INTRODUCTION

1.1 INTRODUCTION

The main concept of Job Portal is to computerize the user's profile and conduct online interviews. By using this system, we can save time and work involved for employing people to the jobs posted. For this a separate section named placement cell is maintained by the company which involves in selecting the right person for the right job. As there will be more one person posting for a single job online tests can be conducted for the users at a time and all the users will able to get the results within no time. So, this system of implementation can be followed by any company.

Online tests can be conducted for the users at a time and all the users will able to get the results within no time (real time). Transparency in online test result is the key feature of this website.

This website can provide a better platform for interaction between the employer and the candidate. The employer can now select a more worthy candidate on the basis of the online test conducted and those shortlisted candidates will go through next rounds of selection according to the norms and regulations of the company.

1.2 STATEMENT OF PROBLEMS

Now-a-days' time is becoming more and more precious.100% industries are computerized and there is a vast development in industries either in the public sector or in the private sector. 1Today every company wants to do any type of work fast and with less investment. So most of the companies are going for computerization where in time and labor involved in manual system will be reduced such that they can use these resources in other work.

1.3 OBJECTIVES

For the growth of business, they want to employee people with in less time. The placement cell has a list of jobs being displayed for the registered and unregistered users. The jobseekers can post their resumes and take online tests for that job. So, the people who get qualified and have the right skills are employed. By this the company can select right employees and not disturb their other activities. This will help them to become a number one position in the current competitive market.

Another advantage is that the company is having branches throughout the country. So, this system will help them to employee people from anywhere for any branch. They don't need to involve personally with the job seekers and go for long procedures as followed in manual

systems. It will give On-line solutions from the superiors to the jobseekers after taking the test so that immediately the work is finished.

1.4 APPLICATION

- It makes the examiner's job easier as evaluation and result generation are all automated.
- It also saves the user from traveling long distances to give an exam.
- It enables simultaneous conduction of exams throughout the country
- In this application, the test and the data provided by the candidate is highly protected and safe.
- No expensive hardware is required to operate this software.
- Helps in selecting skilled and professionally needed persons for the job in less time
- Use of less resources (time, labor money)
- Transparency in conducting online test.

1.5 DEPENDENCIES

- Internet Connection
- Computer System
- Operational knowledge (naïve level)

ANALYSIS

2.1 EXSISTING SYSTEM

Employees are the heart and sole of any company. A company may have branches through out India has a large number of employees all over the country. Companies have people who are highly skilled and dedicated to the company.Hence forth if there are any jobs present here then they go for such qualities in the employees.

Normally jobs in a company will be advertised and number of people might send there resumes for the posts. The person, who has to participate in the selections, has to travel all the way and attend the conducted exam. So it will be very risky to travel for the persons, and it is risky work for the company also to provide all the felicities to persons. Now a days wherever you see so many strikes are going. So selecting the qualified person conducting interviews making hi ease with the environment is all a tedious work. So here the company has decided to develop this project and maintain a separate cell for the company's requirements.

2.2 DISADVANTAGES

There are a number of problems with the existing system which are as follows:

- To conduct an interview is a tedious task as it requires planning and managing resources.
- In doing such tasks on regular interval time, money and human power is wasted.
- In certain situations, whole process is conducted but no output is gained. Hence, the employer as well as candidates gets demotivated.

2.3PROPOSED SYSTEM

We investigated and took a survey how the selection process for the right candidate is done and came out with a result that most of the right candidate with a good knowledge are not selected for the further rounds.

The proposed system is to maintain the details of job seekers in the computers of a company. In this system we can select the persons based on their skills and performance in the tests conducted by the company.

Need for computerization:

Time plays an important role in today's world. Any information is useful if it is available on the right time. Quick and correct information at the right time needs computerization. Many scientists' engineers have to spend their valuable time to attend a conference, which is going on a long-distance place. For them even one second costs millions and millions of dollars. So,

this project will help them to participate in the selecting right person for company's development.

For the growth of business, they want to employee people with in less time. The placement cell has a list of jobs being displayed for the registered and unregistered users. The jobseekers can post their resumes and take online tests for that job. So, the people who get qualified and have the right skills are employed. By this the company can select right employees and not disturb their other activities. This will help them to become a number one position in the current competitive market.

Another advantage is that the company is having branches throughout the country. So, this system will help them to employee people from anywhere for any branch. They don't need to involve personally with the job seekers and go for long procedures as followed in manual systems. It will give On-line solutions from the superiors to the jobseekers after taking the test so that immediately the work is finished.

2.4 ADVANTAGES

The following are the advantages of our proposed systems:

- Selecting skilled and professionally needed person for the job.
- Support of multiple users.
- By selecting the users for online test selections can be done within less time.
- Selections can be done for any branches of the company.

SYSTEM REQUIREMENTS

3.1 HARDWARE REQUIREMENTS

To run the project, certain hardware has to be installed on the system. The system requirements include:

- A hard disk with a minimum of 500 GB
- 2 GB RAM.
- A mouse or other suitable pointing device.

3.2 SOFTWARE REQUIREMENTS

To run the project, certain software has to be installed on the system. The system requirements include:

- Microsoft Windows 7 workstation and above
- Mac IOS 10.2 or above

3.3 LANGUAGES USED

JAVA

Java was conceived by James Gosling, Patrick Naughton, Chris Wrath, Ed Frank, and Mike Sheridan at Sun Micro system. It is a platform independent programming language that extends its features and introduces a new component called “Swing” – is a set of classes that provides more power & flexible components than are possible with AWT[2].

- It’s a lightweight package, as they are not implemented by platform-specific code.
- Related classes are contained in javax.swing and its sub packages, such as javax.swing.tree.
- Components explained in the Swing have more capabilities than those of AWT.

What is Java?

Java is two things: a programming language and a platform. Java is a high-level programming language that is all of the following:

- Simple
- Object-oriented
- Distributed
- Interpreted
- Robust

- Secure
- Architecture-neutral
- Portable
- High-performance
- Multithreaded
- Dynamic

Java is also unusual in that each Java program is both compiled and interpreted. With a compiler, you translate a Java program into an intermediate language called Java bytecodes the platform-independent codes interpreted by the Java interpreter. With an interpreter, each Java bytecode instruction is parsed and run on the computer. Compilation happens just once; interpretation occurs each time the program is executed. This figure illustrates how this works.

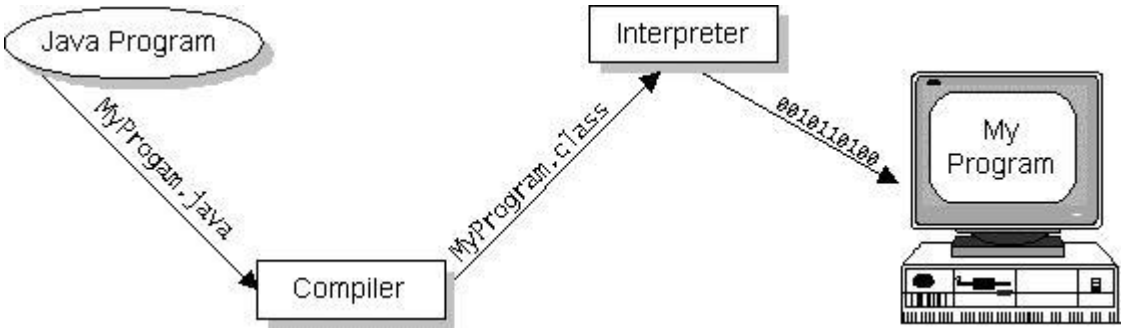


FIG 1: JAVA VIRTUAL MACHINE

Java byte codes can be considered as the machine code instructions for the Java Virtual Machine (JVM). Every Java interpreter, whether it's a Java development tool or a Web browser that can run Java applets, is an implementation of the Java VM. The Java VM can also be implemented in hardware.

Java bytecodes help make "write once, run anywhere" possible. The Java program can be compiled into bytecodes on any platform that has a Java compiler. The byte codes can then be run on any implementation of the Java VM. For example, the same Java program can run on Windows NT, Solaris, and Macintosh.

The Java Platform

A platform is the hardware or software environment in which a program runs. The Java platform differs from most other platforms in that it's a software-only platform that runs on top of other, hardware-based platforms. Most other platforms are described as a combination of hardware and operating system. The Java platform has two components:

- The Java Virtual Machine (JVM)
- The Java Application Programming Interface (Java API)

The Java API is a large collection of ready-made software components that provide many useful capabilities, such as graphical user interface (GUI) widgets. The Java API is grouped into libraries (packages) of related components.

The following figure depicts a Java program, such as an application or applet, that's running on the Java platform. As the figure shows, the Java API and Virtual Machine insulates the Java program from hardware dependencies.

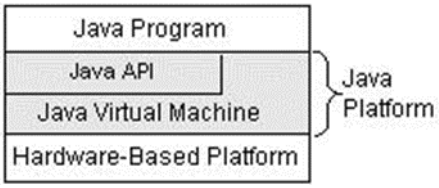


FIG2: SAMPLE JAVA PROGRAM

As a platform-independent environment, Java can be a bit slower than native code. However, smart compilers, well-tuned interpreters, and just-in-time byte code compilers can bring Java's performance close to that of native code without threatening portability.

JSP (Java Server Pages)

Java Server Pages (**JSP**) is a technology that helps software developers create dynamically generated web pages based on HTML, XML, or other document types. Released in 1999 by Sun Microsystems. JSP is similar to PHP and ASP, but it uses the Java programming language.

To deploy and run Java Server Pages, a compatible web server with a servlet container, such as Apache Tomcat or Jetty, is required.

Architecturally, JSP may be viewed as a high-level abstraction of Java servlets. JSPs are translated into servlets at runtime, therefore JSP is a Servlet; each JSP servlet is cached and re-used until the original JSP is modified[3].

