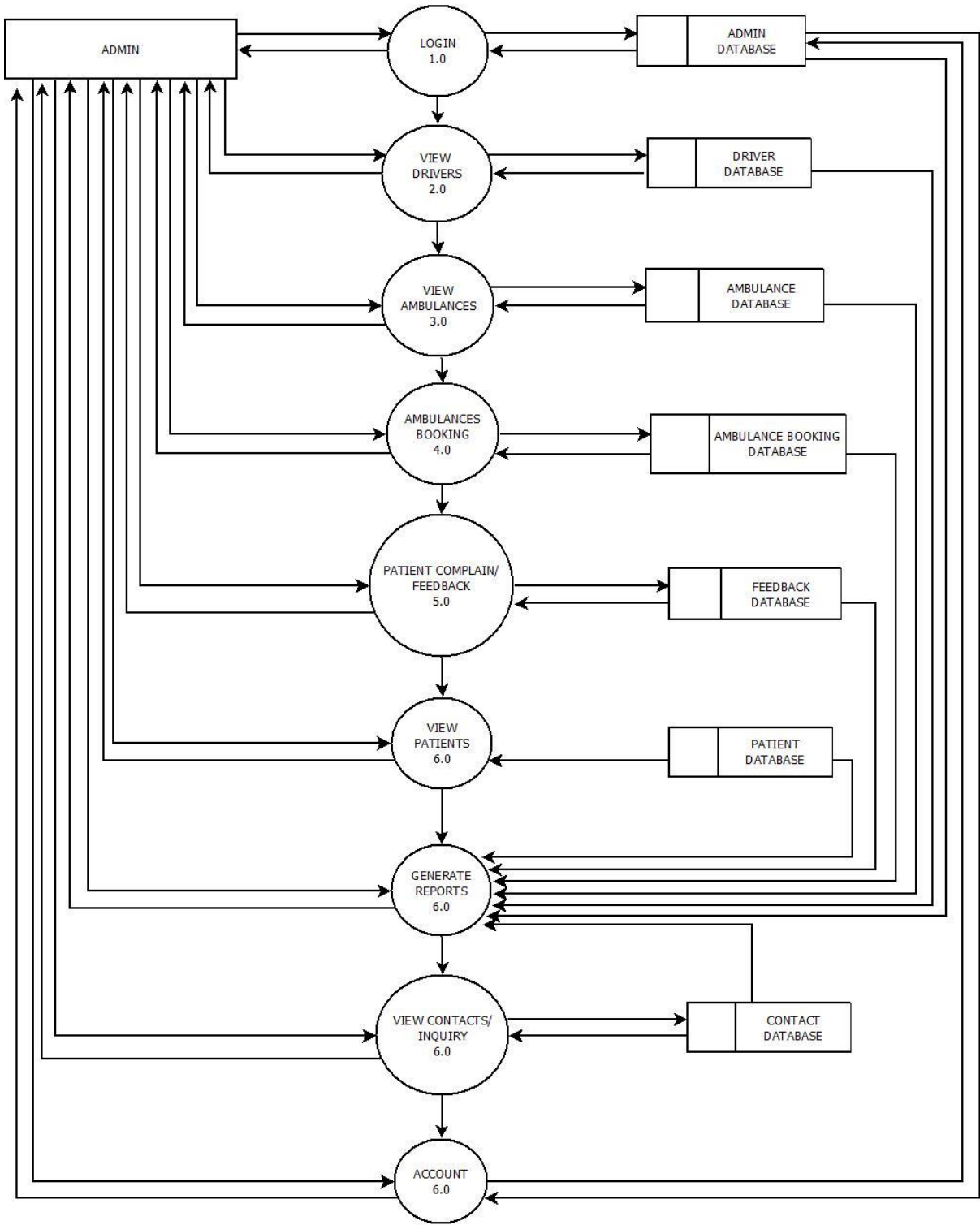
2ND LEVEL ADMIN DFD (2.0)
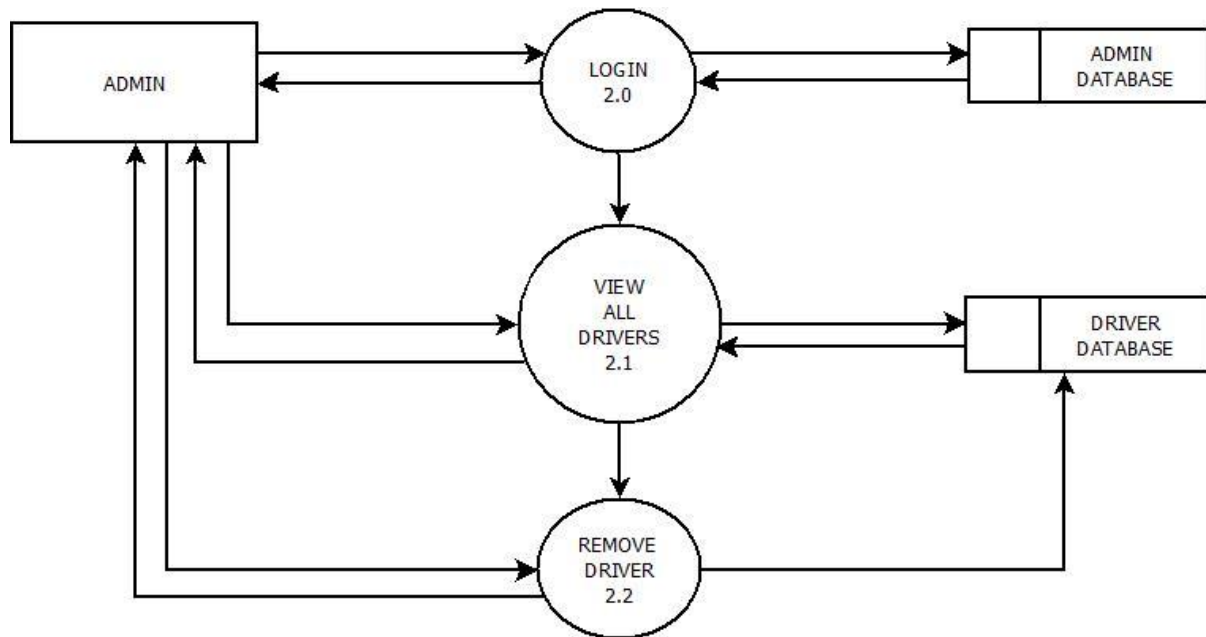
2ND LEVEL ADMIN DFD (3.0)
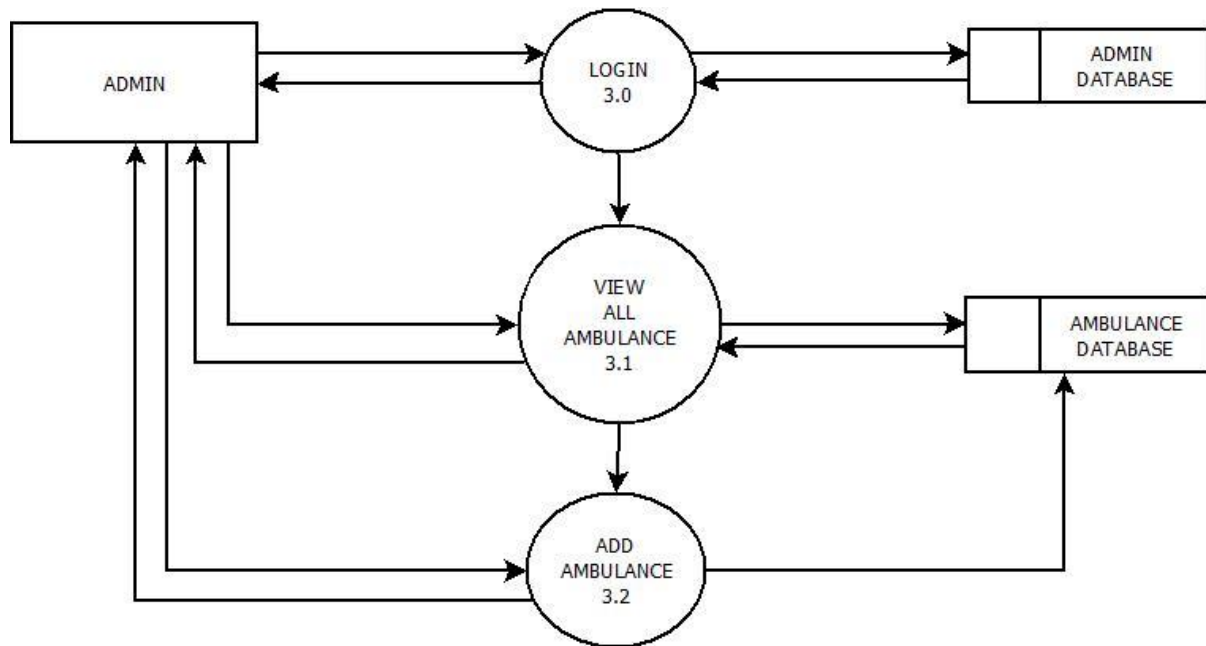
2ND LEVEL ADMIN DFD (6.0)
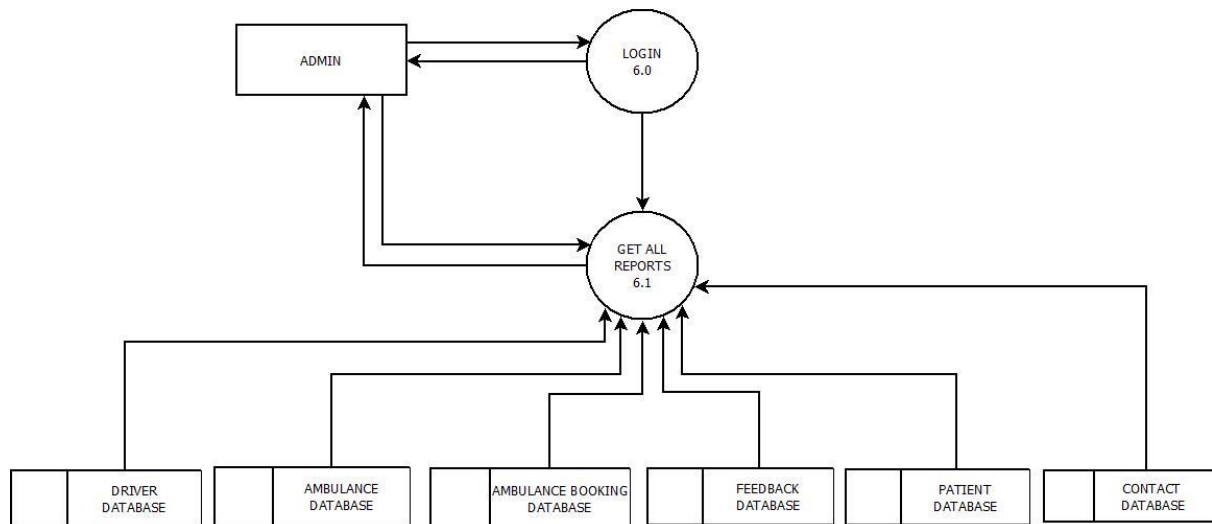
COCOMO MODEL

What is a COCOMO Model?

