ONLINE JOB PORTAL

A PROJECT REPORT

Submitted by

SIVA SURYA S (2303811710421151)

in partial fulfillment of requirements for the award of the course

CGB1201 - JAVA PROGRAMMING

In

COMPUTER SCIENCE AND ENGINEERING

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY

(An Autonomous Institution, affiliated to Anna University Chennai and Approved by AICTE, New Delhi)

SAMAYAPURAM – 621 112

NOVEMBER- 2024

K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY

(AUTONOMOUS)

SAMAYAPURAM – 621 112

BONAFIDE CERTIFICATE

Certified that this project report on **"ONLINE JOB PORTAL"** is the bonafide work of **SIVA SURYA S (2303811710421151)** who carried out the project work during the academic year 2024 - 2025 under my supervision.

SIGNATURE	**SIGNATURE**
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HEAD OF THE DEPARTMENT	**SUPERVISOR**
PROFESSOR	ASSISTANT PROFESSOR
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Submitted for the viva-voce examination held on 06/12/2024

INTERNAL EXAMINER	EXTERNAL EXAMINER

DECLARATION

I declare that the project report on **"ONLINE JOB PORTAL"** is the result of original work done by us and best of our knowledge, similar work has not been submitted to **"ANNA UNIVERSITY CHENNAI"** for the requirement of Degree of **BACHELOR OF ENGINEERING**. This project report is submitted on the partial fulfilment of the requirement of the completion of the course **CGB1201 - JAVA PROGRAMMING.**

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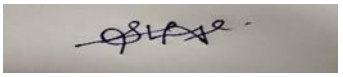
Signature



SIVA SURYA S

Place: Samayapuram

Date: 06/12/2024

ACKNOWLEDGEMENT

It is with great pride that I express our gratitude and in-debt to our institution "**K.Ramakrishnan College of Technology (Autonomous)**", for providing us with the opportunity to do this project.

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I wish to express our special thanks to the officials and Lab Technicians of our departments who rendered their help during the period of the work progress.

VISION OF THE INSTITUTION

To serve the society by offering top-notch technical education on par with global standards

MISSION OF THE INSTITUTION

- Be a center of excellence for technical education in emerging technologies by exceeding the needs of the industry and society.
- Be an institute with world class research facilities
- Be an institute nurturing talent and enhancing the competency of students to transform them as all-round personality respecting moral and ethical values

VISION OF DEPARTMENT

To be a center of eminence in creating competent software professionals with research and innovative skills.

MISSION OF DEPARTMENT

M1: Industry Specific: To nurture students in working with various hardware and software platforms inclined with the best practices of industry.

M2: Research: To prepare students for research-oriented activities.

M3: Society: To empower students with the required skills to solve complex technological problems of society.

PROGRAM EDUCATIONAL OBJECTIVES

1. PEO1: Domain Knowledge

To produce graduates who have strong foundation of knowledge and skills in the field of Computer Science and Engineering.

2. PEO2: Employability Skills and Research

To produce graduates who are employable in industries/public sector/research organizations or work as an entrepreneur.

3. PEO3: Ethics and Values

To develop leadership skills and ethically collaborate with society to tackle real-world challenges.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Domain Knowledge

To analyze, design and develop computing solutions by applying foundational concepts of Computer Science and Engineering.

PSO 2: Quality Software

To apply software engineering principles and practices for developing quality software for scientific and business applications.

PSO 3: Innovation Ideas

To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions to existing/novel problems

PROGRAM OUTCOMES (POs)

Engineering students will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations

6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice

7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

ABSTRACT

The development of an Online Job Portal aims to create a platform that efficiently connects job seekers with employers, simplifying the process of job search, application, and recruitment. The system allows job seekers to register, manage their profiles, upload resumes, and apply for jobs, while employers can post job openings, manage applications, and search for qualified candidates. The portal provides features such as job search filters, application tracking, and job posting management to ensure an efficient matching process between candidates and employers. By offering a user-friendly interface, the platform enhances the overall recruitment experience for both job seekers and employers. This project focuses on providing a basic framework for job registration and job posting functionalities, which can be further expanded to include additional features such as candidate evaluations, interview scheduling, and real-time notifications. This online job portal serves as a foundation for building a more sophisticated and scalable system that can be extended with backend technologies and integrated with databases for storing and managing user data and job postings.