JSP can be used independently or as the view component of a server-side model–view–controller design, normally with JavaBeans as the model and Java servlets (or a framework such as Apache Struts) as the controller. This is a type of Model 2 architecture:-

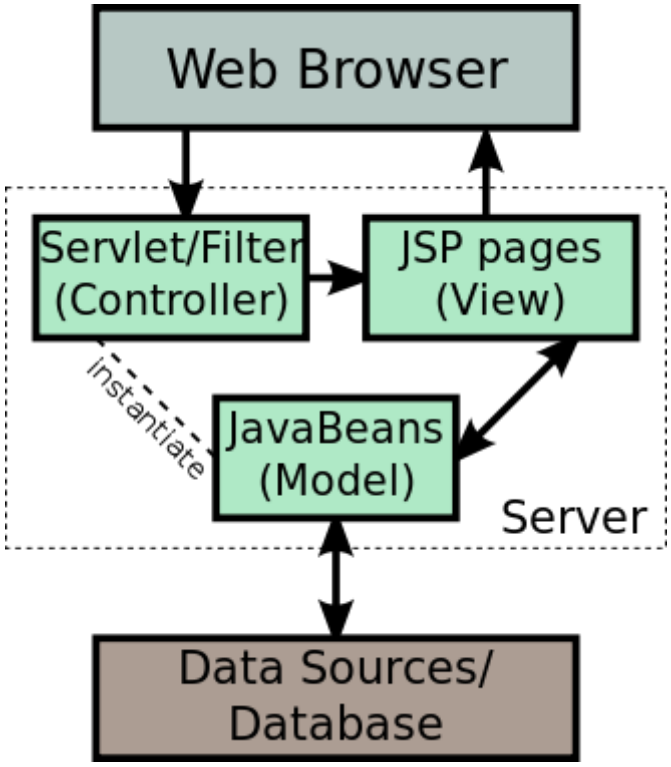


FIG 3: JSP Model Architecture

JSP allows Java code and certain predefined actions to be interleaved with static web markup content, such as HTML, with the resulting page being compiled and executed on the server to deliver a document.

SERVLET

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. However, there were many disadvantages to this technology. We have discussed these disadvantages below[4].

There are many interfaces and classes in the Servlet API such as Servlet, GenericServlet, HttpServlet, ServletRequest, ServletResponse, etc.

Servlet can be described in many ways, depending on the context.

- Servlet is a technology which is used to create a web application.
- Servlet is an API that provides many interfaces and classes including documentation.
- Servlet is an interface that must be implemented for creating any Servlet.
- Servlet is a class that extends the capabilities of the servers and responds to the incoming requests. It can respond to any requests.

- Servlet is a web component that is deployed on the server to create a dynamic web page.

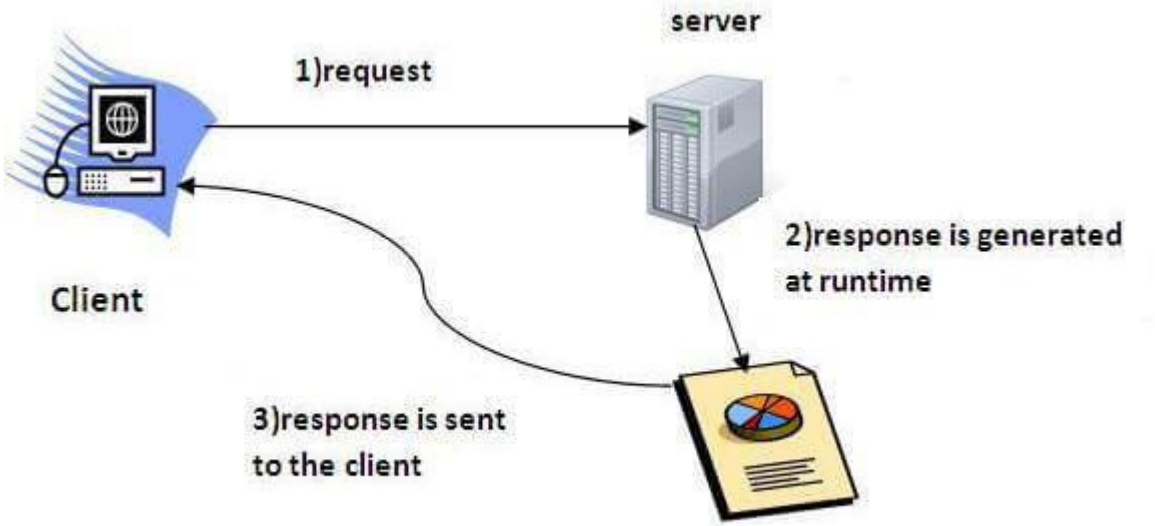


Fig 4: Architecture of Servlet

Advantages of Servlet

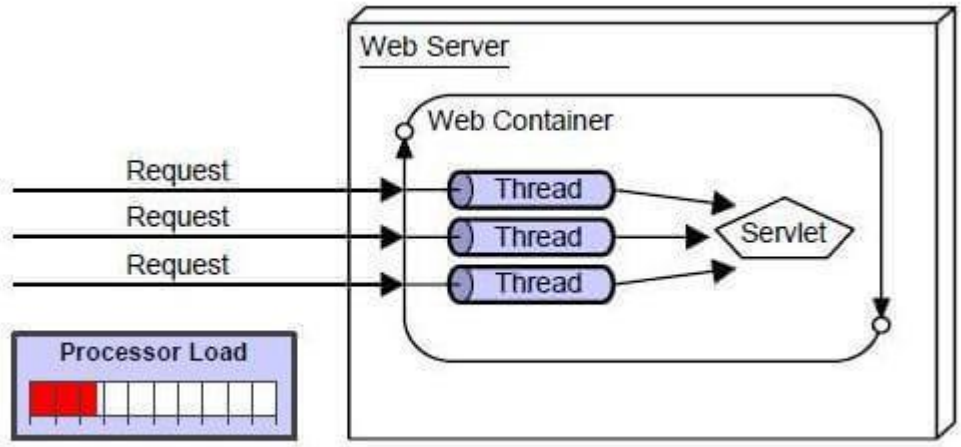


Fig 5: Working of Servlet

There are many advantages of Servlet over CGI. The web container creates threads for handling the multiple requests to the Servlet. Threads have many benefits over the Processes such as they share a common memory area, lightweight, cost of communication between the threads are low. The advantages of Servlet are as follows:

1. **Better performance:** because it creates a thread for each request, not process.
2. **Portability:** because it uses Java language.

3. **Robust:** JVM manages Servlets, so we don't need to worry about the memory leak, garbage collection, etc.
4. **Secure:** because it uses java language.

ORACLE

11g is Oracle's grid computing product group including (among other things) a database management system (DBMS) and an application server. In addition to supporting grid computing features such as resource sharing and automatic load balancing, 10g products automate many database management tasks. The Real Application Cluster (RAC) component makes it possible to install a database over multiple servers.

Oracle says that the g (instead of the expected i) in the name symbolizes the company's commitment to the grid model. However, according to some reports, many early adopters are deploying 10g solely for its automation features and have no immediate plans of implementing a grid environment.

Oracle Database Architecture

An Oracle database is a collection of data treated as a unit. The purpose of a database is to store and retrieve related information. A database server is the key to solving the problems of information management. In general, a server reliably manages a large amount of data in a multiuser environment so that many users can concurrently access the same data. All this is accomplished while delivering high performance. A database server also prevents unauthorized access and provides efficient solutions for failure recovery.

Oracle Database is the first database designed for enterprise grid computing, the most flexible and cost effective way to manage information and applications. Enterprise grid computing creates large pools of industry-standard, modular storage and servers. With this architecture, each new system can be rapidly provisioned from the pool of components. There is no need for peak workloads, because capacity can be easily added or reallocated from the resource pools as needed.

The database has logical structures and physical structures. Because the physical and logical structures are separate, the physical storage of data can be managed without affecting the access to logical storage structures.

JQUERY

jQuery was introduced in January 2006 by John Resig at BarCamp NYC.jQuery also offers functionality that allows developers to build plug-ins, in addition to the JavaScript library. This allows for the development of abstractions for animation and low-level interaction, sophisticated effects and themeable, high-level widgets. The modular mechanism of the jQuery library facilitates the development of highly effective, potent Web applications and Web pages[5].

The jQuery library provides several user friendly strategies and functions for rich application development. Because the functions of jQuery are simple, it is very popular among

developers. jQuery may be used in all Web based applications, in spite of the technology. It may be used with ASP, PHP, JSP, CGI, Servlets and most Web programming languages.

jQuery is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code. jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

There are lots of other JavaScript frameworks out there, but jQuery seems to be the most popular, and also the most extendable. Many of the biggest companies on the Web use jQuery, such as:

- Google
- Microsoft
- IBM
- Netflix

HTML 5

It is the standard markup language for creating web pages and applications. Web receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document

.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets.

CSS(CASCADED STYLE SHEET)

Cascading **S**tyle **S**heets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colours are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the mark-up languages HTML or XHTML.

Advantages of CSS

- **CSS saves time** − You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.
- **Pages load faster** − If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So, less code means faster download times.
- **Easy maintenance** − To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
- **Superior styles to HTML** − CSS have a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
- **Multiple Device Compatibility** − Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.
- **Global web standards** − Now HTML attributes are being deprecated and it is being recommended to use CSS. So, it's a good idea to start using CSS in all the HTML pages to make them compatible to future browsers.

BOOTSTRAP

Bootstrap is a free and open source front end development framework for the creation of websites and web apps. The Bootstrap framework is built on HTML, CSS, and JavaScript (JS) to facilitate the development of responsive, mobile-first sites and apps.

Responsive design makes it possible for a web page or app to detect the visitor's screen size and orientation and automatically adapt the display accordingly; the mobile first approach assumes that smartphones, tablets and task-specific mobile apps are employees' primary tools for getting work done and addresses the requirements of those technologies in design.

Bootstrap includes user interface components, layouts and JS tools along with the framework for implementation. The software is available precompiled or as source code.

Mark Otto and Jacob Thornton developed Bootstrap at Twitter as a means of improving the consistency of tools used on the site and reducing maintenance. The software was formerly known as Twitter Blueprint and is sometimes referred to as Twitter Bootstrap.

In computers, the word bootstrap means to boot: to load a program into a computer using a much smaller initial program to load in the desired program (which is usually an operating system).

In the physical world, a bootstrap is a small strap or loop at the back of a leather boot that enables you to pull the entire boot on and in general usage, bootstrapping is the leveraging of a small initial effort into something larger and more significant. There is also a common expression, "pulling yourself up by your own bootstraps," meaning to leverage yourself to success from a small beginning.

APACHE TOMCAT SERVER

Apache Tomcat, often referred to as Tomcat Server, is an open-source Java Servlet Container developed by the Apache Software Foundation (ASF). Tomcat implements several Java EE specifications including Java Servlet, Java Server Pages (JSP), Java EL, and WebSocket, and provides a "pure Java" HTTP web server environment in which Java code can run.

Tomcat is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation, released under the Apache License 2.0 license, and is open-source software.

Tomcat 7.x implements the Servlet 3.0 and JSP 2.2 specifications. It requires Java version 1.6, although previous versions have run on Java 1.1 through 1.5. Versions 5 through 6 saw improvements in garbage collection, JSP parsing, performance and scalability. Native wrappers, known as "Tomcat Native", are available for Microsoft Windows and Unix for platform integration.

Tomcat 8.x implements the Servlet 3.1 and JSP 2.3 Specifications. Apache Tomcat 8.5.x is intended to replace 8.0.x and includes new features pulled forward from Tomcat 9.0.x. The minimum Java version and implemented specification versions remain unchanged.

