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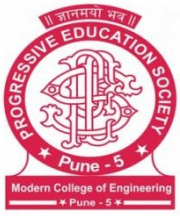

A PROJECT REPORT ON

"Device Repairing Store Management"

By

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Under the guidance of
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In fulfillment of B.E (Information Technology)

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Department of Information Technology

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Certificate

This is to certify that, project entitled "**Device Repairing Store Management**", Submitted by **GANESH PACHARNE, HARSHAL BHALSING, ASHVINI WAGHMARE, OMKAR BAGADE** is record of bonafide work carried out by them, under the guidance of **Mrs.Jyoti Jadhav**, in fulfillment of the requirement for the award of the B.E. of Bachelor of Engineering in **Information Technology,** Savitribai Phule Pune University.

Mrs Jyoti Jadhav **Prof.Mrs.S.D.Deshpande**

GUIDE **H.O.D (IT)**

Date: Place: Pune

ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to my guide Mrs.Jyoti Jadhav for her exemplary guidance, monitoring and constant encouragement. The blessing help and guidance given by her time to time shall carry me a long way in journey which I am about to embark.

I am obliged to all the teachers of Information Technology department for the valuable information provided by them. I am grateful for their cooperation.

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ABSTRACT

Our project is a Device Repairing Store Management portal for everyone who is willing to repair his/her device. This is a website that helps people to submit their devices efficiently and swiftly.In market, there are many customer care shops which provides facility of repairing device but, major problem many people face when they go to such customer care is huge amount of crowd present over their. So, there is high need to devlope system which can maintain a queue of customers so that time of customers will be saved.

Along with this customer should get time and cost estimation for repairing of device before submitting his/her device to repair workshop. Thus, our Device Repairing Store Management will help not only customers but also employees to manage repairing of number of devices at same time .

CHAPTER 1

INTRODUCTION

1.1 Idea and Motivation

The goals of our Device Repairing Store Management are:

- To provide anytime anyplace service for the customer.
- To minimize the number of crowd at the workshops.
- To minimize the efforts of customers.

1.2 Literature Reviews

Management in a repair shop is difficult. Hundreds of people visit a mobile/computer repair shop in a week. Problems are usually small, yet management is not efficient due to scheduling, time management issues. Interaction with customer is done by non-technical staff which might lead to insufficient understanding of problem the customer faces. Non-technical staff cannot give accurate time estimates and do so by guessing, causing dissatisfaction when repairs not delivered on time.

1.3 Proposed System

Our management system solves this problem by analysing ongoing repairs and giving a close estimation for completion of repair beforehand. Cost estimates are given before the customer handovers his/her device for repair. As our system being software based customer logs are easy to maintain as compared to traditional pen-paper system

CHAPTER 2

PROBLEM DEFINITION AND SCOPE

2.1 Problem Statement

In the era of computing time, all sectors having been increasing their use of network services, to create new opportunities for themselves. This project aim at developing a Device Repairing Store Management for device workshops. Where customer having an issue with a device can enter device name and issue and get the estimated cost and the estimated time required to repair the device. Also customer can check their profile anytime and check the repair progress of submitted device.

2.2 Description of Problem

When we visited different customer cares of different different companies then we came to know that majority of the shops use token based system for submitting our device to customer care. Also we noticed the fact that they dont have any concrete system which can tell user estimated cost and estimated time required for repairing certain device after submitting to customer care. Thus , we came to conclusion that one should be developed which can gather all the requirements of not only customers but also employees .Main requirements that we gathered they are queue should be maintained on computer system and not physically so that customer can save their huge amount of time. Also , time estimation and cost estimation should be given to customers so that they can decide whether I want to submit my device right now or not.

This system will replace long queue for device submission and collection and will make the management easier and efficient, this leads to high rate of customer satisfaction. In this the employees in the workshop will also be notified of new device added for repair

2.3 Scope

Customer can see repair cost and minimum time estimates as soon as he submits the details and problem regarding his device in the account customer holds in the Device Repairing Store Management. A database of different repairs that can be kept so that it will be helpful for future references for similar repair cases. Along with this we can also get to know repairs done by employees and track their record so that expertise field of employees can be know from these records. As login and signup facility is provided so that customers current and previous information is easy to store and this will be helpful for customer because when next time he/she would visit the workshop , he/she do not need to login and enter his/her details again and again. Customer cant make payment instantly while submitting the device along with this customer cannot communicate with repairing staff directly. Android application facility is not available for the following web portal.