Ans. The COCOMO (Constructive Cost Model) is one of the most popularly used software cost estimation models i.e. it estimates or predicts the effort required for the project, total project cost and scheduled time for the project. This model depends on the number of lines of code for software product development. There are two types of COCOMO Model they are:-

I) BASIC COCOMO :-

1. Effort = $a(KLOC)^b$ PM [KLOC = Kilo Line of Code, PM = Person-Month]

2. Development Time = $C(Effort)^d$ months

Mode	a	b	c	d
Organic	2.4	1.05	2.5	0.38
Semi-Detached	3.0	1.12	2.5	0.35
Embedded	3.6	1.20	2.5	0.32

∴ LOC = 3KLOC

1. Oraganic :

∴ Effort = $2.4*(3)^{1.05}$ Person-Month

= 2.4*3.16

= 7.584

≈ 8 Person-Month

∴ Development Time = $2.5*(7.584)^{0.38}$ months

= 2.5*2.15

= 5.375

≈ 5 Months

II) INTERMEDIATE COCOMO :-

Mode	ai	bi	ci	<u>di</u>
Organic	3.2	1.05	2.5	0.38
Semi-Detached	3.0	1.12	2.5	0.35
Embedded	2.8	1.20	2.5	0.32

Effort Adjust Factor(EAF) :-

EAF = Calculated by multiplying all the values that have been obtained after categorizing each cast driver.

Effect = $a_i*(KLOC)^{b_i}$ * EAF person-month

Development Time = $c_i(Effort)^{d_i}$ months

Our Parameter - Normal Capable Person & Normal Experience

∴ EAF = 1.0*1.0

= 1

∴ KLOC = 3KLOC

1. Organic :

∴ Effort = $3.2*(3)^{1.05}$ *1 person-month

= 3.2*3.16

= 10.112

≈ 10 person-month

∴ Development Time = $2.5*(10.112)^{0.38}$ months

= 2.5*2.40

= 6

≈ 6 months

SOURCE CODE & OUTPUT

What is JSP?

Ans. JSP stands for JavaServer Pages. It is a technology used for developing dynamic web pages in Java. JSP allows the embedding of Java code within HTML pages, enabling the creation of dynamic content. JSP files are compiled into Java servlets and executed on the server side, generating HTML or other types of responses that are sent to the client's web browser. JSP is often used in combination with Java servlets and other Java EE technologies to build robust web applications.

What is Servlet?

Ans. Servlet technology is used to create a web application (resides at server side and generates a dynamic web page).

Servlet technology is robust and scalable because of java language. Before Servlet, CGI (Common Gateway Interface) scripting language was common as a server-side programming language.

What is Oracle 10G?

Ans. Oracle 10g refers to Oracle Database 10g, which is a relational database management system (RDBMS) developed by Oracle Corporation. The "g" in 10g stands for "grid computing," highlighting the introduction of grid computing capabilities in this version.

1. Home Page:

Output:

JSP Code:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html lang="en">
<title>AMS</title>
<!-- Site Icons -->
<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />
<link rel="apple-touch-icon" href="images/apple-touch-icon.png">
<!-- Bootstrap CSS -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Site CSS -->
<link rel="stylesheet" href="style.css">
<!-- Colors CSS -->
<link rel="stylesheet" href="css/colors.css">
<!-- ALL VERSION CSS -->
```

```html
<link rel="stylesheet" href="css/versions.css">
<!-- Responsive CSS -->
<link rel="stylesheet" href="css/responsive.css">
<!-- Custom CSS -->
<link rel="stylesheet" href="css/custom.css">
<!-- Modernizer for Portfolio -->
<script src="js/modernizer.js"></script>
<!--[if lt IE 9]>
    <script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>
    <script src="https://oss.maxcdn.com/libs/respond.js/1.4.2/respond.min.js"></script>
  <![endif]-->
</head>
<body class="host_version">
        <jsp:include page="header.jsp"></jsp:include>
        <div id="bootstrap-touch-slider"
                class="carousel bs-slider fade  control-round indicators-line"
                data-ride="carousel" data-pause="hover" data-interval="false">
                <!-- Indicators -->
                <ol class="carousel-indicators">
                        <li data-target="#bootstrap-touch-slider" data-slide-to="0"
                                class="active"></li>
                        <li data-target="#bootstrap-touch-slider" data-slide-to="1"></li>
                        <li data-target="#bootstrap-touch-slider" data-slide-to="2"></li>
                </ol>
                <div class="carousel-inner" role="listbox">
                        <div class="item active">
                                <div id="home" class="first-section"
                                        style="background-image: url('images/slide/1.jpg');">
```

```html
<div class="container" style="background: linear-gradient(to right,rgba(255,255,255,0.99) 1%,rgba(255,255,255,0.7) 100%,rgba(255,255,255,0) 89%); padding-top: 13px;">
    <div class="row">
        <div class="col-md-12 col-sm-12 text-center">
            <div class="big-tagline">
                <h2 data-animation="animated zoomInRight">
                    <strong>Ambulance Management System</strong>
                </h2>
                <p class="lead" data-animation="animated fadeInLeft">Not everybody would choose to be a firefighter or an ambulance driver.</p>
            </div>
        </div>
    </div>
    <!-- end row -->
</div>
<!-- end container -->
</div>
<!-- end section -->
</div>
<div class="item">
    <div id="home" class="first-section" style="background-image: url('images/slide/2.jpg');">
        <div class="container" style="background: linear-gradient(to right,rgba(255,255,255,0.99) 1%,rgba(255,255,255,0.7) 100%,rgba(255,255,255,0) 89%); padding-top: 13px;">
            <div class="row">
```

```html
                                                <div class="col-md-12 col-sm-12 text-center">
                                                    <div class="big-tagline">
                                                        <h2 data-animation="animated zoomInRight">
    <strong>Ambulance Management System</strong>
                                                        </h2>
                                                        <p class="lead" data-animation="animated fadeInLeft">Now
                                                            the ambulance is always ready; the paramedics are always
                                                            ready.</p>
                                                    </div>
                                                </div>
                                            </div>
                                            <!-- end row -->
                                        </div>
                                        <!-- end container -->
                                    </div>
                                    <!-- end section -->
                                </div>
                                <div class="item">
                                    <div id="home" class="first-section"
                                        style="background-image: url('images/slide/3.jpg');">
                                        <div class="container" style="background: linear-gradient(to right,rgba(255,255,255,0.99) 1%,rgba(255,255,255,0.7) 100%,rgba(255,255,255,0) 89%); padding-top: 13px;">
                                            <div class="row">
                                                <div class="col-md-12 col-sm-12 text-center">
                                                    <div class="big-tagline">
```

```html
                                                    <h2 data-
animation="animated zoomInRight">

        <strong>Ambulance Management System</strong>

                                                    </h2>
                                                    <p class="lead" data-
animation="animated fadeInLeft">People

                                                    have more fun if
they don't eat so much they have to be taken

                                                    home in an
ambulance. </p>

                                        </div>

                                    </div>

                                </div>

                                <!-- end row -->

                        </div>

                        <!-- end container -->

                    </div>

                    <!-- end section -->

                </div>

                <!-- Left Control -->

                <a class="left carousel-control" href="#bootstrap-touch-slider"

                        role="button" data-slide="prev"> <span class="fa fa-angle-
left"

                        aria-hidden="true"></span> <span class="sr-
only">Previous</span>

                </a>

                <!-- Right Control -->

                <a class="right carousel-control" href="#bootstrap-touch-slider"

                        role="button" data-slide="next"> <span class="fa fa-angle-
right"
```

```html
                              aria-hidden="true"></span> <span class="sr-only">Next</span>

                    </a>

            </div>

      </div>

      <div id="overviews" class="section wb">

            <div class="container">

                  <div class="section-title row text-center">

                        <div class="col-md-8 col-md-offset-2">

                              <h3>About Us</h3>

                              <p class="lead">It is used for patients to, from or between places of medical treatment, such as hospital, dialysis center, Medical Appointments for non-urgent/ emergency care. Main aim of all such transfers is to maintain the continuity of medical care.</p>

                        </div>

                  </div>

                  <!-- end title -->

                  <div class="row">

                        <div class="col-md-6">

                              <div class="message-box">

                                    <h4>Ambulance Management System</h4>

                                    <p class="lead">It is used for patients to, from or between places of medical treatment, such as hospital, dialysis center, Medical Appointments for non-urgent/ emergency care. Main aim of all such transfers is to maintain the continuity of medical care.</p>

                              </div>

                              <!-- end messagebox -->

                        </div>

                        <!-- end col -->

                        <div class="col-md-6">

                              <div class="post-media wow fadeIn">
```

```html
                                    <img src="images/logos/ambulance.jpg" alt=""