DATABASE CONNECTIVITY

In an effort to set an independent database standard API for Java, Sun Microsystems developed Java Database Connectivity, or JDBC. JDBC offers a generic SQL database access mechanism that provides a consistent interface to a variety of RDBMS. This consistent interface is achieved through the use of "plug-in" database connectivity modules, or *drivers*. If a database vendor wishes to have JDBC support, he or she must provide the driver for each platform that the database and Java run on.

To gain a wider acceptance of JDBC, Sun based JDBC's framework on ODBC. As you discovered earlier in this chapter, ODBC has widespread support on a variety of platforms. Basing JDBC on ODBC will allow vendors to bring JDBC drivers to market much faster than developing a completely new connectivity solution.

DESIGN

4.1 USE CASE Diagram

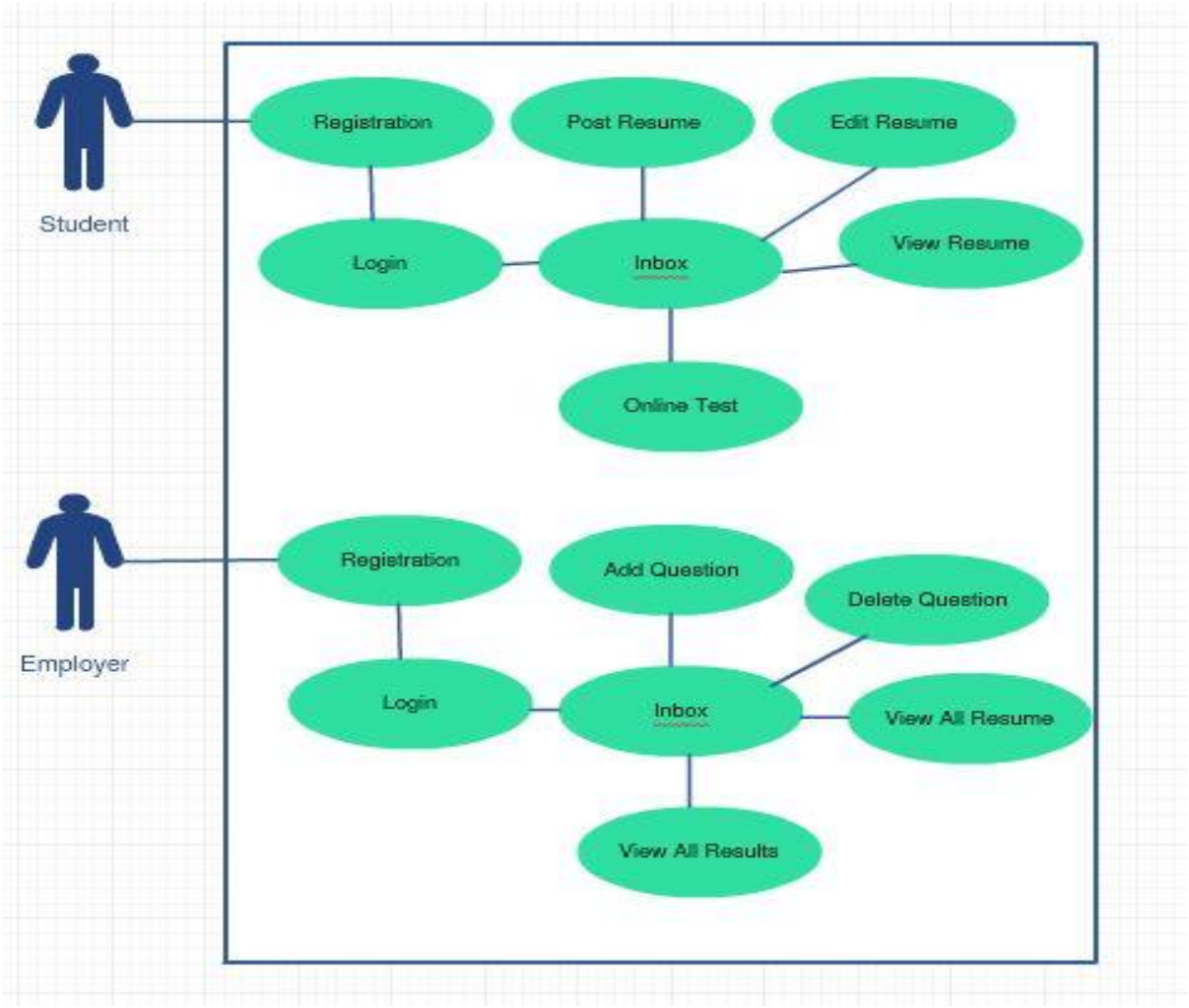


Fig 6: Use Case Diagram

4.2 Class Diagram Candidate

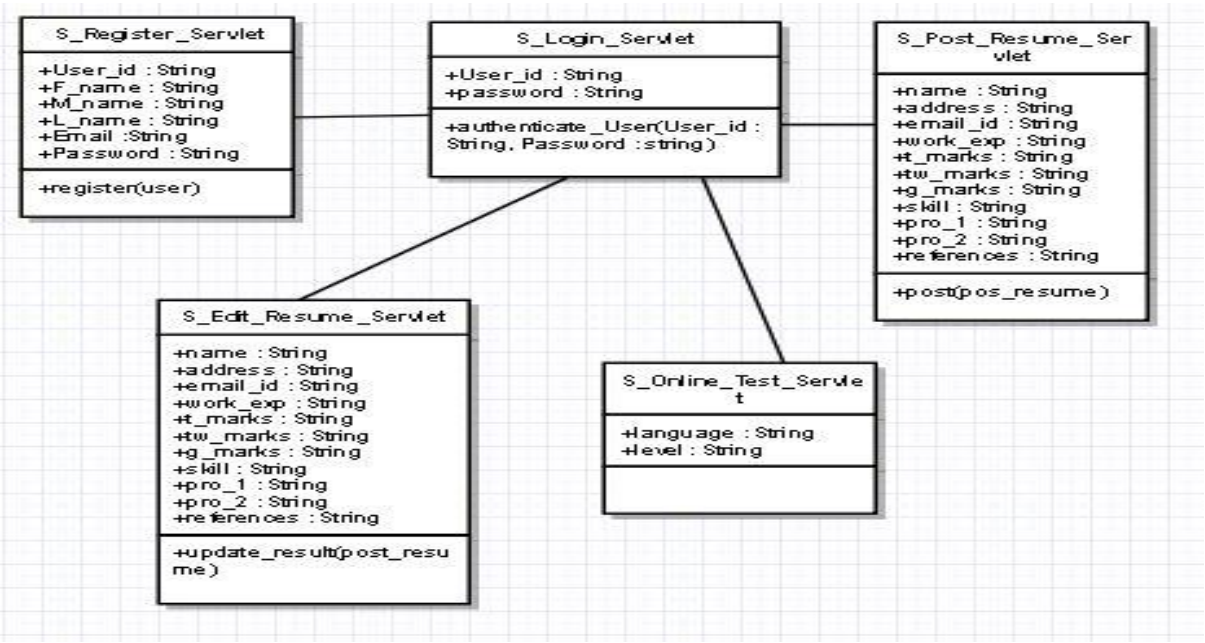


Fig 7 :Class Diagram for Candidate

4.3 Class Diagram Employer

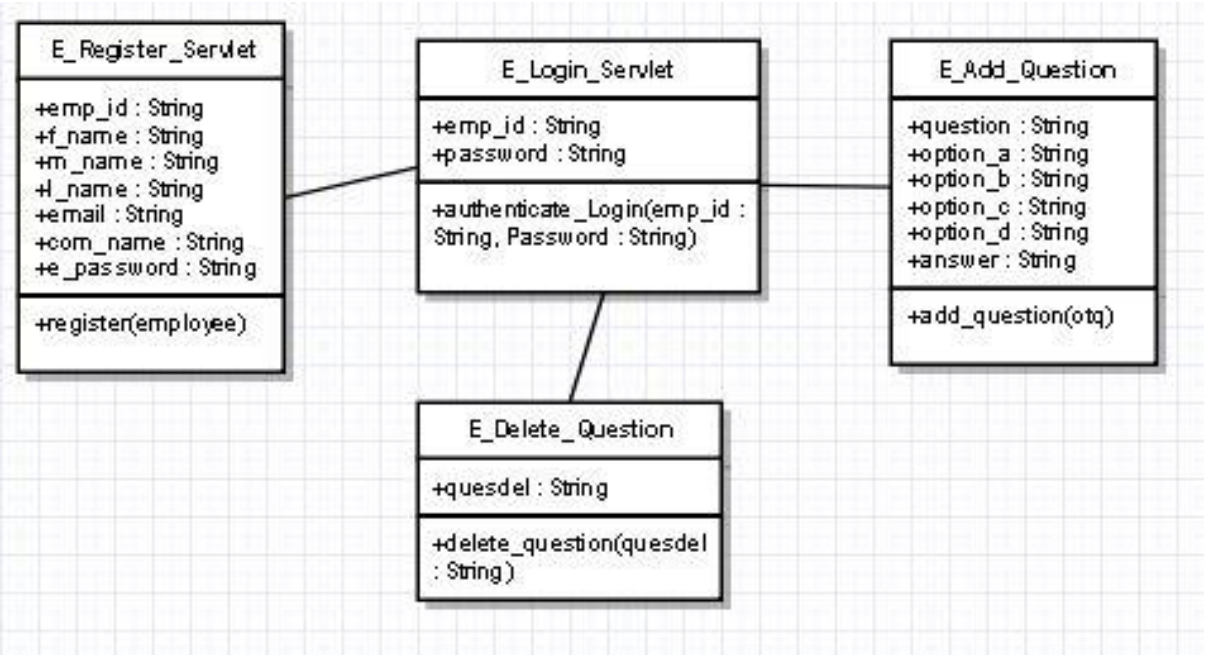


Fig 8 : Class Diagram for Employer

SYSTEM DEVELOPMENT

5.1 Database Connectivity

Candidate Table

	COLUMN NAME	DATA TYPE	NULLABLE	CONSTRAINT
2	USER_ID	VARCHAR2(25 BYTE)	No	Primary Key
3	F_NAME	VARCHAR2(25 BYTE)	Yes	NO
4	M_NAME	VARCHAR2(25 BYTE)	Yes	NO
5	L_NAME	VARCHAR2(25 BYTE)	Yes	NO
6	EMAIL_ID	VARCHAR2(45 BYTE)	Yes	NO
7	PASSWORD	VARCHAR2(35 BYTE)	Yes	NO
8	RESULT	NUMBER(38,0)	Yes	NO