CHAPTER 3

MODULE DESCRIPTION

3.1 Sign Up:

In this module, The registration of the new customer is done by entering name, email, contact, address and password.

3.2 Login:

This module provides login for admin, user and employee by entering name and password.

3.3 Submit Device:

In this module the customer enters the device name and issues related to it.

3.4 Cost Estimation:

After entering the device and issues customer get the estimated cost required to repair their device.

3.5 Time Estimation:

In this module along with the cost, the time required to repair the device is also shown.

3.6 Get Your Receipt By Email:

After confirming the order, customer can get the receipt by email.

CHAPTER 4

SYSTEM REQUIREMENT SPECIFICATION

4.1 Software Requirements:

Front End	Java, JSP, HTML, CSS, Javascript
Back End	Mysql Server, XAMPP

4.2 Hardware Requirements:

RAM	512 MB(Min)
Processor	Intel Dual Core Processor
Memory	1 GB

CHAPTER 5

FUNCTIONAL MODEL AND DESCRIPTION

5.1 ER Diagram:

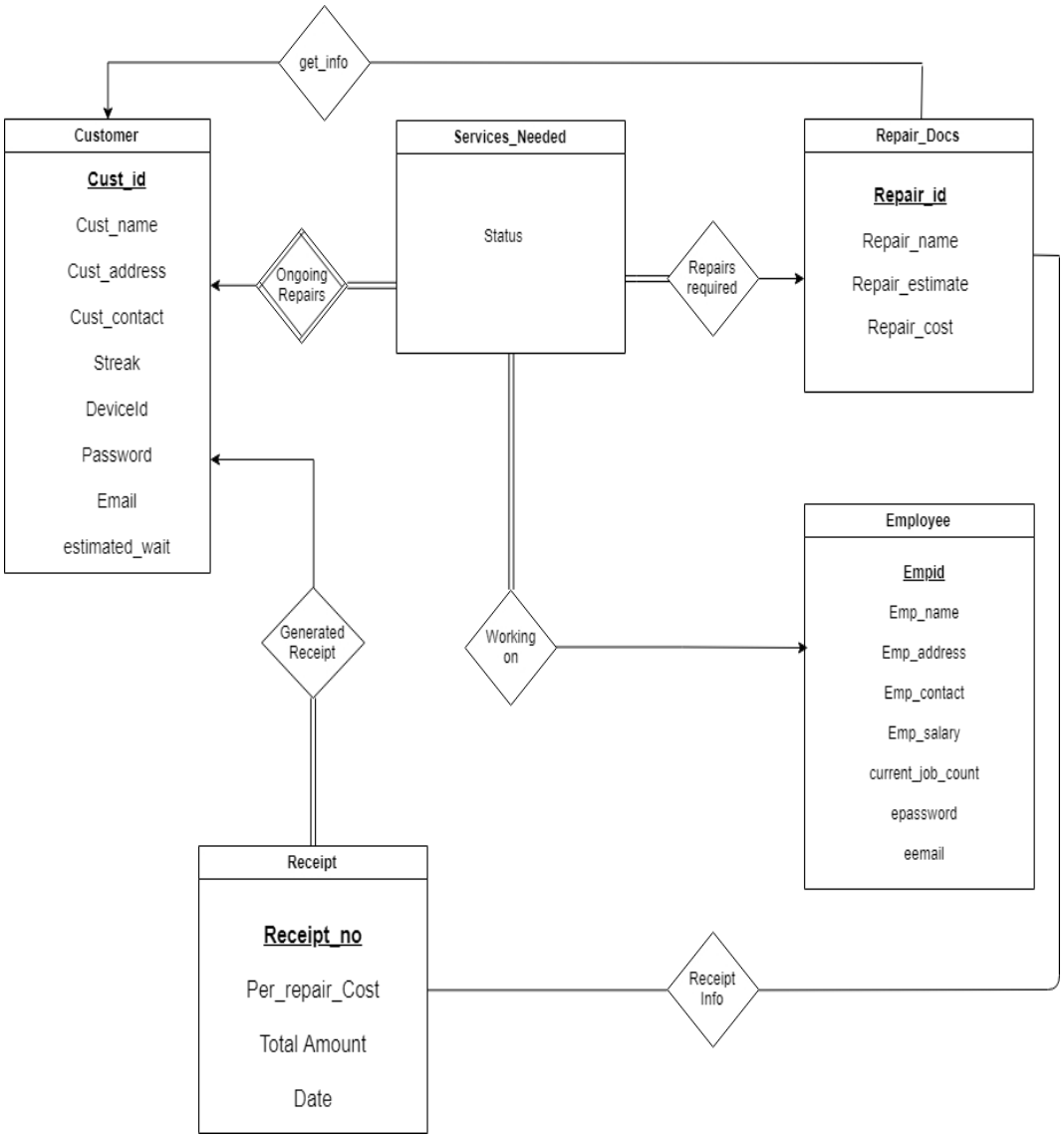

Fig no.1 : ER Diagram

5.2 Schema Diagram