                                        class="img-responsive img-rounded">

                                </div>

                                <!-- end media -->

                        </div>

                        <!-- end col -->

                </div>

                <!-- end row -->

                <hr class="invis">

                <div class="row">

                        <div class="col-md-4 col-sm-6 col-xs-12">

                                <div class="icon-wrapper wow fadeIn" data-wow-
duration="1s"

                                        data-wow-delay="0.2s">

                                        <i class="flaticon-server global-radius effect-1
alignleft"></i>

                                        <h3>Collective Ambulance</h3>

                                </div>

                                <!-- end icon-wrapper -->

                        </div>

                        <!-- end col -->

                        <div class="col-md-4 col-sm-6 col-xs-12">

                                <div class="icon-wrapper wow fadeIn" data-wow-
duration="1s"

                                        data-wow-delay="0.6s">

                                        <i class="flaticon-server global-radius effect-1
alignleft"></i>

                                        <h3>Individual Ambulance</h3>

                                </div>

                                <!-- end icon-wrapper -->
```

```html
            </div>
            <!-- end col -->
            <div class="col-md-4 col-sm-6 col-xs-12">
                <div class="icon-wrapper wow fadeIn" data-wow-duration="1s"
                    data-wow-delay="0.4s">
                    <i class="flaticon-server global-radius effect-1 alignleft"></i>
                    <h3>Mobile ICU Ambulance</h3>
                </div>
                <!-- end icon-wrapper -->
            </div>
            <!-- end col -->
        </div>
        <!-- end row -->
        <hr class="hr3">
        <div class="row">
            <div class="col-md-4 col-sm-6 col-xs-12">
                <div class="icon-wrapper wow fadeIn" data-wow-duration="1s"
                    data-wow-delay="0.2s">
                    <i class="flaticon-server global-radius effect-1 alignleft"></i>
                    <h3>Basic Life Support Ambulance</h3>
                </div>
                <!-- end icon-wrapper -->
            </div>
            <!-- end col -->
            <div class="col-md-4 col-sm-6 col-xs-12">
```

```html
                                <div class="icon-wrapper wow fadeIn" data-wow-
duration="1s"

                                        data-wow-delay="0.4s">

                                        <i class="flaticon-server global-radius effect-1
alignleft"></i>

                                        <h3>Neonatal Incubator</h3>

                                </div>

                                <!-- end icon-wrapper -->

                        </div>

                        <!-- end col -->

                        <div class="col-md-4 col-sm-6 col-xs-12">

                                <div class="icon-wrapper wow fadeIn" data-wow-
duration="1s"

                                        data-wow-delay="0.6s">

                                        <i class="flaticon-server global-radius effect-1
alignleft"></i>

                                        <h3>Cardiac Ambulance</h3>

                                </div>

                                <!-- end icon-wrapper -->

                        </div>

                        <!-- end col -->

                </div>

                <!-- end row -->

        </div>

        <!-- end container -->

</div>

<!-- end section -->

<!-- end section -->

<jsp:include page="footer.jsp"></jsp:include>

<!-- end copyrights -->
```
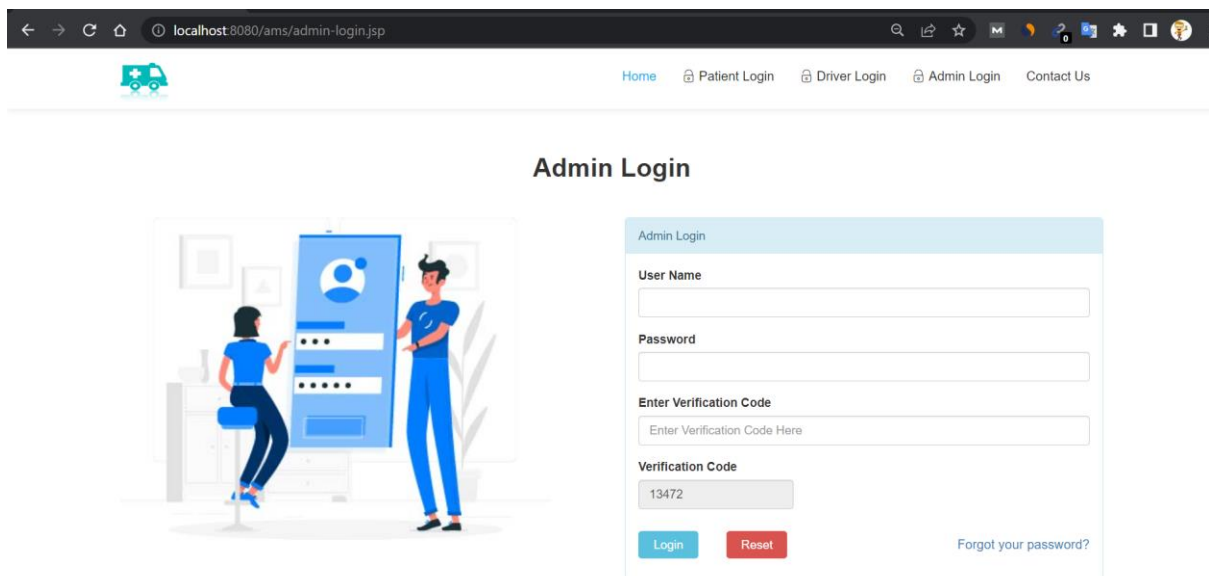
```
        <a href="#" id="scroll-to-top" class="dmtop global-radius"><i

            class="fa fa-angle-up"></i></a>

        <!-- ALL JS FILES -->

        <script src="js/all.js"></script>

        <!-- ALL PLUGINS -->

        <script src="js/custom.js"></script>

</body>

</html>
```

2. Admin Login Page:

Output:

JSP Code:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

    pageEncoding="ISO-8859-1"%>

<%@ page import="java.sql.*"%>

<%@ page import="com.connection.*"%>

<!DOCTYPE html>

<html lang="en">
```

```html
<!-- Site Metas -->
<title>AMS</title>
<!-- Site Icons -->
<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />
<link rel="apple-touch-icon" href="images/apple-touch-icon.png">
<!-- Bootstrap CSS -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Site CSS -->
<link rel="stylesheet" href="style.css">
<!-- Colors CSS -->
<link rel="stylesheet" href="css/colors.css">
<!-- ALL VERSION CSS -->
<link rel="stylesheet" href="css/versions.css">
<!-- Responsive CSS -->
<link rel="stylesheet" href="css/responsive.css">
<!-- Custom CSS -->
<link rel="stylesheet" href="css/custom.css">
<!-- Modernizer for Portfolio -->
<script src="js/modernizer.js"></script>
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body class="host_version">
    <jsp:include page="header.jsp"></jsp:include><br>
      <div class="container">
        <div class="row pad-botm">
```

```
<div class="col-md-12 register-header">

  <h4 class="header-line"><b>Admin Login</b></h4>

</div>

</div>

<div class="row">

  <div class="col-md-6 col-sm-6 col-xs-12">

    <img src="images/admin-login.jpg" style="width: 500px;">

  </div>

  <div class="col-md-6 col-sm-6 col-xs-12">

    <div class="panel panel-info">

      <div class="panel-heading">Admin Login</div>

      <div class="panel-body">

      <%

        String credential = (String) session.getAttribute("credential");

        if (credential != null) {

          session.removeAttribute("credential");

      %>

      <div class="alert alert-danger" id="danger">You have enter

        wrong credentials.</div>

        <%

          }

        %>

        <%

          String captchaCode = (String) session.getAttribute("verificationCode");

          if (captchaCode != null) {

            session.removeAttribute("verificationCode");

        %>

      <div class="alert alert-info" id="info">You have enter wrong

        verification code.</div>
```

```jsp
<%
  }
%>
<form action="AdminLogin" method="post">
  <div class="form-group">
    <label>User Name</label> <input class="form-control" type="text"
                        name="uname" required/>
  </div>
  <div class="form-group">
    <label>Password</label> <input class="form-control"
                        type="password" name="upass" required/>
  </div>
  <%
    String captcha = null;
    ResultSet resultset =
DatabaseConnection.getResultFromSqlQuery("select captcha from tblcaptcha");
        if (resultset.next()) {
          captcha = resultset.getString(1);
        }
  %>
  <div class="form-group">
    <label>Enter Verification Code</label> <input type="text"
                            name="vercode" class="form-control"
                            placeholder="Enter Verification Code Here" />
  </div>
  <div class="form-group">
    <label>Verification Code</label> <input type="text"
                            value="<%=captcha%>" class="form-control"
style="width: 180px;"
```

```html
                                readonly />

                    </div>

                    <div class="btn-sub">

                        <button type="submit" class="btn btn-info btn-reset-login">Login

                        </button>

                        <button type="reset" class="btn btn-danger btn-reset-login"
id="btnReset" style="margin-right: 160px;">Reset</button>

                            <a class="for-pwd already" href="admin-forgot-password.jsp">Forgot
your password?</a>

                    </div>

                </form>

            </div>

        </div>

    </div>

</div>

<br>

<br>

<br>

<br>

<br>

<jsp:include page="footer.jsp"></jsp:include>

</body>

<script type="text/javascript">

  $(function () {

    $('#danger').delay(3000).show().fadeOut('slow');

  });

  $(function () {
```

```
        $('#info').delay(3000).show().fadeOut('slow');

    });

</script>

</html>
```