Employer Table

	COLUMN NAME	DATA TYPE	NULLABLE	CONSTRAINT
2	EMP_ID	VARCHAR2(25 BYTE)	No	Primary Key
3	F_NAME	VARCHAR2(25 BYTE)	Yes	NO
4	M_NAME	VARCHAR2(25 BYTE)	Yes	NO
5	L_NAME	VARCHAR2(25 BYTE)	Yes	NO
6	EMAIL	VARCHAR2(45 BYTE)	Yes	NO
7	COM_NAME	VARCHAR2(35 BYTE)	Yes	NO
8	E_PASSWORD	VARCHAR2(35 BYTE)	Yes	NO

Online Test Table

	COLUMN NAME	DATA TYPE	NULLABLE	CONSTRAINT
2	QUESTION	VARCHAR2(200 BYTE)	Yes	NO
3	OPTION_A	VARCHAR2(100 BYTE)	Yes	NO
4	OPTION_B	VARCHAR2(100 BYTE)	Yes	NO
5	OPTION_C	VARCHAR2(100 BYTE)	Yes	NO
6	OPTION_D	VARCHAR2(100 BYTE)	Yes	NO
7	CORRECT_ANSW	VARCHAR2(100 BYTE)	Yes	NO

5.2 SOURCE CODE

Connection.java

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class Connect
{
        public static Connection conn =null;
```

```
	public static Connection create_connection()
	{
		try {
			Class.forName("oracle.jdbc.driver.OracleDriver");
			System.out.println("Driver loaded successfully");
			conn =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE ", "hr", "root");
			if(conn!=null)
			System.out.println("Connection Created");
		} catch (ClassNotFoundException | SQLException e)
		{
			System.out.println("Not created");
			e.printStackTrace();
		}
		return conn;
	}
}
```

S_Post_Resume.java

```
package controller;

import java.io.IOException;

import javax.servlet.RequestDispatcher;
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 modal.Post_Resume;
import modal.User;
import service.S_Post_Resume_Service;

@WebServlet("/S_Post_Resume_Servlet")
public class S_Post_Resume_Servlet extends HttpServlet
{
	public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
	{
		response.setContentType("text/html");
		boolean result;
		HttpSession session = request.getSession(false);
		User user = (User) session.getAttribute("user");
		if (user == null)
		{
			response.sendRedirect("S_Login.html");
```

```
		}
		else
		{
			String name = request.getParameter("name");
			String address = request.getParameter("address");
			String email_id = request.getParameter("email_id");
			String work_exp = request.getParameter("work_exp");
			String t_marks = request.getParameter("t_marks");
			String tw_marks = request.getParameter("tw_marks");
			String g_marks = request.getParameter("g_marks");
			String p_marks = request.getParameter("p_marks");
			String skill = request.getParameter("skill");
			String pro_1 = request.getParameter("pro_1");
			String pro_2 = request.getParameter("pro_2");
			String references = request.getParameter("references");
			String user_id=request.getParameter("user_id");
			Post_Resume post_Resume = new
Post_Resume(name,address,email_id,Integer.parseInt(work_exp),

	Integer.parseInt(t_marks),Integer.parseInt(tw_marks),Integer.parseInt(g_marks),Integ
er.parseInt(p_marks)
					,skill,pro_1,pro_2,references,user_id);
			try
			{
				S_Post_Resume_Service postresumeservice = new
S_Post_Resume_Service();
				result = postresumeservice.post(post_Resume);
				System.out.println("Result"+result);
				RequestDispatcher dispatcher;
				if(result)
				{
					dispatcher =
request.getRequestDispatcher("S_Post_Res_Suc.html");
					dispatcher.forward(request, response);
				}
				else
				{
					dispatcher =
request.getRequestDispatcher("S_Post_Res_Fail.html");
					dispatcher.forward(request, response);
				}
			} catch (Exception e)
			{
				e.printStackTrace();
			}
```

```
		}
	}
}
```

S_Post_Resume.java

```
package service;

import java.sql.Connection;
import java.sql.PreparedStatement;
import modal.Post_Resume;
import util.Connect;

public class S_Post_Resume_Service
{
	public boolean post(Post_Resume post_Resume)
	{
		int status=0;
		boolean flag=false;
		try
		{
			Connection conn = Connect.create_connection();
			if(conn!=null)
			{
				String sql = "insert into post_resume
values(?,?,?,?,?,?,?,?,?,?,?,?,?)";
				PreparedStatement ps = conn.prepareStatement(sql);
				ps.setString(1,post_Resume.getName());
				ps.setString(2, post_Resume.getAddress());
				ps.setString(3, post_Resume.getEmail_id());
				ps.setInt(4, post_Resume.getWork_exp());
				ps.setInt(5, post_Resume.getT_marks());
				ps.setInt(6, post_Resume.getTw_marks());
				ps.setInt(7, post_Resume.getG_marks());
				ps.setInt(8,post_Resume.getP_marks());
				ps.setString(9, post_Resume.getSkill());
				ps.setString(10, post_Resume.getPro_1());
				ps.setString(11, post_Resume.getPro_2());
				ps.setString(12, post_Resume.getReferences());
				ps.setString(13, post_Resume.getUser_id());
				status = ps.executeUpdate();
				if(status==1)
					flag=true;
			}
		} catch (Exception e)
		{
			e.printStackTrace();
```

```
		}
		return flag;
	}
}
```

E_Add_Question.java

```
package controller;

import java.io.IOException;
import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;
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 modal.Employee;
import modal.Online_Test_Questions;
import service.E_Add_Questions_Service;

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

	public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
	{
		response.setContentType("text/html");
		PrintWriter out = response.getWriter();

		HttpSession session = request.getSession(false);
		Employee employee = (Employee)session.getAttribute("employee");

		if(employee==null)
		{
			response.sendRedirect("S_Sign_In.jsp");
		}
		else
		{
			String question = request.getParameter("question");
			String option_a = request.getParameter("option_a");
			String option_b = request.getParameter("option_b");
			String option_c = request.getParameter("option_c");
```

```
                String option_d = request.getParameter("option_d");
                String answer = request.getParameter("correct_answer");

                Online_Test_Questions otq = new Online_Test_Questions(question,
option_a, option_b, option_c, option_d, answer);
                try
                {
                        System.out.println("Here3");
                        E_Add_Questions_Service questions_Service = new
E_Add_Questions_Service();
                        boolean result= questions_Service.add_question(otq);
                        System.out.println("here2"+result);
                        RequestDispatcher dispatcher;
                        if(result==true)
                        {
                                dispatcher =
request.getRequestDispatcher("E_Add_Ques_Suc.html");
                                dispatcher.forward(request, response);
                        }
                        else
                        {
                                dispatcher =
request.getRequestDispatcher("E_Add_Ques_Fail.html");
                                dispatcher.forward(request, response);
                        }
                } catch (Exception e)
                {
                        e.printStackTrace();
                }
        }
    }
}
```

E_Add_Question.java

```
package service;

import java.sql.Connection;
import java.sql.PreparedStatement;

import modal.Online_Test_Questions;
import util.Connect;

public class E_Add_Questions_Service
{
        public boolean add_question(Online_Test_Questions otq)
```