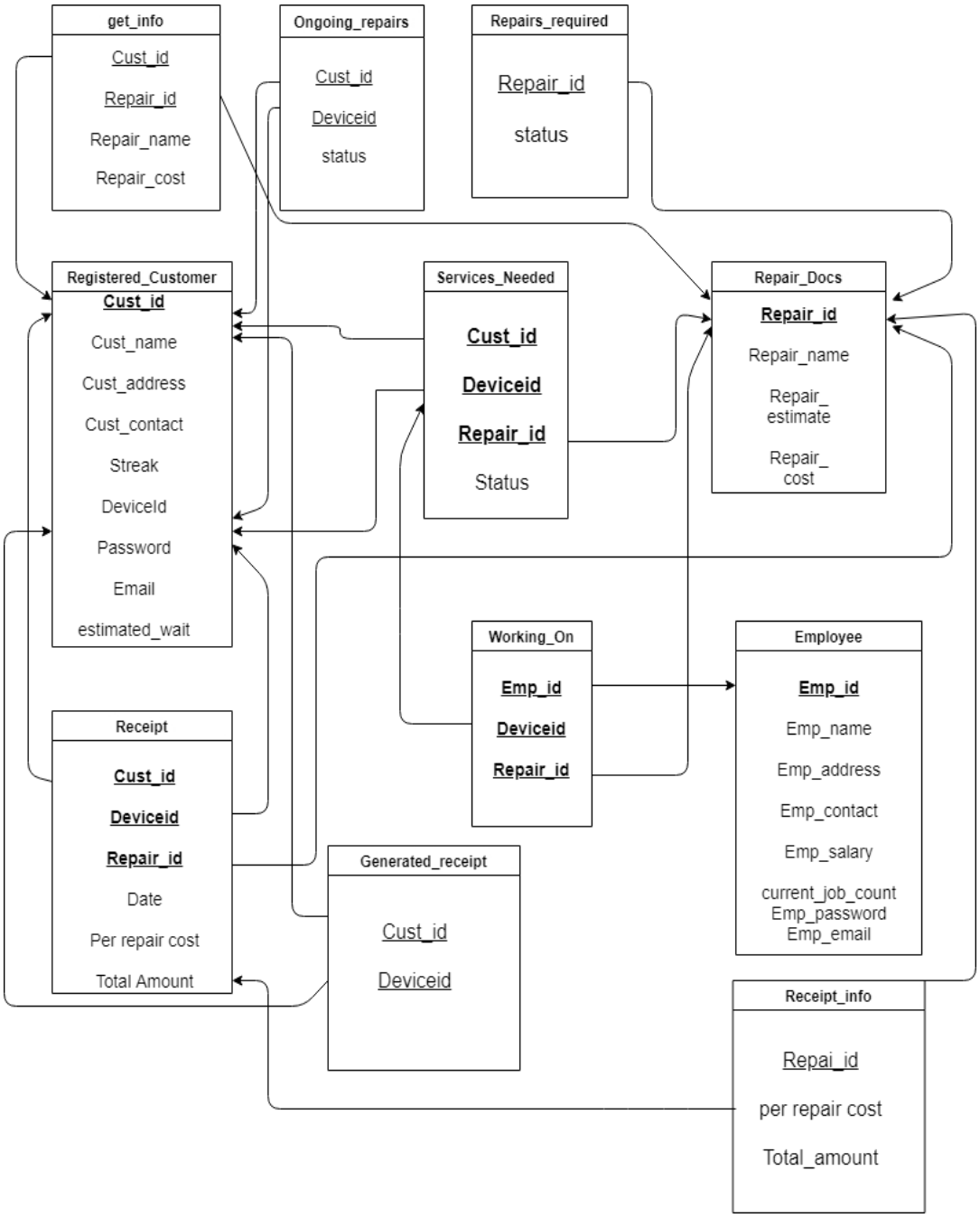

Fig no.2: Schema Diagram

CHAPTER 6

TECHNOLOGY SPECIFICATION

- The user interface is based on web browser. The application is developed using HTML/CSS and Javascript. The Interface design is aimed at a flexible front-end communication to provide the user with clear information in navigating the interface
  .
- Javascript enables form validation which ensures correct the database will contain the right information in the right format.

- JavaServer Pages (JSP) is a technology for developing Webpages that supports dynamic content. This helps developers insert java code in HTML pages by making use of special JSP tags, most of which start with <% and end with %>.

- The Information of all users must be stored in a database. MySQL is used for database.

CHAPTER 7

PROJECT PLAN

Sr No.	Topics	Dates
1	Selection of topic	
2	Gathering Required Information	
3	Discussing the Modules	
4	Developing the application code	
5	Project Testing	
6	Project Documentation	
7	Proper Integration of modules	
8	Project Report	
9	Project Submission	