ABSTRACT WITH POs AND PSOs MAPPING

CO 5 : BUILD JAVA APPLICATIONS FOR SOLVING REAL-TIME PROBLEMS.

ABSTRACT	POs MAPPED	PSOs MAPPED
The Online Job Portal is a platform designed to connect job seekers with employers, streamlining the job search and recruitment process. Job seekers can create profiles, upload resumes, and apply for jobs, while employers can post job openings and manage applications. The system facilitates efficient job matching through search filters and application tracking. This project provides a basic framework for job registration and posting, with potential for future expansion to include advanced features like candidate evaluations and interview scheduling.	**PO1 -3** **PO2 -3** **PO3 -3** **PO4 -3** **PO5 -3** **PO6 -3** **PO7 -3** **PO8 -3** **PO9 -3** **PO10 -3** **PO11-3** **PO12 -3**	**PSO1 -3** **PSO2 -3** **PSO3 -3**

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CHAPTER 1

INTRODUCTION

1.1 Objective

The objective of the Online Job Portal is to create a seamless platform that connects job seekers with employers, streamlining the job search and recruitment process. For job seekers, the portal allows them to create profiles, upload resumes, search for jobs based on various filters, and apply directly to job openings. Employers can post job listings, manage applications, and evaluate candidates. The system aims to efficiently match candidates with suitable positions based on their skills and preferences, while also providing employers with an easy way to find qualified candidates. Additionally, the portal is designed with scalability in mind, allowing for future enhancements such as candidate evaluations, interview scheduling, and real- time notifications, ultimately improving the overall recruitment experience for both job seekers and employers.

1.2 Overview

The Online Job Portal connects job seekers with employers, simplifying the recruitment process. Job seekers can create profiles, upload resumes, search for jobs, and apply to positions. Employers can post job openings, manage applications, and find suitable candidates. The portal aims to streamline job matching, enhance the recruitment process, and provide a user-friendly experience. Future features could include real-time notifications, candidate evaluations, and interview scheduling to further improve the platform.

1.3 Java Programming Concepts

- **Classes and Objects**:

  Represents components like job seekers, employers, and job postings using classes. Objects store individual details such as names, emails, and job descriptions.

- **Graphical User Interface (GUI)**:

  Utilizes AWT components like Button, TextField, and TextArea to create forms for user input. Layout managers like GridLayout and CardLayout organize the interface.

- **Event Handling**:

  Uses ActionListener to trigger actions when buttons are clicked. This makes the program interactive, processing user input when forms are submitted.

- **String Manipulation**:

  Handles user input through getText() from text fields and processes it for display or further action. This enables easy extraction and manipulation of data.

- **Object-Oriented Principles**:

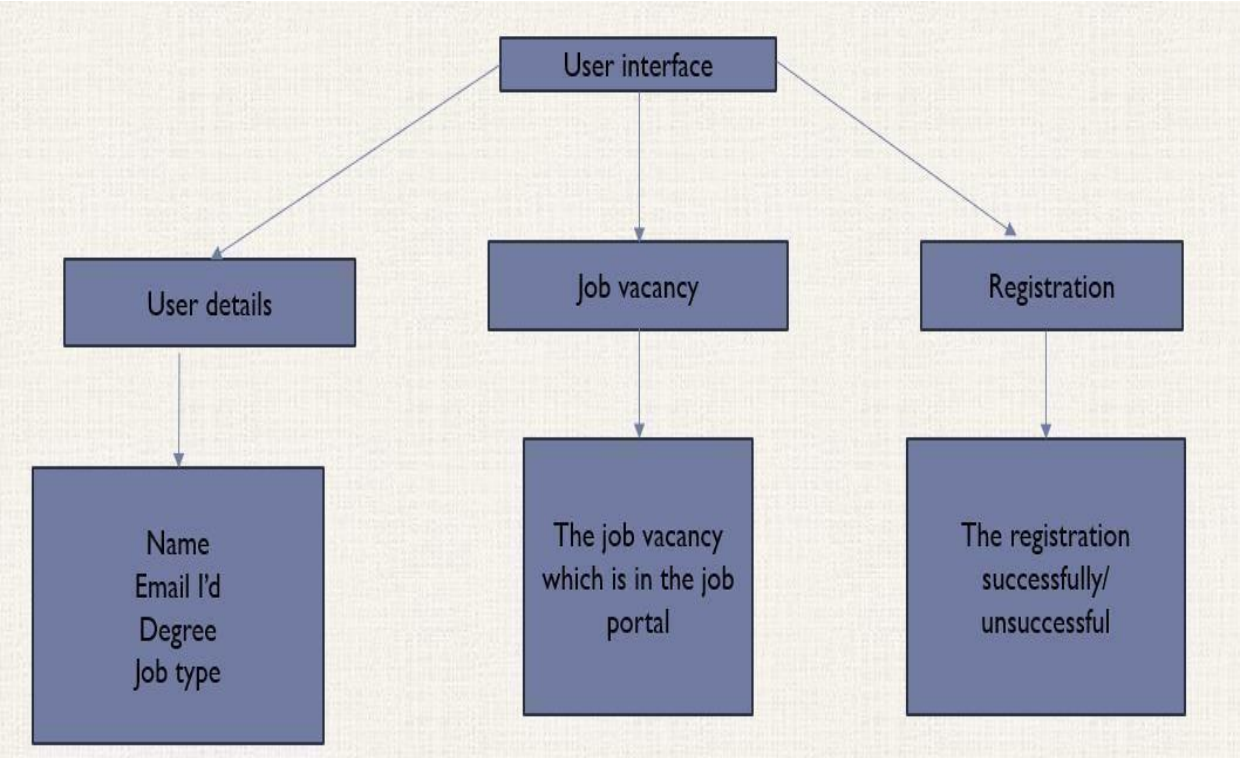
  Encapsulation is used to store user and job data within objects. Abstraction simplifies user interaction by hiding the internal complexity.

CHAPTER 2
PROJECT METHODOLOGY

2.1 Proposed Work

The proposed work for the Online Job Portal is to create a platform that connects job seekers and employers, making the job search and hiring process easier. Job seekers will be able to create profiles, upload resumes, search for jobs, and apply for positions. Employers can post job openings, view applications, and manage candidates. The portal will include features like job search filters, application tracking, and a dashboard for both job seekers and employers. Future updates will include a matching algorithm to suggest relevant jobs, a notification system for updates, and integration with a database to store user data. The user interface will be simple and easy to use. Later, the system can be expanded with features like mobile access and interview scheduling.

2.2 Block Diagram



CHAPTER 3

MODULE DESCRIPTION

3.1 User Authentication Module

- Handles registration, login, and session management for both job seekers and employers.
- Ensures secure access through techniques like JWT or OAuth.

3.2 Job Seeker Profile Management Module

- Allows job seekers to create, update, and manage their profiles, including personal information, work experience, skills, and resume uploads.

3.3 Job Search and Filtering Module

- Enables job seekers to search for jobs based on keywords, location, salary, and other filters.
- Provides sorting options to refine search results.

3.4 Job Application Module

- Lets job seekers apply for jobs by submitting their profiles and resumes.
- Tracks the status of applications (e.g., Pending, Shortlisted, Rejected).

3.5 Employer Job Posting and Management Module

- Allows employers to post jobs, manage job listings, and specify job details like title, description, location, and salary.
- Provides options to edit or remove job postings.