```
	{
		boolean flag=false;
		int status=0;
		try
		{
			Connection con =Connect.create_connection();
			if(con!=null)
			{
				String sql ="insert into online_test
(question,option_a,option_b,option_c,option_d,correct_answer) values(?,?,?,?,?,?)";
				PreparedStatement ps = con.prepareStatement(sql);
				ps.setString(1, otq.getQuestion());
				ps.setString(2, otq.getOption_a());
				ps.setString(3, otq.getOption_b());
				ps.setString(4, otq.getOption_c());
				ps.setString(5, otq.getOption_d());
				ps.setString(6, otq.getCorrect_answer());
				status=ps.executeUpdate();
				if(status==1)
					flag=true;
			}
		} catch (Exception e)
		{
			e.printStackTrace();
		}
		return flag;
	}
}
```

TESTING

6.1 PURPOSE:

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of tests. Each test type addresses a specific testing requirement.

6.2 TYPES OF TESTING

Unit Testing:

Unit involves the design of test cases that validate that the internal program logic is functioning properly and that program inputs produce valid outputs. All decision branches and internal code flow should be validated it is a testing of individual software units of the application it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit test perform basic test at component level and test a specific business process, application, and/or system configuration Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

Functional Testing:

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation and user manuals.

Functional testing is centered on the following items:

Valid Input: Identified classes of valid input must be accepted**.**

Invalid Input: Identified classes of invalid input must be rejected.

Functions: Identified functions must be exercised.