CHAPTER 8

GRAFICAL USER INTERFACE

Fig no.3 :Home Page

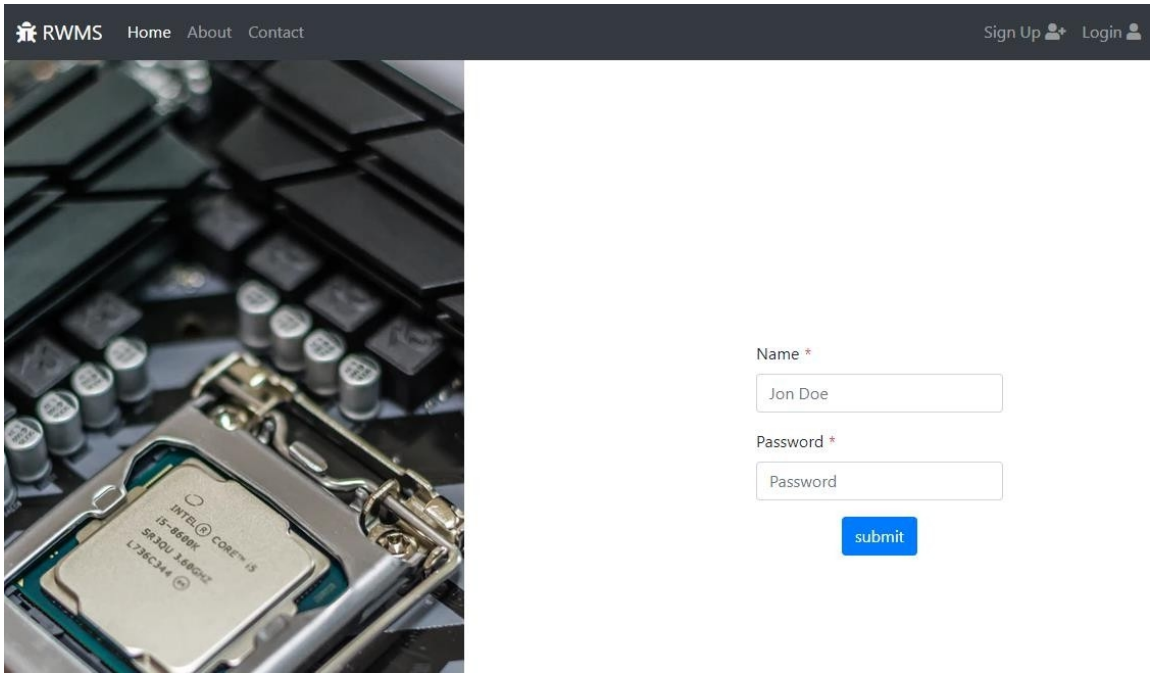

Fig no.4 Login Page

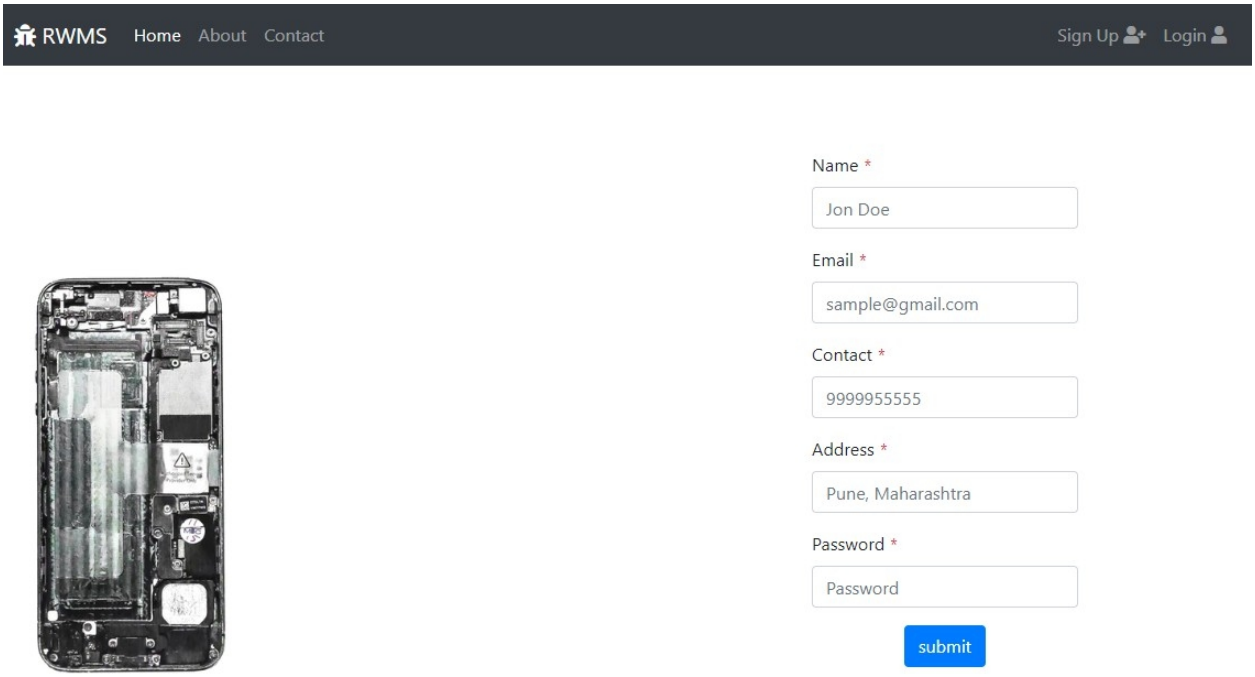

Fig no.5:Signup Page

CHAPTER 9

PROJECT CODE

Code for home page:

```
package org.apache.jsp;

import javax.servlet.*;

import javax.servlet.http.*;

import javax.servlet.jsp.*;


public final class index1_jsp extends org.apache.jasper.runtime.HttpJspBase

implements org.apache.jasper.runtime.JspSourceDependent {


private static final JspFactory _jspxFactory = JspFactory.getDefaultFactory();


private static java.util.List<String> _jspx_dependants;


private org.glassfish.jsp.api.ResourceInjector _jspx_resourceInjector;


public java.util.List<String> getDependants()

{ return _jspx_dependants;
```

```
}

public void _jspService(HttpServletRequest request, HttpServletResponse response)
throws java.io.IOException, ServletException {

PageContext pageContext = null;
HttpSession session = null;
ServletContext application = null;
ServletConfig config = null;
JspWriter out = null;
Object page = this;
JspWriter _jspx_out = null;
PageContext _jspx_page_context = null;

try
{ response.setContentType("text/html;charset=UTF-
8");
pageContext = _jspxFactory.getPageContext(this, request, response,
                        null, true, 8192, true);
_jspx_page_context = pageContext;
application = pageContext.getServletContext();
config = pageContext.getServletConfig();
```

```
            session = pageContext.getSession();

            out = pageContext.getOut();

            _jspx_out = out;

            _jspx_resourceInjector = (org.glassfish.jsp.api.ResourceInjector)
application.getAttribute("com.sun.appserv.jsp.resource.injector");



            out.write("\n");

            out.write("\n");

            out.write("\n");

            out.write("<!DOCTYPE html>\n");

            out.write("<html>\n");

            out.write("<head>\n");

            out.write("<meta http-equiv=\"Content-Type\" content=\"text/html; charset=UTF-
8\">\n");

            out.write("<title>JSP Page</title>\n");

            out.write("        \n");

            out.write("<link href=\"https://fonts.googleapis.com/css?family=Lato:400,700\"
rel=\"stylesheet\">\n");

            out.write("\t<link rel=\"stylesheet\" type=\"text/css\"
href=\"https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css\">\n");

            out.write("<link rel=\"stylesheet\"
href=\"https://use.fontawesome.com/releases/v5.3.1/css/all.css\" integrity=\"sha384-
```

```
mzrmE5qonljUremFsqc01SB46JvROS7bZs3IO2EmfFsd15uHvIt+Y8vEf7N7fWAU\"
crossorigin=\"anonymous\">\n");

        out.write("<link rel=\"stylesheet\" type=\"text/css\" href=\"css/index1.css\">\n");