Servlet Code:

```java
package com.admin;

import java.io.IOException;

import java.sql.Connection;

import java.sql.ResultSet;

@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);
```

```java
				}
				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
			}
		}
}
```
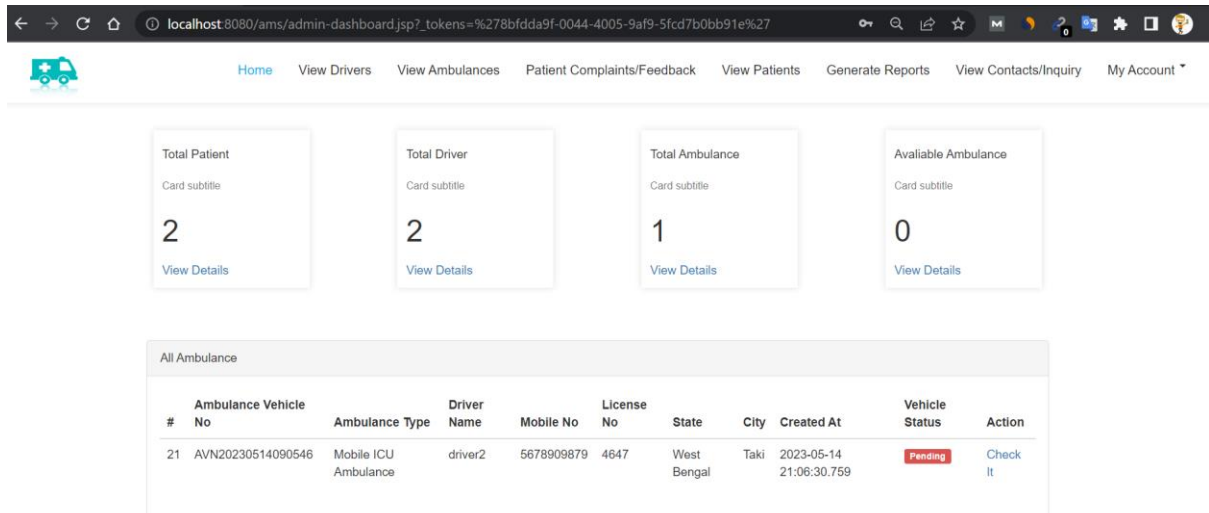
3. Admin Dashboard Page:

Output:

JSP Code:

```
<%@page import="java.sql.ResultSet"%>

<%@page import="com.connection.DatabaseConnection"%>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

    pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html lang="en">

  <!-- Site Metas -->

  <title>AMS</title>

  <!-- Site Icons -->

  <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />

  <link rel="apple-touch-icon" href="images/apple-touch-icon.png">

  <!-- Bootstrap CSS -->

  <link rel="stylesheet" href="css/bootstrap.min.css">

  <!-- Site CSS -->

  <link rel="stylesheet" href="style.css">
```

```html
<!-- Colors CSS -->
<link rel="stylesheet" href="css/colors.css">
<!-- ALL VERSION CSS -->
<link rel="stylesheet" href="css/versions.css">
<!-- Responsive CSS -->
<link rel="stylesheet" href="css/responsive.css">
<!-- Custom CSS -->
<link rel="stylesheet" href="css/custom.css">


<!-- Modernizer for Portfolio -->
<script src="js/modernizer.js"></script>
<link rel="stylesheet"
    href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body class="host_version">
  <%
    if (session.getAttribute("uname") != null && session.getAttribute("uname") != "") {
  %>
  <jsp:include page="admin-header.jsp"></jsp:include>
    <div class="container" style="margin-bottom: 150px;">
      <div class="row d-flex justify-content-center" style="margin-left: 30px;
        padding-top: 31px;">
        <div class="col-sm-3">
          <div class="card dynamic-card">
            <div class="card-body">
```

```jsp
                    <h5 class="card-title">Total Patient</h5>
                    <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>
                <%
                    int patient = 0;
                    ResultSet resultset = DatabaseConnection.getResultFromSqlQuery("select
count(*) from tblpatient");
                    if (resultset.next()) {
                        patient = resultset.getInt(1);
                    }
                %>
                    <p class="card-text"><%=patient%></p>
                    <a href="admin-view-patient.jsp" class="card-link">View Details</a>
                </div>
            </div>
        </div>
        <div class="col-sm-3">
            <div class="card dynamic-card">
                <div class="card-body">
                    <h5 class="card-title">Total Driver</h5>
                    <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>
                <%
                    int driver = 0;
                    ResultSet resultset1 = DatabaseConnection.getResultFromSqlQuery("select
count(*) from tbldriver");
                    if (resultset1.next()) {
                        driver = resultset1.getInt(1);
                    }
                %>
                    <p class="card-text"><%= driver%></p>
```

```html
          <a href="admin-view-drivers.jsp" class="card-link">View Details</a>

        </div>

      </div>

    </div>

    <div class="col-sm-3">

      <div class="card dynamic-card">

        <div class="card-body">

          <h5 class="card-title">Total Ambulance</h5>

          <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>

          <%

            int ambulance = 0;

            ResultSet resultset2 = DatabaseConnection.getResultFromSqlQuery("select
count(*) from tblambulance");

            if (resultset2.next()) {

              ambulance = resultset2.getInt(1);

            }

          %>

          <p class="card-text"><%= ambulance%></p>

          <a href="admin-view-ambulance.jsp" class="card-link">View Details</a>

        </div>

      </div>

    </div>

    <div class="col-sm-3">

      <div class="card dynamic-card">

        <div class="card-body">

          <h5 class="card-title">Avaliable Ambulance</h5>

          <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>

          <p class="card-text">0</p>

          <a href="#" class="card-link">View Details</a>
```

```html
            </div>
        </div>
    </div>
</div>
<div>
    <div class="row admin-dashboard-table" style="margin-left: 22px;">
        <div class="col-md-12">
            <!--  Context Classes  -->
            <div class="panel panel-default">
                <div class="panel-heading">All Ambulance</div>
                <div class="panel-body">
                    <div class="table-responsive">
                        <table class="table">
                            <thead>
                                <tr>
                                    <th>#</th>
                                    <th>Ambulance Vehicle No</th>
                                    <th>Ambulance Type</th>
                                    <th>Driver Name</th>
                                    <th>Mobile No</th>
                                    <th>License No</th>
                                    <th>State</th>
                                    <th>City</th>
                                    <th>Created At</th>
                                    <th>Vehicle Status</th>
                                    <th>Action</th>
                                </tr>
                            </thead>
                            <%
```

```jsp
                    ResultSet resultset4 =
DatabaseConnection.getResultFromSqlQuery("select * from tblambulance where
status='Pending'");

                    while (resultset4.next()) {
        %>
        <tbody>
          <tr class="default">
            <td><%=resultset4.getString("id")%></td>
            <td><%=resultset4.getString("ambulance_vehicle_no")%></td>
            <td><%=resultset4.getString("ambulance_type")%></td>
            <td><%=resultset4.getString("driver_name")%></td>
            <td><%=resultset4.getString("driver_mobile")%></td>
            <td><%=resultset4.getString("driver_lincense_no")%></td>
            <td><%=resultset4.getString("state")%></td>
            <td><%=resultset4.getString("city")%></td>
            <td><%=resultset4.getString("created_at")%></td>
            <%
                if (resultset4.getString("status").equals("Pending")) {
            %>
            <td><span class="label label-danger"><%=resultset4.getString("status")%></span></td>
            <%
            } else {
            %><td><span class="label label-success"><%=resultset4.getString("status")%></span></td>

            <%
                }
            %>
```

```jsp
                    <td><a href="admin-check-
ambulance.jsp?id=<%=resultset4.getString("id")%>">Check It</a></td>

                </tr>

            </tbody>

            <%

            }

            %>

        </table>

    </div>

    </div>

    </div>

    </div>

    </div>

    </div>

    <br>

    <jsp:include page="footer.jsp"></jsp:include>

    <%

    } else {

        response.sendRedirect("index.jsp");

    }

    %>

</body>

</html>
```

4. Admin View Driver Page:

Output:

All Drivers

Driver Id	Driver Name	Email	Mobile	Address	Created At	Updated At	Action
1	Driver	driver@gmail.com	8159985867	Taki	2023-04-23 19:05:58.404	2023-04-23 19:05:58.404	Remove Driver
41	driver2	driver2@gmail.com	5678909879	Taki	2023-05-14 21:01:55.216	2023-05-14 21:01:55.216	Remove Driver

JSP Code:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
        pageEncoding="ISO-8859-1"%>
<%@ page import="java.sql.*"%>
<%@ page import="com.connection.*"%>
<!DOCTYPE html>
<html lang="en">
<title>AMS</title>
<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />
<link rel="apple-touch-icon" href="images/apple-touch-icon.png">
<!-- Bootstrap CSS -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Site CSS -->
<link rel="stylesheet" href="style.css">
<!-- Colors CSS -->
<link rel="stylesheet" href="css/colors.css">
<!-- ALL VERSION CSS -->
<link rel="stylesheet" href="css/versions.css">
<!-- Responsive CSS -->
<link rel="stylesheet" href="css/responsive.css">
```

```html
<!-- Custom CSS -->

<link rel="stylesheet" href="css/custom.css">

<!-- Modernizer for Portfolio -->

<script src="js/modernizer.js"></script>

<link rel="stylesheet"

        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

<script

        src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

<script

        src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>

<body class="host_version">

        <%

                if (session.getAttribute("uname") != null && session.getAttribute("uname") !=
"") {

        %>

        <jsp:include page="admin-header.jsp"></jsp:include>

        <div class="container-fluid">

                <div class="row pad-botm">

                        <div class="col-md-12 register-header">

                 <h4 class="header-line"><b>All Drivers</b></h4>

                        </div>

                </div>

                <div class="row">

                        <div class="col-md-12">

                                <!--   Context Classes  -->

                                <div class="panel panel-default">

                                        <div class="panel-heading">All Drivers</div>
```

```html
<div class="panel-body">
    <div class="table-responsive">
        <table class="table">
            <thead>
                <tr>
                    <th>Driver Id</th>
                    <th>Driver Name</th>
                    <th>Email</th>
                    <th>Mobile</th>
                    <th>Address</th>
                    <th>Created At</th>
                    <th>Updated At</th>
                    <th>Action</th>
                </tr>
            </thead>
            <%
                ResultSet resultset = DatabaseConnection.getResultFromSqlQuery("select * from tbldriver");
                while (resultset.next()) {
            %>
            <tbody>
                <tr class="default">
                    <td><%=resultset.getString("driver_id")%></td
                    <td><%=resultset.getString("driver_name")%></td>
                    <td><%=resultset.getString("driver_email")%></td>
                    <td><%=resultset.getString("driver_mobile")%></td>