Output: Identified classes of application outputs must be exercised.

System/Procedure: Interfacing systems or procedures must be invoked.

Organization and preparation of functional tests is focused on requirements, key functions or special test cases. In addition, systematic coverage pertaining to identify business process flows; data fields, predefined processes and successive processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

Integration Testing:

Integration Testing is defined as a type of testing where software modules are integrated logically and tested as a group.

A typical software project consists of multiple software modules, coded by different programmers. Integration Testing focuses on checking data communication amongst these modules.

Although each software module is unit tested, defects still exist for various reasons like

- A Module, in general, is designed by an individual software developer whose understanding and programming logic may differ from other programmers. Integration Testing becomes necessary to verify the software modules work in unity
- At the time of module development, there are wide chances of change in requirements by the clients. These new requirements may not be unit tested and hence system integration Testing becomes necessary.
- Interfaces of the software modules with the database could be erroneous
- External Hardware interfaces, if any, could be erroneous
- Inadequate exception handling could cause issues.

6.3 TEST STRATERGIES AND APPROACH

Field-testing will be performed manually and functional tests will be written in detail.

Test Objectives:

- All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

Features to be tested:

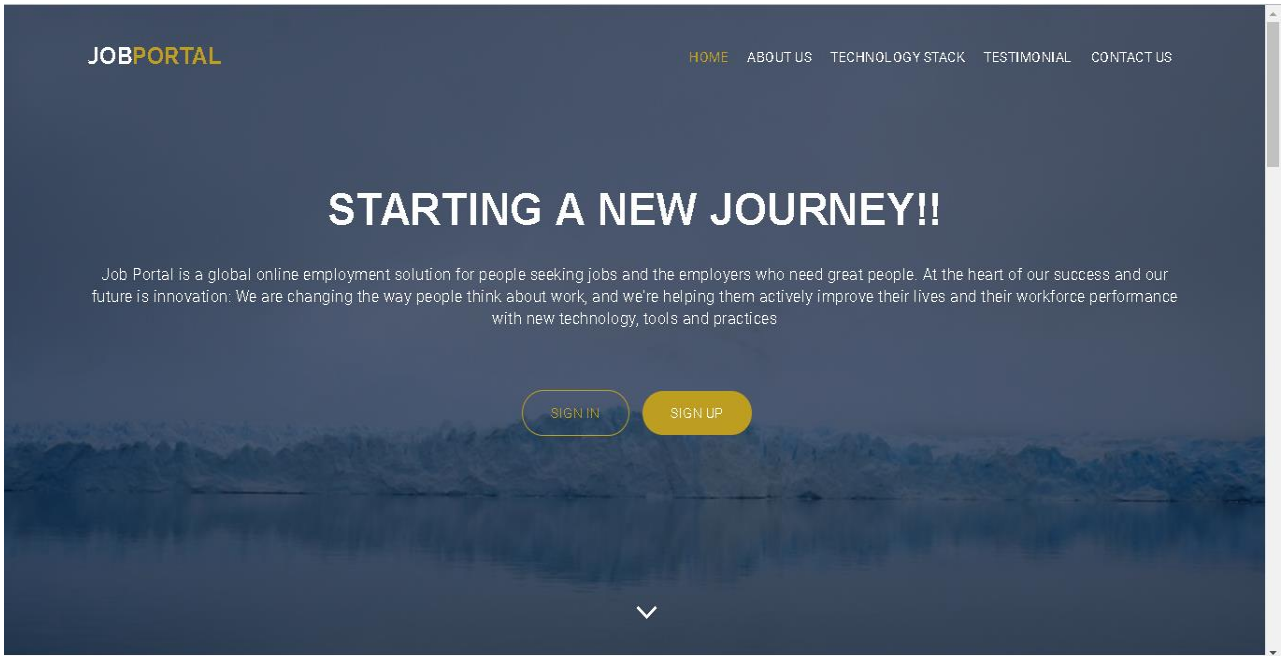
- Verify that the entries are of the correct format.
- No duplicate entries should be allowed.
- All links should take the user to the correct page.

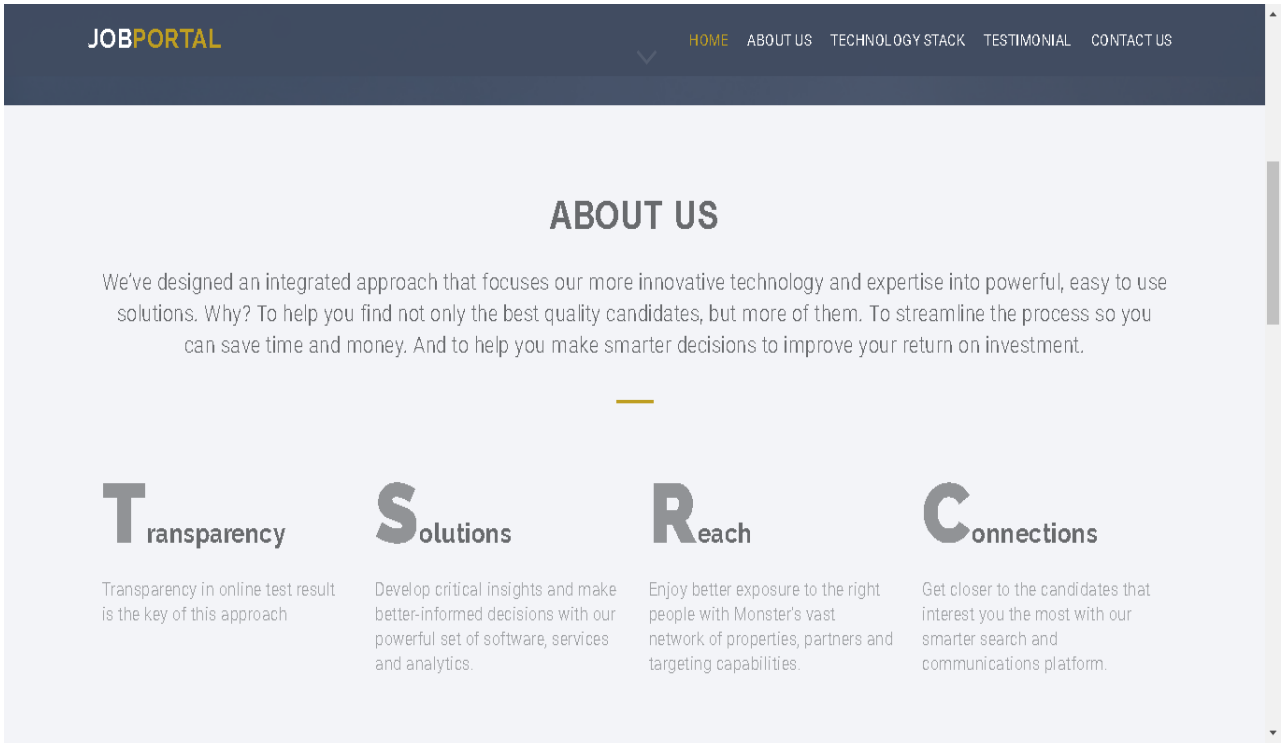
6.4 TEST RESULTS

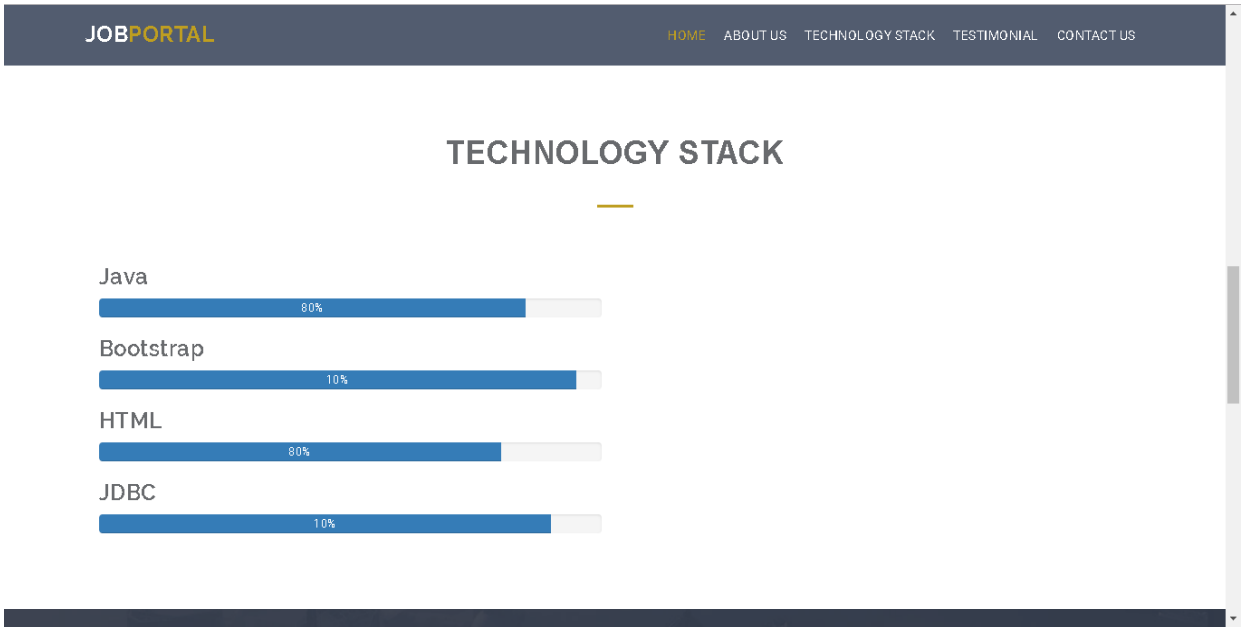
All the test cases mentioned above passed successfully. No defects encountered.

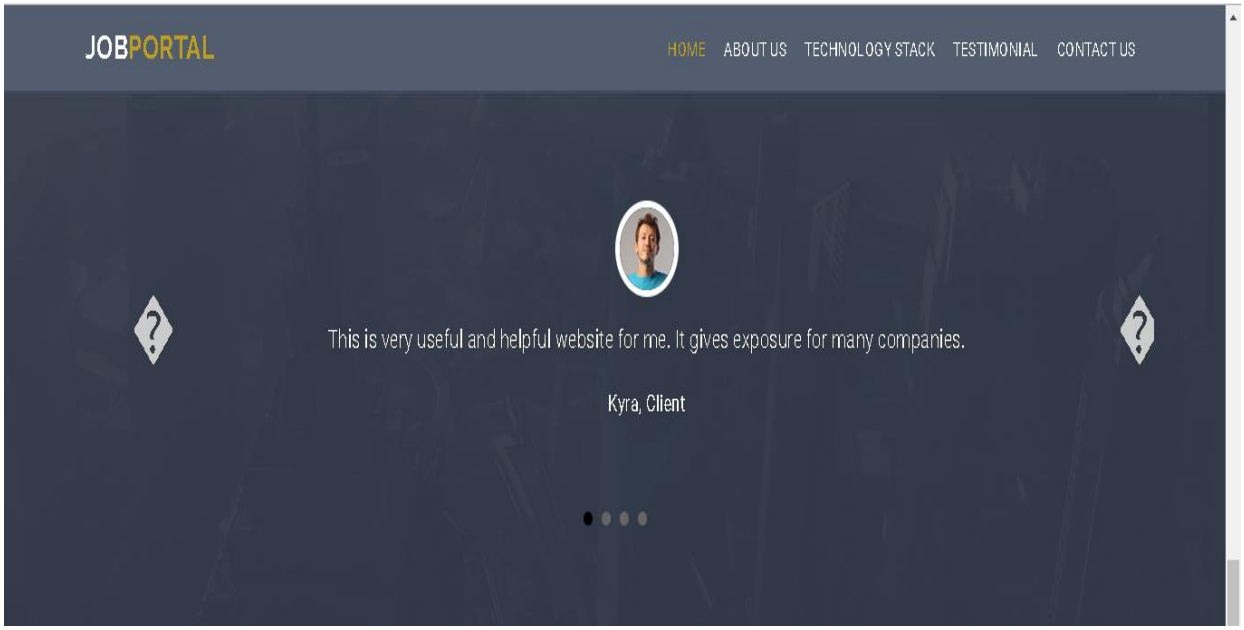
OUTPUT SCREENS

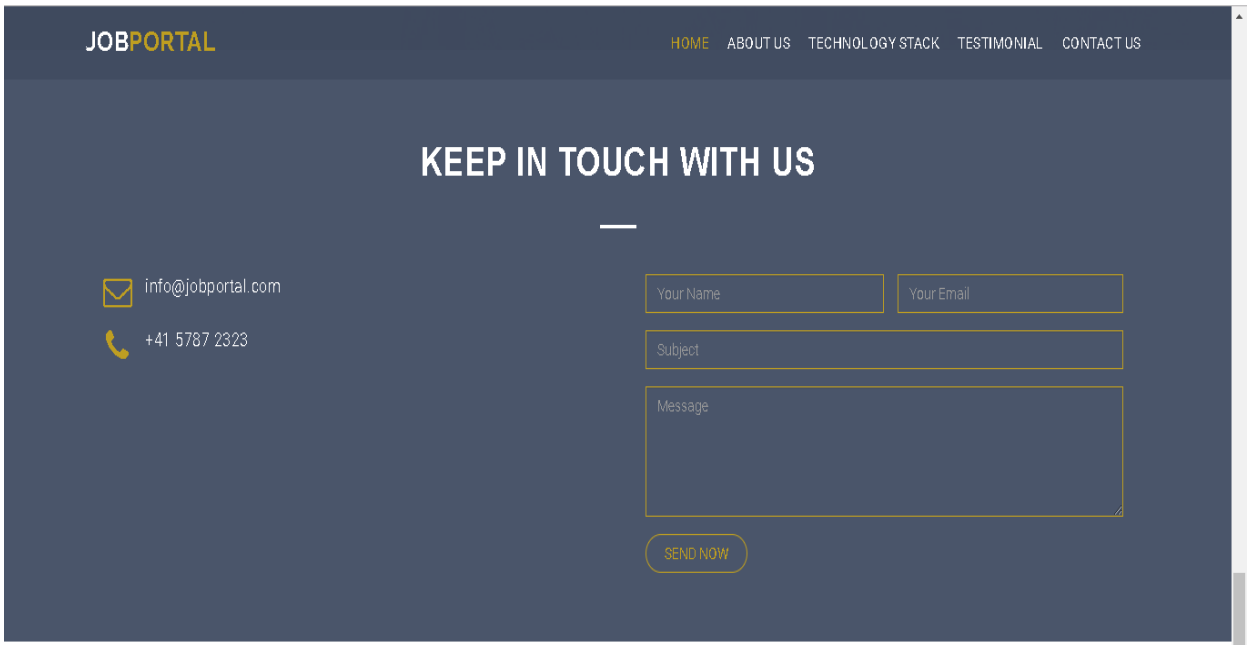
HOME PAGE



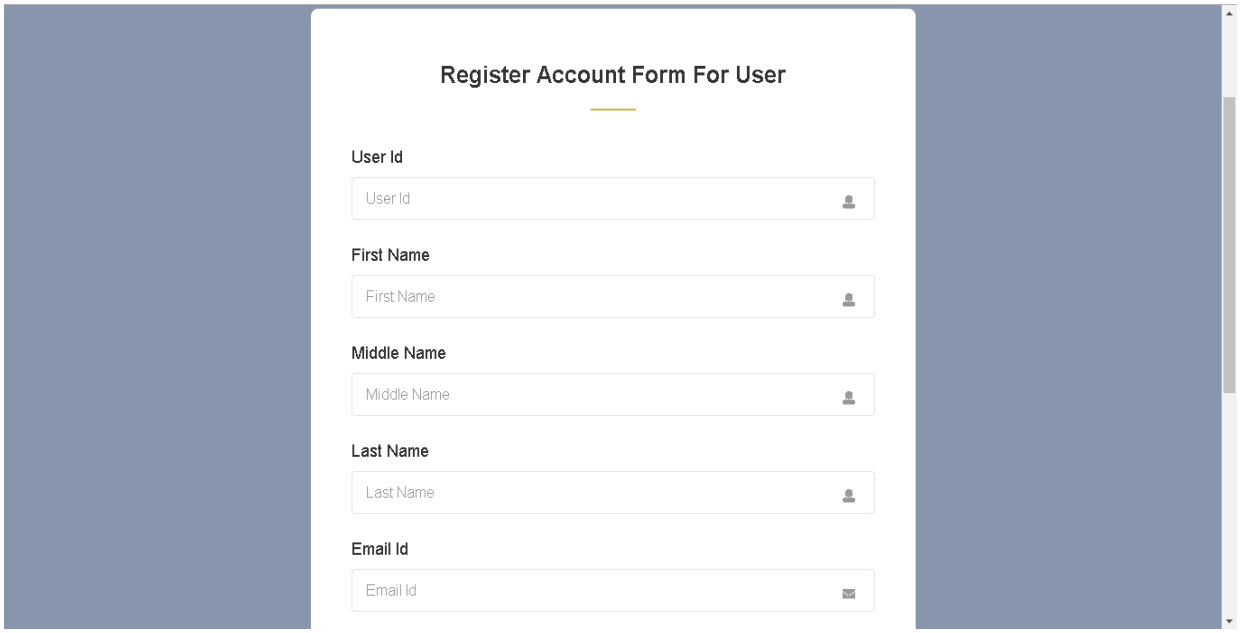



JOBPORTAL
HOME
ABOUT US
TECHNOLOGY STACK
TESTIMONIAL
CONTACT US
TECHNOLOGY STACK
Java
80%
Bootstrap
10%
HTML
80%
JDBC
10%

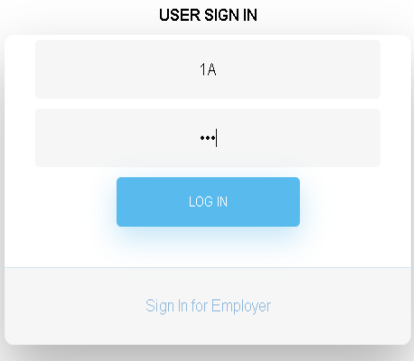

JOBPORTAL
HOME
ABOUT US
TECHNOLOGY STACK
TESTIMONIAL
CONTACT US
This is very useful and helpful website for me. It gives exposure for many companies.
Kyra, Client



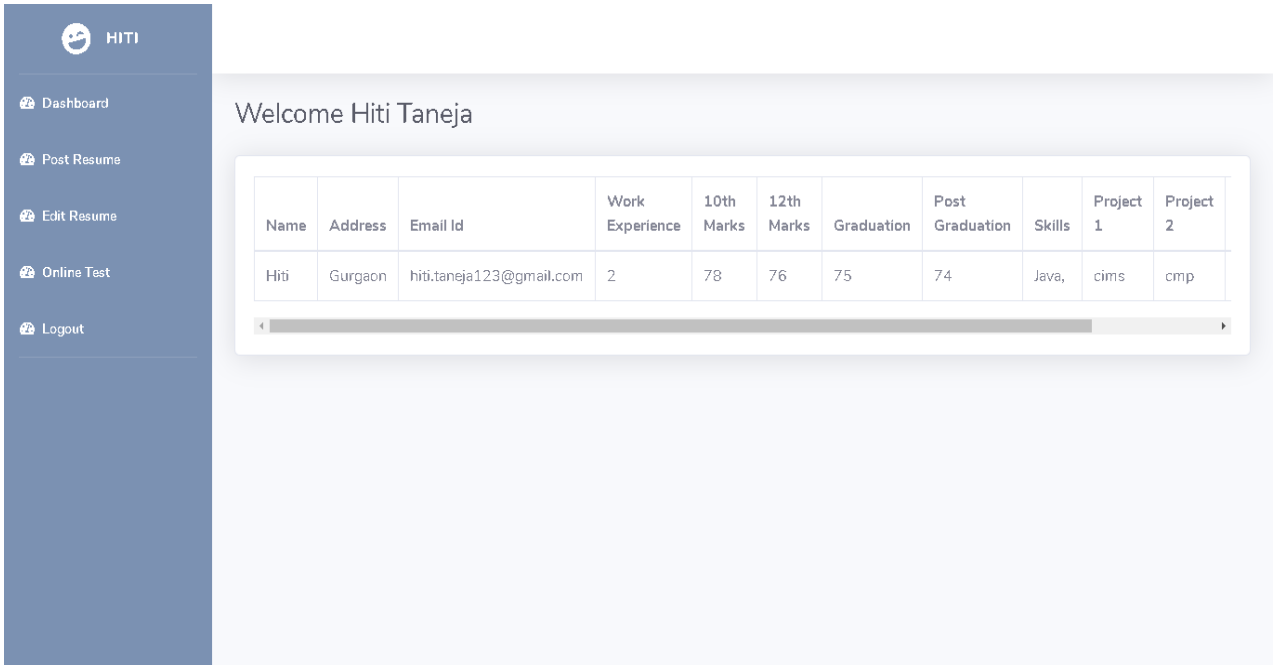
CANDIDATE REGISTRATION PAGE



CANDIDATE LOGIN PAGE

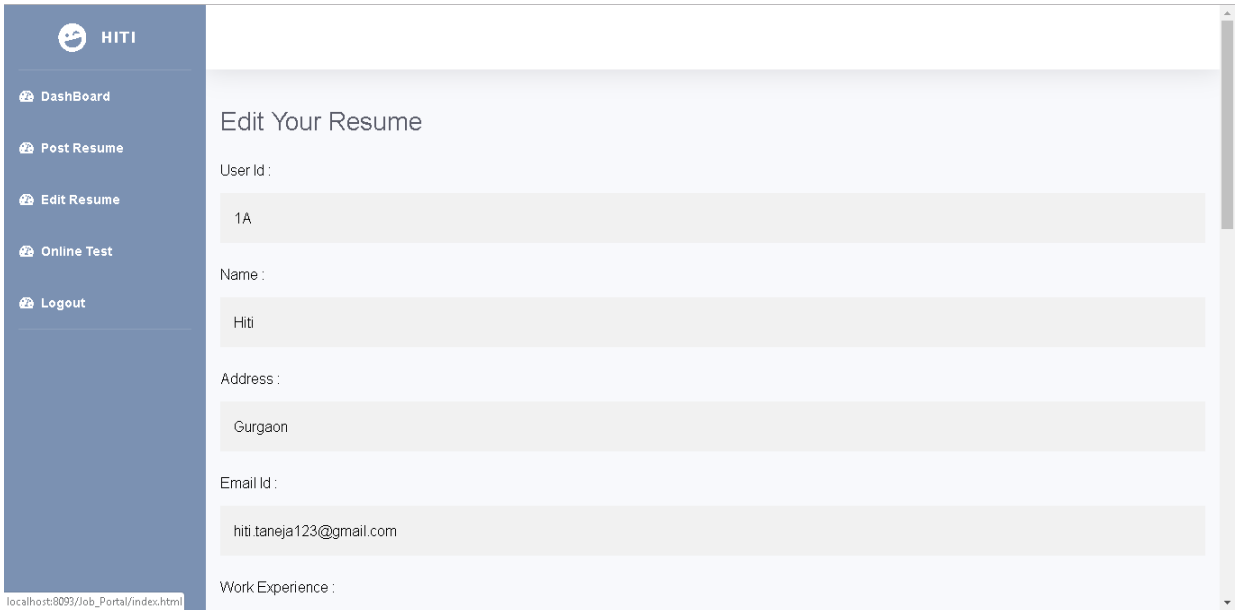


CANDIDATE DASHBOARD PAGE

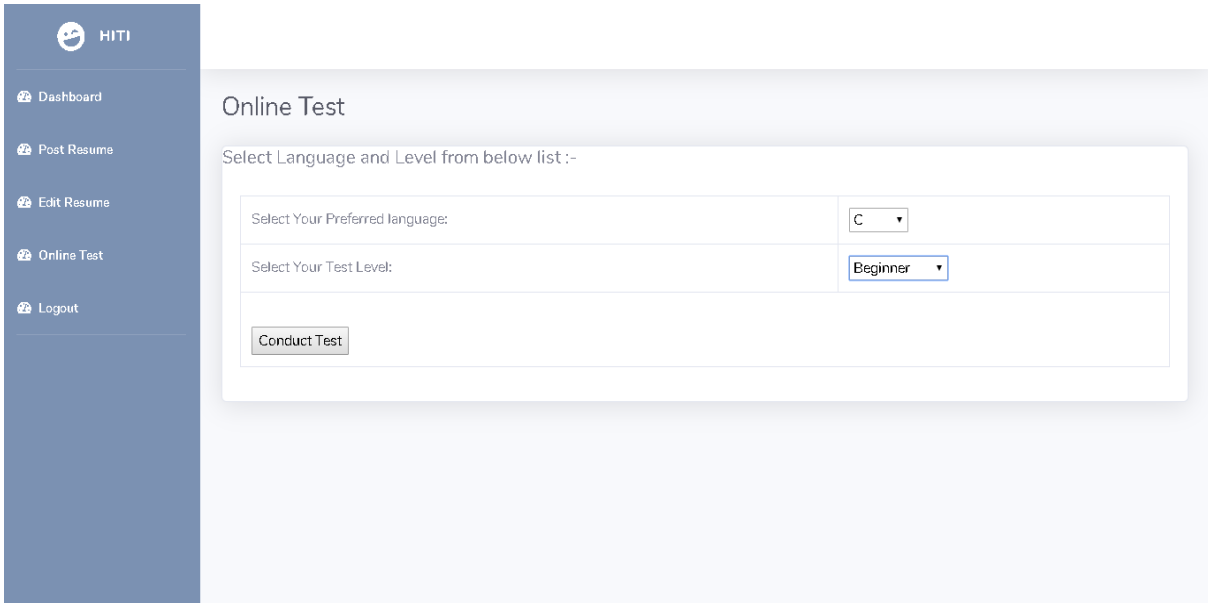


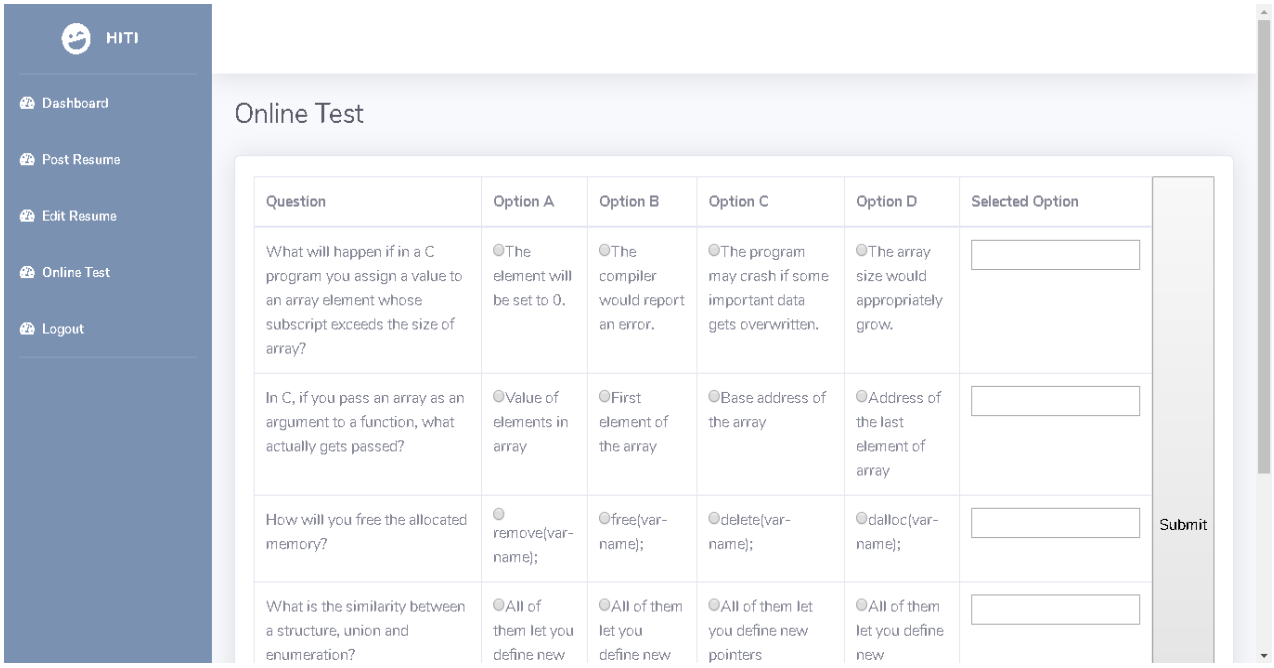
POST RESUME PAGE

EDIT RESUME PAGE

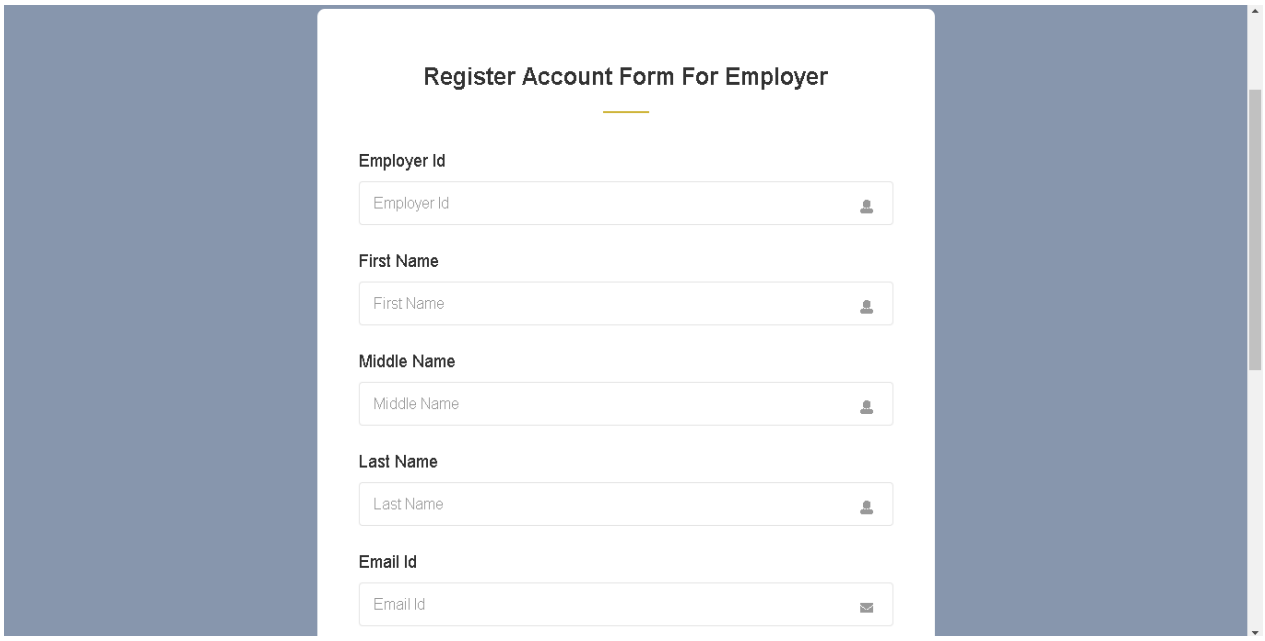


ONLINE TEST PAGE



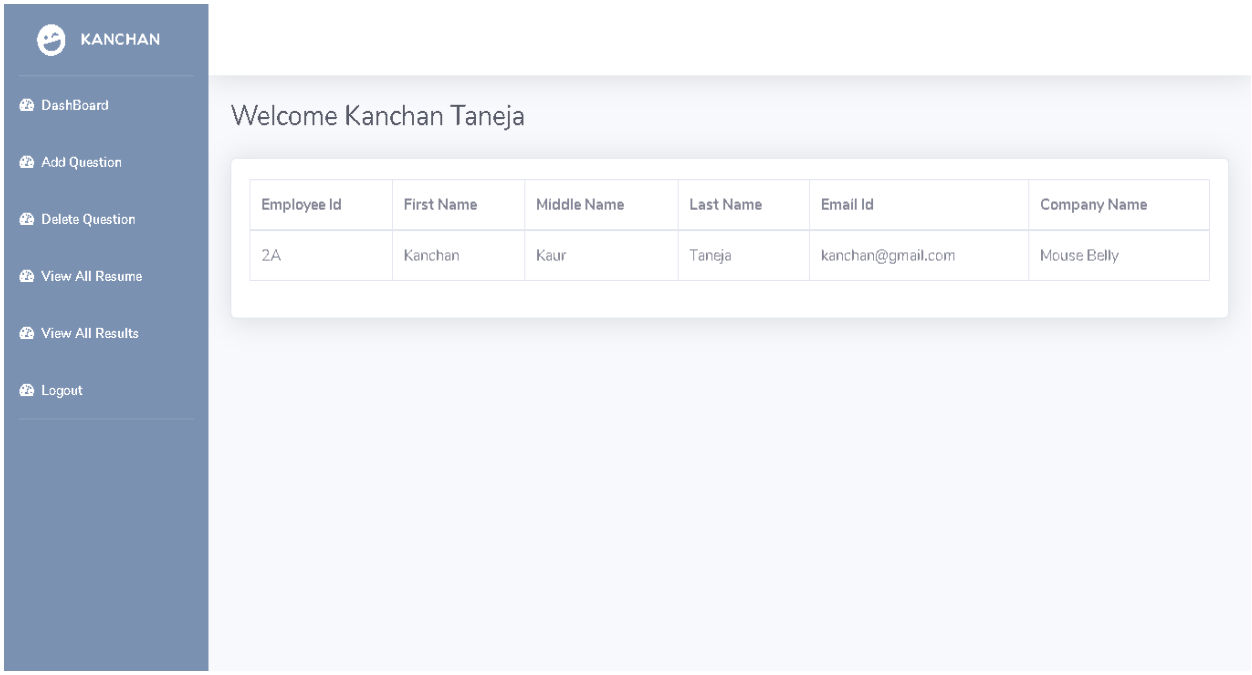


EMPLOYER REGISTRATION PAGE

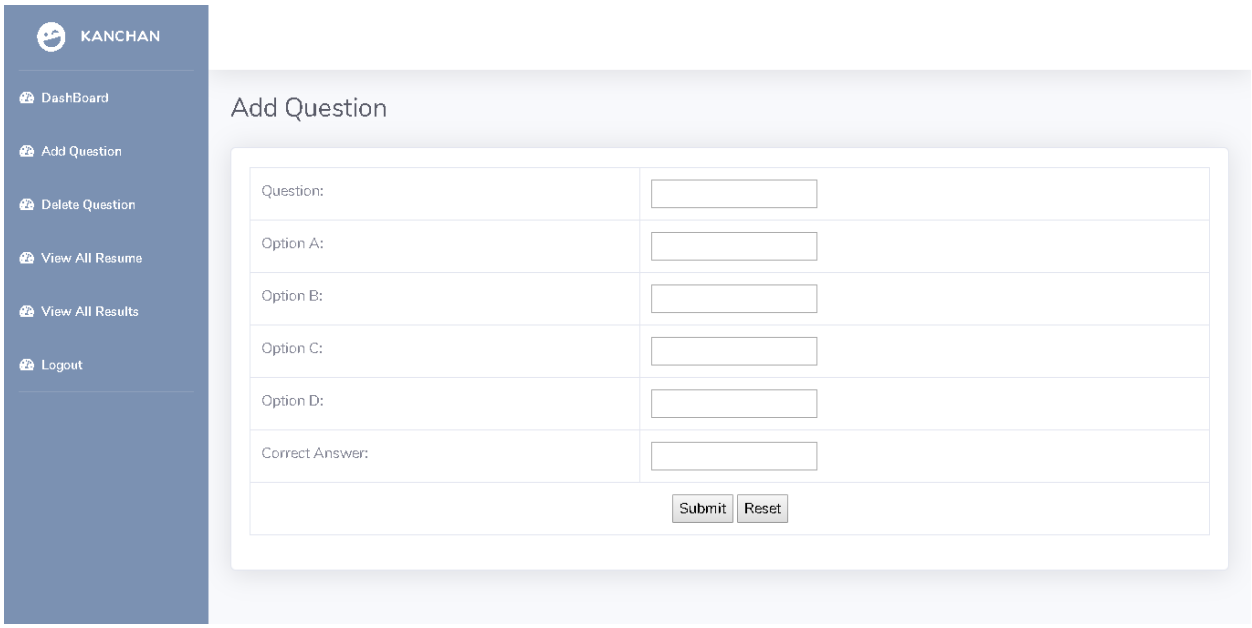


EMPLOYER LOGIN PAGE

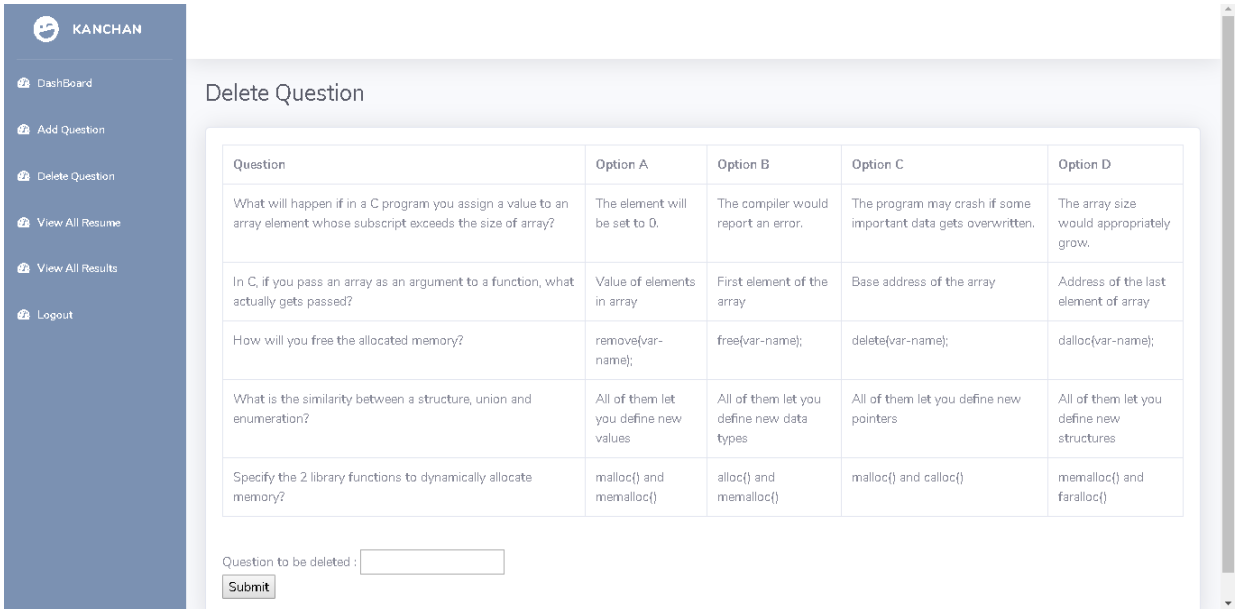
EMPLOYER DASHBOARD PAGE



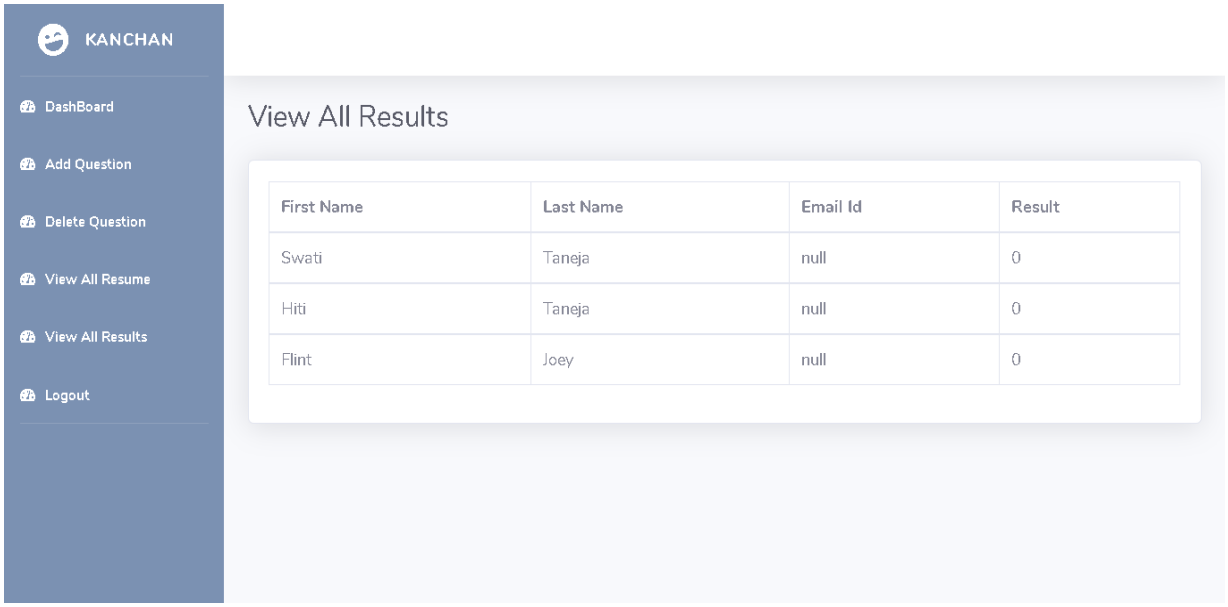
EMPLOYER ADD QUESTION PAGE



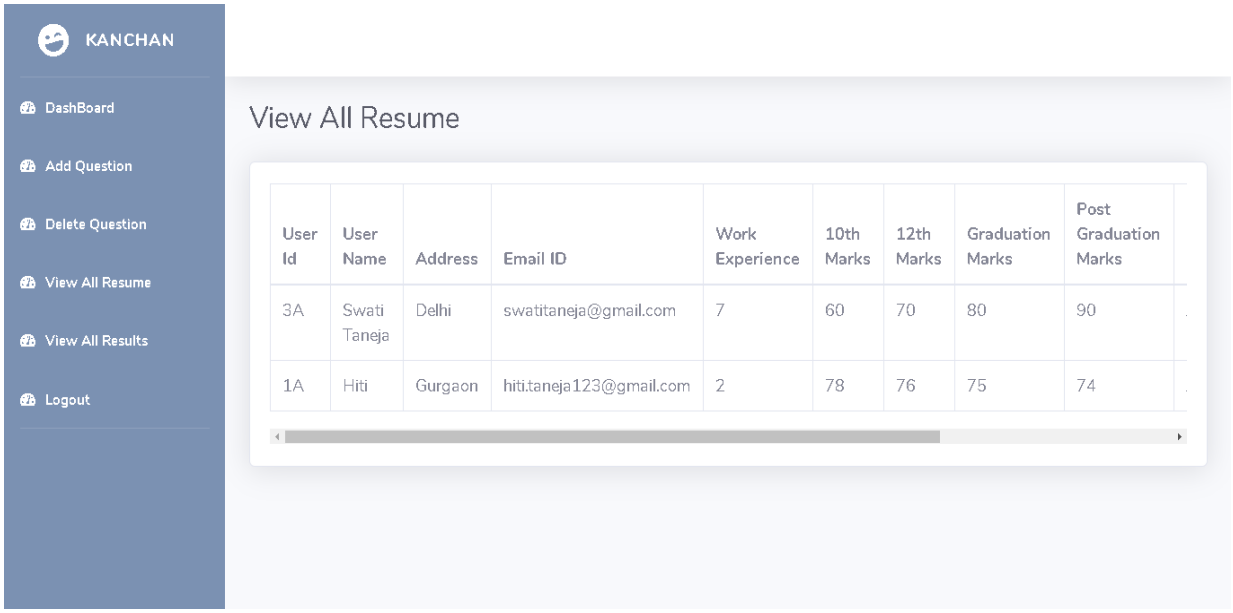
EMPLOYER DELETE QUESTION PAGE



EMPLOYER VIEW ALL RESULTS PAGE



EMPLOYER VIEW ALL RESUMES PAGE



FUTURE SCOPE OF WORK

The objective of this project is to computerize the user's profile and conduct online interviews. Instead of conducting selections by going to respective branch place we can select them from main company through placement cell and employee them in need branch.

By using this project, they can

- Conduct conferences with their job seekers online from the different branches of the company.
- Another advantage is that the company is having branches throughout the country so this will help them to communicate business requirements of the company and have up-to-date information.
- By seeing the job requirement only person having required skills will post their resumes so no need of short listing.
- On-line tests will still more reduce the work of the company and results immediately will clear out the work.

Likely there are so many advantages by developing this maintenance system.

- Conduct conferences with their job seekers online from the different branches of the company.
- To communicate business requirements of the company and have up-to-date information.
- By seeing the job requirement only person having required skills will post their resumes so no need of short listing.

CONCLUSION

In this project work, we provided the employer and employee a better platform to interact with each other. This website is beneficial for both of them in various prospects. The employer can select the right person for the right job on them bases of result conducted online on the website and the employee can clear the online conducted test and can approach various companies that are looking for a worthy opponent for the job. After clearing the online process, the companies can approach the candidates based on their percentile scored in the online test.

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