        out.write("</head> \n");

        out.write("<body>\n");

        out.write("<nav class=\"navbar navbar-expand-lg navbar-dark bg-dark\">\n");

        out.write("\t <div class=\"container\">\n");

        out.write("\t  \t<a  class=\"navbar-brand\"  href=\"#\"><i  class=\"fas  fa-bug\"></i>
RWMS</a>\n");

        out.write("\t  <button  class=\"navbar-toggler\"  type=\"button\"  data-toggle=\"collapse\"
data-target=\"#navbarSupportedContent\"  aria-controls=\"navbarSupportedContent\"  aria-
expanded=\"false\" aria-label=\"Toggle navigation\">\n");

        out.write("\t  <span  class=\"navbar-toggler-icon\"></span>\n");

        out.write("\t  </button>\n");

        out.write("\n");

        out.write("\t                <div          class=\"collapse          navbar-collapse\"
id=\"navbarSupportedContent\">\n");

        out.write("\t    <ul class=\"navbar-nav mr-auto\">\n");

        out.write("\t      <li class=\"nav-item active\">\n");

        out.write("\t                  <a class=\"nav-link\" href=\"#\">Home <span class=\"sr-
only\">(current)</span></a>\n");

        out.write("\t      </li>\n");
```

```
out.write("\t                    <li    class=\"nav-item\"><a    class=\"nav-link\" href=\"\">About</a></li>\n");

out.write("\t                    <li    class=\"nav-item\"><a    class=\"nav-link\" href=\"\">Contact</a></li>\n");

out.write("\t    \n");

out.write("\t   </ul>\n");

out.write("\t   <ul class=\"nav navbar-nav navbar-right\">\n");

out.write("\t   \t<!-- <li class=\"nav-item nav-right\">\n");

out.write("\t      \t<a class=\"nav-link\" href=\"#\">Sign Up</a>\n");

out.write("\t    \t</li> -->\n");

out.write("\t      \t<li><a class=\"nav-link\" href=\"reg1.jsp\">Sign Up <i class=\"fa fa-user-plus\"></i></a></li>\n");

out.write("\t      \t<li><a class=\"nav-link\" href=\"login1.jsp\">Login <i class=\"fa fa-user\"></i></a></li>\n");

out.write("\t   </ul>\n");

out.write("\t    \n");

out.write("\t </div>\n");

out.write("\t </div>\n");

out.write("\t</nav>\n");

out.write("      \n");

out.write("<!--///-->\n");

out.write("<!--session cheching-->\n");
```

```
out.write("");



//check session for already logged in user
if (session.getAttribute("userid") == null){


out.write("\n");
out.write("<!--          <a href=\"login1.jsp\" id=\"loginButton\"> Login111</a>-->\n");
out.write("");


}else{
//String userid=request.getParameter("usr");
//user=session.getValue("userid").toString();


out.write("\n");
out.write("<p>you are already logged in \n");
out.write("</p>\n");
out.write("            \n");
out.write("");


}
```

```
out.write("\n");

out.write("        \n");

out.write("        \n");

out.write("<!--////-->\n");

out.write("<!--        <a href=\"Login1.jsp\">Login</a>\n");