                    <td><%=resultset.getString("driver_address")%></td>
                    <td><%=resultset.getString("created_at")%></td>
```

```jsp
            <td><%=resultset.getString("updated_at")%></td>
                                        <td><a
href="admin-delete-driver.jsp?id=<%=resultset.getString("driver_id")%>" class="btn btn-
danger">Remove Driver</a></td>
                                    </tr>
                                </tbody>
                                <%
                                    }
                                %>
                            </table>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <br>
    <jsp:include page="footer.jsp"></jsp:include>
    <%
        } else {
    response.sendRedirect("index.jsp");
    }
    %>
</body>
</html>
```

5. Patient Search Ambulance Page:

Output:

JSP Code:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
        pageEncoding="ISO-8859-1"%>
<%@ page import="java.sql.*"%>
<%@ page import="com.connection.*"%>
<!DOCTYPE html>
<title>AMS</title>
<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />
<link rel="apple-touch-icon" href="images/apple-touch-icon.png">
<!-- Bootstrap CSS -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Site CSS -->
<link rel="stylesheet" href="style.css">
<!-- Colors CSS -->
<link rel="stylesheet" href="css/colors.css">
<!-- ALL VERSION CSS -->
<link rel="stylesheet" href="css/versions.css">
<!-- Responsive CSS -->
<link rel="stylesheet" href="css/responsive.css">
<!-- Custom CSS -->
```

```html
<link rel="stylesheet" href="css/custom.css">
<!-- Modernizer for Portfolio -->
<script src="js/modernizer.js"></script>
<link rel="stylesheet"
        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script
        src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script
        src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body class="host_version">
        <%
                if (session.getAttribute("uname") != null && session.getAttribute("uname") !=
"") {
        %>
        <jsp:include page="patient-header.jsp"></jsp:include>
        <div class="container-fluid">
                <div class="row pad-botm">
                        <div class="col-md-12">
                                <div class="register-header"><h4 class="header-
line"><b>Search Ambulance</b></h4></div>
                                        <form class="form-inline" action="search-ambulance.jsp"
                                                method="post">
                                                <label for="email">Enter City.:</label> <input
type="text"
                                                        class="form-control" id="city"
placeholder="Enter city"
                                                        name="city">
                                                <button type="submit" class="btn btn-
primary">Search
```

```
                                            Ambulance</button>
                            </form>


                </div>
        </div>
        <br>
        <div class="row">
                <div class="col-md-12">
                        <%
                                String bookAmbulance = (String)
session.getAttribute("book-ambulance");
                                        if (bookAmbulance != null) {
                                        session.removeAttribute("book-ambulance");
                        %>
                        <div class="alert alert-success" id="success">Ambulance
booking successfully.</div>
                        <%
                                }
                        %>
                        <div class="panel panel-default">
                                <div class="panel-heading">View Ambulance</div>
                                <div class="panel-body">
                                        <div class="table-responsive">
                                                <table class="table">
                                                        <thead>
                                                                <tr>
                                                                        <th>#</th>
                                                                        <th>Ambulance
Vehicle No</th>
```

```jsp
                                                    <th>Ambulance
Type</th>
                                                    <th>Driver
Name</th>
                                                    <th>Mobile
No</th>
                                                    <th>License
No</th>
                                                    <th>State</th>
                                                    <th>City</th>
                                                    <th>Created
At</th>
                                                    <th>Updated
At</th>
                                                    <th>Vehicle
Status</th>
                                                    <th>Book
Ambulance</th>
                                            </tr>
                                        </thead>
                                        <%
                                            ResultSet resultset = DatabaseConnection
                                                    .getResultFromSqlQuery("select * from
tblambulance where city like '%" + request.getParameter("city") + "%'");
                                            while (resultset.next()) {
                                        %>
                                        <tbody>
                                            <tr class="default">

        <td><%=resultset.getString("id")%></td>

        <td><%=resultset.getString("ambulance_vehicle_no")%></td>
```

```jsp
<td><%=resultset.getString("ambulance_type")%></td>

<td><%=resultset.getString("driver_name")%></td>

<td><%=resultset.getString("driver_mobile")%></td>

<td><%=resultset.getString("driver_lincense_no")%></td>

<td><%=resultset.getString("state")%></td>

<td><%=resultset.getString("city")%></td>

<td><%=resultset.getString("created_at")%></td>

<td><%=resultset.getString("updated_at")%></td>
<%
    if (resultset.getString("status").equals("Added")) {
%>
<td><span class="label label-success">Available</span></td>
<td><a href="book-ambulance.jsp?avn=<%=resultset.getString("ambulance_vehicle_no")%>"
    class="btn btn-warning">Book Ambulance</a></td>
<%
    } else {
%>
<td><span class="label label-danger">Not Available</span></td>
<%
    }
```

```jsp
                                        %>
                                    </tr>
                                </tbody>
                                <%
                                    }
                                %>
                            </table>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <br>
    <jsp:include page="footer.jsp"></jsp:include>
    <%
        } else {
    response.sendRedirect("index.jsp");
    }
    %>
</body>
<script type="text/javascript">
    $(function() {
        $('#success').delay(3000).show().fadeOut('slow');
    });
</script>
</html>
```

6. Driver Ambulance Booking Page:

Output:

JSP Code:

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
        pageEncoding="ISO-8859-1"%>

<%@ page import="java.sql.*"%>

<%@ page import="com.connection.*"%>

<!DOCTYPE html>

<html lang="en">

<title>AMS</title>

<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />

<link rel="apple-touch-icon" href="images/apple-touch-icon.png">

<!-- Bootstrap CSS -->

<link rel="stylesheet" href="css/bootstrap.min.css">

<!-- Site CSS -->

<link rel="stylesheet" href="style.css">

<!-- Colors CSS -->

<link rel="stylesheet" href="css/colors.css">

<!-- ALL VERSION CSS -->

<link rel="stylesheet" href="css/versions.css">
```

```html
<!-- Responsive CSS -->

<link rel="stylesheet" href="css/responsive.css">

<!-- Custom CSS -->

<link rel="stylesheet" href="css/custom.css">

<!-- Modernizer for Portfolio -->

<script src="js/modernizer.js"></script>

<link rel="stylesheet"

        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

<script

        src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

<script

        src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>

<body class="host_version">

        <%

                if (session.getAttribute("uname") != null && session.getAttribute("uname") !=
"") {

        %>

        <jsp:include page="driver-header.jsp"></jsp:include>

        <div class="container-fluid" style="margin-bottom: 350px;">

                <div class="row pad-botm">

                        <div class="col-md-12 register-header">

                        <h4 class="header-line"><b>Patients Request For Ambulance</b></h4>

                        </div>

                </div>

                <div class="row">

                        <div class="col-md-12">

                                <!--   Context Classes  -->
```

```html
<div class="panel panel-default">
    <div class="panel-heading">Patients Request For Ambulance</div>
    <div class="panel-body">
        <div class="table-responsive">
            <table class="table">
                <thead>
                    <tr>
                        <th>Patient Id</th>
                        <th>Name</th>
                        <th>Email Id</th>
                        <th>Mobile</th>
                        <th>Address</th>
                        <th>Disease</th>
                        <th>Ambulance Id</th>
                        <th>Source City</th>
                        <th>Destination City</th>
                        <th>Status</th>
                        <th>Action</th>
                    </tr>
                </thead>
                <%
                    String avn = null;
                    ResultSet rs = DatabaseConnection.getResultFromSqlQuery("select * from tblambulance where driver_name='" + session.getAttribute("dname") + "'");
                    if (rs.next()) {
```

```jsp
                                          avn =
rs.getString("ambulance_vehicle_no");

                                          }

                                          System.out.println("avn "
+ avn);


                                          ResultSet resultset =
DatabaseConnection.getResultFromSqlQuery("select * from tblpatient where avn='" + avn
+ "'");

                                          while (resultset.next()) {
                            %>
                            <tbody>
                                <tr class="default">

    <td><%=resultset.getString("patient_id")%></td>

    <td><%=resultset.getString("patient_name")%></td>

    <td><%=resultset.getString("patient_email")%></td>

    <td><%=resultset.getString("Patient_mobile")%></td>

    <td><%=resultset.getString("patient_address")%></td>

    <td><%=resultset.getString("patient_disease")%></td>

    <td><%=resultset.getString("avn")%></td>

    <td><%=resultset.getString("source_city")%></td>

    <td><%=resultset.getString("destination_city")%></td>

                                          <%
```

```jsp
                                                                if
(resultset.getString("ambulance_status").equals("Assigned")) {

                                                                %>

                                                                <td><span
class="label label-success">Assigned</span></td>

                                                                <%
                                                                } else {

                                                                %>
                                                                <td><span
class="label label-danger">Pending</span></td>

                                                                <%
                                                                }

                                                                %>
                                                                <%
                                                                if
(resultset.getString("ambulance_status").equals("Assigned")) {

                                                                %>
                                                                <td><a

        href="ManagePatientsAmbulanceRequest?id=<%=resultset.getString("avn")%>&pa
ntietId=<%=resultset.getString("patient_id")%>"><button
                                                class="btn btn-danger"
                                                                onClick="return confirm('Are you
sure, you want to cancel ambulance?');">Cancel</button></a></td>

                                                                <%
                                                                } else {

                                                                %>
                                                                <td><a

        href="ManagePatientsAmbulanceRequest?id=<%=resultset.getString("avn")%>&pa
ntietId=<%=resultset.getString("patient_id")%>"><button
                                                        class="btn btn-primary"
                                                                        onClick="return
```

```
confirm('Are you sure, you want to assigned ambulance to
patient?');">Assign</button></a></td>