out.write("</br>\n");

out.write("</br>\n");

out.write("<a href=\"reg1.jsp\">Register</a>\n");

out.write("        -->\n");

out.write("<!--if already logged in logout-->\n");

out.write("");


if (session.getAttribute("userid") != null){


out.write("\n");

out.write("<a href=\"javascript:void(0);\" onclick=\"logout()\">Logout</a>\n");

out.write("");


}else{

//user=session.getValue("userid").toString();
```

```
}


out.write("\n");

out.write("          \n");

out.write("          \n");

out.write("<div class=\"container\">\n");

out.write("\t\t<div class=\"row\">\n");

out.write("\t\t\t<div class=\"col-lg-12\">\n");

out.write("\t\t\t\t<div id=\"content\">\n");

out.write("\t\t\t\t\t<h1>Device Repairing Store Management</h1>\n");

out.write("\t\t\t\t\t<h3></h3>\n");

out.write("\t\t\t\t\t<hr>\n");

out.write("<p><center>\n");

out.write("<a href=\"reg1.jsp\"><button class=\"btn btn-dark btn-lg\"><i class=\"fas fa-user-plus\"></i> Sign Up</button></a>\n");

out.write("    \n");

out.write("<a href=\"login1.jsp\"><button class=\"btn btn-dark btn-lg\"><i class=\"fas fa-user\"></i> Login</button></a>\n");

out.write("</center>\n");

out.write("</p>\n");

out.write("</div>\t\t\n");

out.write("\t\t\t</div>\n");
```

```
		out.write("\t\t</div>\n");

		out.write("\t</div>\n");

		out.write("		\n");

		out.write("		\n");

		out.write("<script 			src=\"https://code.jquery.com/jquery-3.3.1.slim.min.js\"
integrity=\"sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo\"
crossorigin=\"anonymous\"></script>\n");

		out.write("<script
src=\"https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js\"
integrity=\"sha384-
ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIPm49\"
crossorigin=\"anonymous\"></script>\n");

		out.write("<script
src=\"https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js\"
integrity=\"sha384-
ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy\"
crossorigin=\"anonymous\"></script>\n");

		out.write("</body>\n");

		out.write("\n");

		out.write("<script>\n");

		out.write("function logout(){\n");

		out.write("");



		//response.sendRedirect("login.jsp");
```

```
out.write("\n");

out.write("    window.location=\"logout.jsp\";\n");

out.write(" //document.location.reload();\n");

out.write("}\n");

out.write("</script>\n");

out.write("</html>\n");

out.write("\n");

out.write("\n");

} catch (Throwable t) {

if (!(t instanceof

SkipPageException)){ out = _jspx_out;

if (out != null && out.getBufferSize() != 0)

out.clearBuffer();

if (_jspx_page_context != null) _jspx_page_context.handlePageException(t);

else throw new ServletException(t);

}

} finally {

_jspxFactory.releasePageContext(_jspx_page_context);

}

}}
```

CHAPTER 10

CONCLUSION AND FUTURE ENHANCEMENT

CONCLUSION

The software product was fairly good, it achieved most if the user requirements, the user interface is good and is very easy to navigate, and even novice users can find their way around the web application easily. The client side validation is excellent. The lack of integration with a payment system is the major drawback. In order for the system to be more comprehensive, I'd recommend an integration of the payment system that will enable users to complete selling process more efficiently. This project assisted me to gain a practical experience and apply knowledge assimilated from the previous courses undertook. Putting the knowledge gained earlier and applying different techniques from past courses was interesting and certain concepts, tools and techniques only made sense after seeing the application in real world scenario. It was extremely challenging at times but it has been a great worthwhile learning experience.

FUTURE ENHANCEMENT

In future enhancement we are going to cover some important aspects likes E-payment options, home delivery of product and after repair. We can also develop android and IOS application which will be easy for user to use and will increase business. We can also add hardware resource management. Notifications of repair will be given on the portal. Chat bots will be used to answer query of user 24/7.

CHAPTER 11

REFERENCES

[1] The Java Documentation https://docs.oracle.com/en/java/javase/11/

[2] The Bootstrap Documentation https://getbootstrap.com/docs/4.1/gettingstarted/introduction/

[3] The JavaScript Documentation - https://developer.mozilla.org/en-US/docs/Web/JavaScript

[4] HTML and CSS examples - w3schools.com