                                                          <%
                                                      }
                                                  %>
                                          </tr>
                                      </tbody>
                                      <%
                                      }
                                  %>
                              </table>
                          </div>
                      </div>
                  </div>
              </div>
          </div>
      </div>
      <jsp:include page="footer.jsp"></jsp:include>
      <%
          } else {
              response.sendRedirect("index.jsp");
          }
      %>
</body>
</html>
```

7. Driver Add Ambulance Page:

Output:

Request To Admin For Adding Ambulance

JSP Code:

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

    pageEncoding="ISO-8859-1"%>

<%@ page import="java.sql.*" %>

<%@ page import="com.connection.*" %>

<!DOCTYPE html>

<html lang="en">

  <title>AMS</title>

  <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />

  <link rel="apple-touch-icon" href="images/apple-touch-icon.png">

  <!-- Bootstrap CSS -->

  <link rel="stylesheet" href="css/bootstrap.min.css">

  <!-- Site CSS -->

  <link rel="stylesheet" href="style.css">

  <!-- Colors CSS -->

  <link rel="stylesheet" href="css/colors.css">

  <!-- ALL VERSION CSS -->

  <link rel="stylesheet" href="css/versions.css">

  <!-- Responsive CSS -->
```

```html
<link rel="stylesheet" href="css/responsive.css">
<!-- Custom CSS -->
<link rel="stylesheet" href="css/custom.css">
<!-- Modernizer for Portfolio -->
<script src="js/modernizer.js"></script>
<link rel="stylesheet"
    href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body class="host_version">
    <%
        if (session.getAttribute("uname") != null && session.getAttribute("uname") != "") {
    %>
    <jsp:include page="driver-header.jsp"></jsp:include>
        <div class="container">
            <div class="row pad-botm">
                <div class="col-md-12 register-header">
                    <h4 class="header-line"><b>Request To Admin For Adding
Ambulance</b></h4>
                </div>
            </div>
            <div class="row">
                <div class="col-md-5 col-sm-5 col-xs-12">
                    <img src="images/ambulance-request.jpg"
                        style="width: 400px; height: 400px;">
                </div>
```

```jsp
<div class="col-md-7 col-sm-7 col-xs-12">
<%
    String addAmbulance = (String) session.getAttribute("add-ambulance");
    if (addAmbulance != null) {
        session.removeAttribute("add-ambulance");
%>
<div class="alert alert-success" id="success">Ambulance added successfully,
waiting for admin approval.</div>
<%
    }
%>
<div class="panel panel-info">
    <div class="panel-heading">Request To Admin For Adding
        Ambulance</div>
    <div class="panel-body">
        <form role="form" action="RequestToAddAmbulance" method="post"
enctype="multipart/form-data">
            <div class="form-group">
                <label>Name</label> <input class="form-control" type="text"
                            name="dname" value="<%=
session.getAttribute("dname")%>" readonly/>
            </div>
            <div class="form-group">
                <label>Mobile No</label> <input class="form-control" type="text"
                            name="mobile" value="<%=
session.getAttribute("mobile")%>" readonly/>
            </div>
            <div class="form-group">
                <%
                    String vehicleNo = DatabaseConnection.generateAmbulanceId();
```

```
                    %>
                    <label>Ambulance Vehicle No</label> <input class="form-control"
                                        type="text" name="vehicleNo"
value="<%=vehicleNo%>" readonly/>

            </div>

            <div class="form-group">

                <label>Ambulance Type</label> <select class="form-control"
                                    type="text" name="ambulanceType" required>

                    <option>Individual Ambulance</option>

                    <option>Cardiac Ambulance</option>

                    <option>Collective Ambulance</option>

                    <option>Mobile ICU Ambulance</option>

                    <option>Basic Life Support Ambulance</option>

                </select>

            </div>

            <div class="form-group">

                <label>License No</label> <input class="form-control"
                                    type="text" name="licenseNo" required/>

            </div>

            <div class="form-group">

                <label>License Image</label> <input class="form-control"
                                    type="file" name="aimage" id="picfile"
onchange="document.getElementById('pic').src =
window.URL.createObjectURL(this.files[0]);" required/>

                <img src="" width="150" height="150" id="pic" name="pic" alt="No image
Choce" style="padding-top: 10px;">

            </div>

            <div class="form-group">

                <label>State</label> <select class="form-control" name="state"
required/>
```

```
<option>Andhra Pradesh</option>
<option>Arunachal Pradesh</option>
<option>Assam</option>
<option>Bihar</option>
<option>Chhattisgarh</option>
<option>Goa</option>
<option>Gujarat</option>
<option>Haryana</option>
<option>Himachal Pradesh</option>
<option>Jharkhand</option>
<option>Karnataka</option>
<option>Kerala</option>
<option>Madhya Pradesh</option>
<option>Maharashtra</option>
<option>Manipur</option>
<option>Meghalaya</option>
<option>Mizoram</option>
<option>Nagaland</option>
<option>Odisha</option>
<option>Punjab</option>
<option>Rajasthan</option>
<option>Sikkim</option>
<option>Tamil Nadu</option>
<option>Telangana</option>
<option>Tripura</option>
<option>Uttar Pradesh</option>
<option>Uttarakhand</option>
<option>West Bengal</option>
</select>
```

```
                </div>

                <div class="form-group">

                   <label>City</label> <input class="form-control"

                              type="text" name="city" required/>

                </div>

                <button type="submit" class="btn btn-info">Send Request To Add
Ambulance

                </button>

              </form>

            </div>

          </div>

        </div>

      </div>

      <jsp:include page="footer.jsp"></jsp:include>

      <%

        } else {

          response.sendRedirect("index.jsp");

        }

      %>
</body>
<script type="text/javascript">

  $(function () {

    $('#success').delay(3000).show().fadeOut('slow');

  });
</script>
</html>
```

Servlet Code:

```java
package com.driver;

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;

import static com.connection.DatabaseConnection.connection;

import java.io.InputStream;

import java.sql.Connection;

import java.sql.DriverManager;

import oracle.jdbc.OracleDriver;

@MultipartConfig

@WebServlet("/RequestToAddAmbulance")

public class RequestToAddAmbulance extends HttpServlet {

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

        String avn = request.getParameter("vehicleNo");

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

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

        String driverName = request.getParameter("dname");

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

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

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

        String status = "Pending";

        Part imagePart = request.getPart("aimage");

        InputStream inputStream = imagePart.getInputStream();
```

```java
        HttpSession session = request.getSession();

        try {

            Connection connection = DatabaseConnection.getConnection();

            PreparedStatement pstmt = (PreparedStatement)
connection.prepareStatement("insert into
tblambulance(ambulance_vehicle_no,ambulance_type,driver_lincense_no,driver_nam
e,driver_mobile,state,city,status,license_image)values(?,?,?,?,?,?,?,?,?)");

            pstmt.setString(1, avn);

            pstmt.setString(2, ambulanceType);

            pstmt.setString(3, licenseNo);

            pstmt.setString(4, driverName);

            pstmt.setString(5, driverMobile);

            pstmt.setString(6, state);

            pstmt.setString(7, city);

            pstmt.setString(8, status);

            pstmt.setBlob(9, inputStream);

            int requestAmbulance = pstmt.executeUpdate();

            if (requestAmbulance > 0) {

                String message = "Ambulance added successfully, waiting for admin approval.";

                session.setAttribute("add-ambulance", message);

                response.sendRedirect("add-ambulance-driver.jsp");

            }
        } catch (Exception e) {

            e.printStackTrace();

        }

    }
}
```
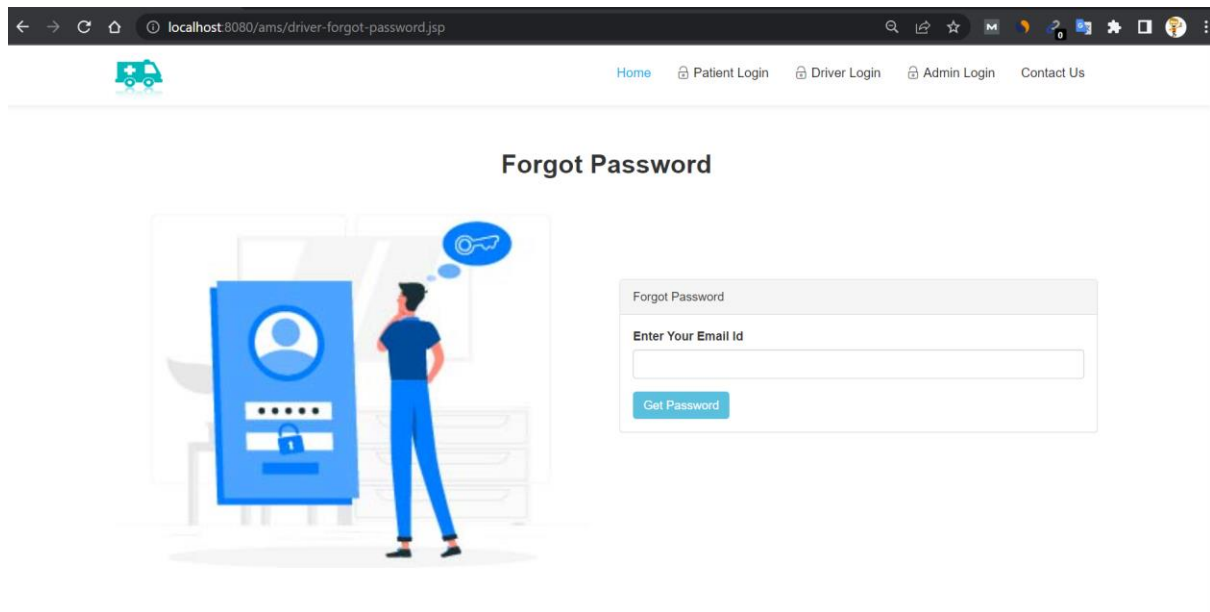
8. Driver Forgot Passowrd Page:

Output:

JSP Code:

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
        pageEncoding="ISO-8859-1"%>

<%@ page import="java.sql.*" %>

<%@ page import="com.connection.*" %>

<!DOCTYPE html>

<html lang="en">

<title>AMS</title>

<link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />

<link rel="apple-touch-icon" href="images/apple-touch-icon.png">

<!-- Bootstrap CSS -->

<link rel="stylesheet" href="css/bootstrap.min.css">

<!-- Site CSS -->

<link rel="stylesheet" href="style.css">

<!-- Colors CSS -->

<link rel="stylesheet" href="css/colors.css">
```

```html
<!-- ALL VERSION CSS -->

<link rel="stylesheet" href="css/versions.css">

<!-- Responsive CSS -->

<link rel="stylesheet" href="css/responsive.css">

<!-- Custom CSS -->

<link rel="stylesheet" href="css/custom.css">

<!-- Modernizer for Portfolio -->

<script src="js/modernizer.js"></script>

<link rel="stylesheet"

        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

<script

        src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

<script

        src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></scri
pt>

</head>

<body class="host_version">

        <jsp:include page="header.jsp"></jsp:include><br>

        <div class="container">

                <div class="row pad-botm">

                        <div class="col-md-12 register-header">

                 <h4 class="header-line"><b>Forgot Password</b></h4>

                        </div>

                </div>

                <div class="row">

                        <div class="col-md-6 col-sm-6 col-xs-12">

                                <img src="images/forgot-password.jpg"
style="width:550px;">

                        </div>
```

```jsp
<div class="col-md-6 col-sm-6 col-xs-12 forgot-password">
    <%
        String success = (String) session.getAttribute("mail-success");

        if (success != null) {
        session.removeAttribute("mail-success");
    %>
    <div class="alert alert-success" id="success">Your login user
        name & password send successfully in your
        email.</div>
    <%
        }
    %>
    <%
        String failPassword = (String) session.getAttribute("error");

        if (failPassword != null) {
        session.removeAttribute("error");
    %>
    <div class="alert alert-danger" id="danger">
        <strong>Your have enter wrong email id so unable to
            get password.</strong>
    </div>
    <%
        }
    %>
    <div class="panel panel-default">
        <div class="panel-heading">Forgot Password</div>
        <div class="panel-body">
```

```html
                                                <form action="ForgotDriverPassword"
method="post">
                                                        <div class="form-group">
                                                                <label>Enter Your Email
Id</label> <input class="form-control"
                                                                        type="email"
name="email" id="txtEmail"/>
                                                        </div>
                                                        <button type="submit" id="btnValidate"
class="btn btn-info">Get Password</button>
                                                </form>
                                        </div>
                                </div>
                        </div>
                </div>
        </div>
        </div>
        <jsp:include page="footer.jsp"></jsp:include>
</body>
<script type="text/javascript">
        $(function() {
                $('#danger').delay(3000).show().fadeOut('slow');
        });
</script>
<script type="text/javascript">
        $(function() {
                $('#success').delay(3000).show().fadeOut('slow');
        });
</script>
</html>
```

Servlet Code:

```java
package com.driver;

import com.email.EmailUtility;

@WebServlet("/ForgotDriverPassword")
public class ForgotDriverPassword extends HttpServlet {

        private String host;

        private String port;

        private String user;

        private String pass;

        public void init() {

                // reads SMTP server setting from web.xml file

                ServletContext context = getServletContext();

                host = "smtp.gmail.com";

                port = "587";

                user = "sushantakarmakar818@gmail.com";

                pass = "efdtififcnxxcfcg";

        }

        protected void doPost(HttpServletRequest request, HttpServletResponse response)

                        throws ServletException, IOException {

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

                String uname = "";

                String password = null;

                String userPassword = "";

                String databaseEmailId = "";

                String resultMessage = "";

                String message = "Ambulance Management System";

                HttpSession session = request.getSession();

                try {
```

```java
                    ResultSet resultset =
DatabaseConnection.getResultFromSqlQuery("select driver_email from tbldriver where
driver_email='" + email + "'");

                if (resultset.next()) {

                        databaseEmailId = resultset.getString("driver_email");

                }

                if (databaseEmailId.equals(email)) {

                        ResultSet resultPassword =
DatabaseConnection.getResultFromSqlQuery("select uname,upass from tbldriver where
driver_email='" + email + "'");

                        if (resultPassword.next()) {

                                uname = resultPassword.getString("uname");

                                password = resultPassword.getString("upass");

                                userPassword = "Hi " + uname + "," +
System.lineSeparator() + System.lineSeparator()+ "Your Driver Login Portal" +
System.lineSeparator() + "User Name: " + uname+ System.lineSeparator() + "Password: " +
password + System.lineSeparator()+ System.lineSeparator() + "Thank you." +
System.lineSeparator()+ "Ambulance Management System Team.";

                                EmailUtility.sendEmail(host, port,
"ambulancemanagement2021@gmail.com", "admin2021", email, message,userPassword);

                                resultMessage = "Your login user name & password
send successfully in your email.";

                                session.setAttribute("mail-success", resultMessage);

                                response.sendRedirect("driver-forgot-password.jsp");

                        }

                } else {

                        String fail = "Your email id is wrong, unable to get password.";

                        session.setAttribute("error", fail);

                        response.sendRedirect("driver-forgot-password.jsp");

                }

        } catch (Exception e) {

                e.printStackTrace();
```
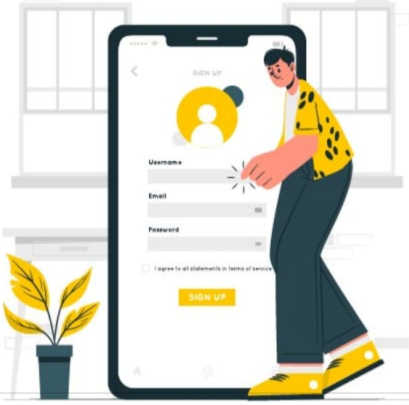
```
            }
        }
}
```

9. Patient Register Page:

Output:

JSP Code:

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

```
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.sql.*"%>
<%@ page import="com.connection.*"%>
<!DOCTYPE html>
<html lang="en">
    <title>AMS</title>


    <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />
    <link rel="apple-touch-icon" href="images/apple-touch-icon.png">


    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <!-- Site CSS -->
    <link rel="stylesheet" href="style.css">
    <!-- Colors CSS -->
    <link rel="stylesheet" href="css/colors.css">
    <!-- ALL VERSION CSS -->
    <link rel="stylesheet" href="css/versions.css">
    <!-- Responsive CSS -->
    <link rel="stylesheet" href="css/responsive.css">
    <!-- Custom CSS -->
    <link rel="stylesheet" href="css/custom.css">
    <!-- Modernizer for Portfolio -->
    <script src="js/modernizer.js"></script>
    <link rel="stylesheet"
        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
    <script
    src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <script
```

```
          src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body class="host_version">
   <jsp:include page="header.jsp"></jsp:include><br>
     <div class="container">
       <div class="row pad-botm">
         <div class="col-md-12 register-header">
           <h4 class="header-line"><b>Patient Registration</b></h4>
         </div>
       </div>
       <div class="row">
         <div class="col-md-6 col-sm-6 col-xs-12">
           <img src="images/patient-registration.jpg">
         </div>
         <div class="col-md-6 col-sm-6 col-xs-12">
         <%
           String adminRegister = (String) session.getAttribute("success-message");
           if (adminRegister != null) {
             session.removeAttribute("success-message");
         %>
         <div class="alert alert-success" id="success">Patient account
           created successfully.</div>
           <%
             }
           %>
         <div class="panel panel-info">
           <div class="panel-heading">Create Patient Account</div>
           <div class="panel-body">
```

```html
<form role="form" action="AccountCreate" method="post"
name='patientRegister' enctype="multipart/form-data">
    <div class="form-group" style="display: none">
        <label>Patient Id</label>
        <%
            String patientId = DatabaseConnection.generatePatientId();
        %>
        <input class="form-control" type="text" value="<%=patientId%>"
            name="patientId" readonly />
    </div>
    <div class="form-group">
        <label>Patient Name</label> <input class="form-control"
                        type="text" name="patientName" required/>
    </div>
    <div class="form-group">
        <label>Email Id</label> <input class="form-control" type="email"
                        name="emailId" required/>
    </div>
    <div class="form-group">
        <label>Gender</label> <select class="form-control"
                        type="text" name="gender" required>
            <option>Male</option>
            <option>Female</option>
            <option>Other</option>
        </select>
    </div>
    <div class="form-group">
        <label>Mobile No</label> <input class="form-control" type="number"
                        name="mobile" id="txtMB"
```

```html
                                required/>

                <p id="phone-error" style="display:none; color:red;">Phone number must
be 10 digits long.</p>

            </div>

            <div class="form-group">

                <label>Address</label> <textarea class="form-control" type="text"

                                name="address" required></textarea>

            </div>

            <div class="form-group">

                <label>User Name</label> <input class="form-control" type="text"

                                name="uname" required/>

            </div>

            <div class="form-group">

                <label>Password</label> <input class="form-control"

                                type="password" name="upass" required/>

            </div>

            <div class="form-group">

                <label>Image</label> <input class="form-control"

                                type="file" name="pimage" id="picfile"
onchange="document.getElementById('pic').src =
window.URL.createObjectURL(this.files[0]);" required/>

                <img src="" width="150" height="150" id="pic" name="pic" alt="No image
Choce" style="padding-top: 10px;">

            </div>

            <div class="form-check form-switch check-box">

            <input class="form-check-input" type="checkbox"
id="flexSwitchCheckDefault" required onclick="funCheck(this)">

            <label class="form-check-label check-box-label"
for="flexSwitchCheckDefault" >I Agree To The Term & Conditions</label>

            </div>

            <div class="btn-sub">
```

```html
                    <button type="submit" class="btn btn-info" id="btnValidate"
disabled>Create

                        Account</button>

                    <button type="reset" class="btn btn-danger btn-reset"
id="btnReset">Reset</button>

                    <span class="already"><b>Already

                        registered?</b><a class="for-pwd" href="patient-login.jsp">Please
Login</a></span>

                </div>

            </form>

        </div>

    </div>

    </div>

    </div>

</div>

<br>

<jsp:include page="footer.jsp"></jsp:include>

<script type="text/javascript">

    $(function () {

        $('#danger').delay(3000).show().fadeOut('slow');

    });

    $(function () {

        $('#success').delay(3000).show().fadeOut('slow');

    });

    $(function () {

        $('#info').delay(3000).show().fadeOut('slow');

    });</script>

<script>

    const phoneInput = document.getElementById("txtMB");
```

```javascript
    const phoneError = document.getElementById("phone-error");

    phoneInput.addEventListener("change", function () {

      const phoneNumber = phoneInput.value;

      if (phoneNumber.length !== 10) {

        phoneError.style.display = "block";

        phoneInput.value = "";

      } else {

        phoneError.style.display = "none";

      }

    });

    function funCheck(chk)

    {

      if (chk.checked)

        document.getElementById("btnValidate").disabled = false;

      else

        document.getElementById("btnValidate").disabled = true;

    }
</script>

</body>

</html>
```

Servlet Code:

```java
package com.patient;

import com.connection.DatabaseConnection;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;
```

```java
import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import static com.connection.DatabaseConnection.connection;

import java.io.ByteArrayOutputStream;

import java.io.InputStream;

import java.sql.Blob;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import javax.imageio.ImageIO;

import javax.servlet.annotation.MultipartConfig;

import javax.servlet.http.Part;

import oracle.jdbc.OracleDriver;

@MultipartConfig

@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 pgender = request.getParameter("gender");

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

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

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

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

        // Assuming the image was uploaded as part of a form

        Part imagePart = request.getPart("pimage");

        InputStream inputStream = imagePart.getInputStream();
```

```java
try {

    Connection connection = DatabaseConnection.getConnection();

    HttpSession hs = request.getSession();

    PreparedStatement pstmt = (PreparedStatement)
connection.prepareStatement("insert into
tblpatient(patient_id,patient_name,patient_email,patient_gender,patient_mobile,patien
t_address,patient_image,uname,upass) VALUES (?,?,?,?,?,?,?,?,?)");

    pstmt.setString(1, patientId);

    pstmt.setString(2, pname);

    pstmt.setString(3, pemail);

    pstmt.setString(4, pgender);

    pstmt.setString(5, pmobile);

    pstmt.setString(6, paddress);

    pstmt.setBlob(7, inputStream);

    pstmt.setString(8, uname);

    pstmt.setString(9, upass);

    int patientAccount = pstmt.executeUpdate();

//        int patientAccount = DatabaseConnection.insertUpdateFromSqlQuery("insert into
tblpatient(patient_id,patient_name,patient_email,patient_gender,patient_mobile,patien
t_address,patient_image,uname,upass) values('" + patientId + "','" + pname + "','" + pemail
+ "', '" + pgender + "' ,'" + pmobile + "','" + paddress + "','" + imageBlob + "' ,'" + 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();
```

```
        }
    }
}
```

10. Patient Book Ambulance Page:

Output:

JSP Code:

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

    pageEncoding="ISO-8859-1"%>

```jsp
<%@ page import="java.sql.*"%>

<%@ page import="com.connection.*"%>

<!DOCTYPE html>

<html lang="en">

    <title>AMS</title>

    <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon" />

    <link rel="apple-touch-icon" href="images/apple-touch-icon.png">

    <!-- Bootstrap CSS -->

    <link rel="stylesheet" href="css/bootstrap.min.css">

    <!-- Site CSS -->

    <link rel="stylesheet" href="style.css">

    <!-- Colors CSS -->

    <link rel="stylesheet" href="css/colors.css">

    <!-- ALL VERSION CSS -->

    <link rel="stylesheet" href="css/versions.css">

    <!-- Responsive CSS -->

    <link rel="stylesheet" href="css/responsive.css">

    <!-- Custom CSS -->

    <link rel="stylesheet" href="css/custom.css">


    <!-- Modernizer for Portfolio -->

    <script src="js/modernizer.js"></script>

    <link rel="stylesheet"

        href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

    <script

    src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

    <script

    src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>
```

```jsp
<body class="host_version">
  <%
    if (session.getAttribute("uname") != null && session.getAttribute("uname") != "") {
  %>
  <jsp:include page="patient-header.jsp"></jsp:include>
    <div class="container">
      <div class="row pad-botm">
        <div class="col-md-12 register-header">
          <h4 class="header-line"><b>Application For Book Ambulance</b></h4>
        </div>
      </div>
    <%
      String avn = request.getParameter("avn");
      String driver_name = request.getParameter("name");
      String driver_license = request.getParameter("license");
      String driver_id = request.getParameter("driver_id");
    %>
    <div class="row">
      <div class="col-md-5 col-sm-5 col-xs-12">
        <img src="images/book-ambulance.jpg"
          style="width: 450px; padding-top: 40px;">
      </div>
      <div class="col-md-7 col-sm-7 col-xs-12">
        <div class="panel panel-info">
          <div class="panel-heading">Application For Book Ambulance</div>
          <div class="panel-body">
            <form role="form" action="BookAmbulance" method="post">
              <div class="form-group">
                <label>Patient Disease</label>
```

```html
                    <textarea name="pdisease" class="form-control" rows="3"></textarea>

                </div>

            </div>

            <div class="form-group">

                <label>Ambulance Vehicle No</label> <input type="text"

                                    class="form-control" name="vehicleNo"
value="<%=avn%>" readonly>

                </div>

            <div class="form-group">

                <label>driver Name</label> <input type="text"

                                class="form-control" name="driverName"
value="<%=driver_name%>" readonly>

                </div>

            <div class="form-group">

                <label>Ambulance Vehicle License No</label> <input type="text"

                                        class="form-control" name="vehicleLicense"
value="<%=driver_license%>" readonly>


            <div class="form-group">

                <label>Source Address</label> <textarea class="form-control"

                                type="text" name="scity" ></textarea>

                </div>

            <div class="form-group">

                <label>Destination Address</label> <textarea class="form-control"

                                type="text" name="dcity" ></textarea>

                </div>

            <div class="form-group">

                <label>Distance In Km.</label> <input class="form-control"

                                type="number" name="distance" />

                </div>
```

```html
            <div class="form-group">

              <label>PickUp Time</label> <input class="form-control"

                            type="datetime-local" name="pickuptime" />

            </div>

            <button type="submit" class="btn btn-info">Book

              Ambulance</button>

            </form>

          </div>

        </div>

      </div>

    </div>

  </div>

  <jsp:include page="footer.jsp"></jsp:include>

  <%

    } else {

      response.sendRedirect("index.jsp");

    }

  %>

</body>

</html>
```

Servlet Code:

```java
package com.patient;

public class BookAmbulance extends HttpServlet {

  protected void doPost(HttpServletRequest request, HttpServletResponse response)

      throws ServletException, IOException {

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

    String avn = request.getParameter("vehicleNo");

    String scity = request.getParameter("scity");
```

```java
String ambulance_status = "Pending";

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

String pickup_time = request.getParameter("pickuptime");

String driver_name = request.getParameter("driverName");

String driver_license = request.getParameter("vehicleLicense");

int dis = parseInt(request.getParameter("distance"));

float amount = dis * 10;

double driver_amount = amount * 0.7;

float admin_amount = (float) (amount-driver_amount);

HttpSession session = request.getSession();

try {

    int ambulanceBook = DatabaseConnection.insertUpdateFromSqlQuery(

                            "insert into
tblambulancebooking(patient_id,patient_disease, source_address, avn,
destination_address,pickup_time,status, driver_name, driver_license, distance, amount,
driver_amount, admin_amount)values('"

                                            + session.getAttribute("pid") + "','" +
pdisease + "','" + scity + "','" + avn + "','" + dcity + "','"

                                            + pickup_time + "','" +
ambulance_status+ "', '"+driver_name+"','"+driver_license+"',
'"+dis+"','"+amount+"','"+driver_amount+"','"+admin_amount+"')");

        if (ambulanceBook > 0) {

            String message = "Ambulance booking successfully.";

            session.setAttribute("book-ambulance", message);

            response.sendRedirect("search-ambulance.jsp");

        }

    } catch (Exception e) {

        e.printStackTrace();

    }

  }

}
```

FUTURE SCOPE

This chapter includes the Conclusion reached after creating the current version of the software to meet the System objectives. The comparison is done between the system that was built and original requirements that were designed at the beginning of the project. It also describes the Future Work that is intended to be accomplished with later versions of the software.

- This system can be extended to send the patient's vitals to the hospital once the patient has been picked up by the ambulance. This can be achieved by monitoring the health of the patients using different sensors and sending the data collected by the sensors to the hospital. The hospital staff can use this information to provide medical assistance to the patient without any delay.

- Other sensors can be implemented such as blood sugar monitoring, ECG monitoring, blood group detection can be implemented. Additional Ambulance services can be included. By using capacitive touch screen the system can be implemented in hospitals to maintain patient's data.

- Providing the facilities of payment can be included in the application. Voice alerts can be used to initiate the various controlling of devices and their status of operation.

CONCLUSION

The main objective of the application is to help Computer science students understanding the basics of HTML, css, Javascript, JSP, Servlet, SQL. By browsing through the application and looking at the code foreach graphical interpretation, students should be able to easily understand the implementation. The following results have been achieved after the completing the system and from this project we have learned how we can connect Oracle database with java servlet, and also how to query a database via java.

BILBIOGRAPHY

1. Java servlet programming, Jason Hunter, 4th Edition

2. Servlet and JSP: A Tutorial, Budi Kurniawan, 3rd Edition

3. https://www.geeksforgeeks.org/introduction-java-servlets/,

https://www.javatpoint.com/servlet-tutorial,

https://www.javatpoint.com/jsp-tutorial