CHAPTER 4

CONCLUSION & FUTURE SCOPE

4.1 CONCLUSION

The development of an online job portal facilitates seamless interaction between job seekers and employers, offering a streamlined platform for job searches, applications, and recruitment processes. By integrating key features such as advanced job matching, personalized dashboards, and efficient application management, the system improves the overall recruitment experience for both parties. This digital approach not only reduces the time and effort involved in traditional hiring processes but also provides job seekers with a vast array of opportunities and employers with access to a diverse talent pool. Furthermore, the inclusion of real-time communication and analytics ensures that the platform remains effective and transparent, meeting the needs of modern recruitment practices.

4.2 FUTURE SCOPE

The future scope of an online job portal lies in integrating advanced technologies like AI for smarter job matching, blockchain for secure credential verification, and VR/AR for immersive hiring experiences. Expanding mobile-first designs, multilingual support, and global accessibility will enhance user reach and convenience. Additionally, incorporating skill development resources, predictive analytics for job market trends, and robust security measures will make the platform more comprehensive, addressing evolving recruitment needs while fostering professional growth and innovation.

APPENDIX A

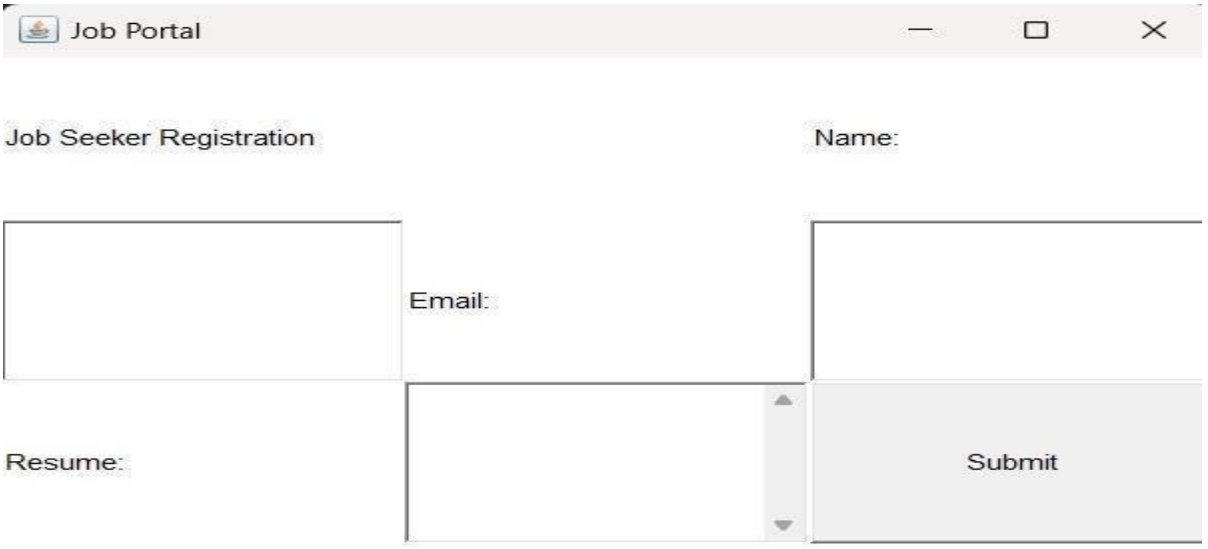
```
import java.awt.*;
import java.awt.event.*;
public class JobPortal extends Frame implements ActionListener {
    // Create components for Job Seeker registration
    Label seekerLabel, nameLabel, emailLabel, resumeLabel;
    TextField nameField, emailField;
    TextArea resumeField;
    Button seekerButton;
    // Create components for Employer job posting
    Label employerLabel, jobTitleLabel, jobDescLabel, jobLocationLabel;
    TextField jobTitleField, jobLocationField;
    TextArea jobDescField;
    Button employerButton;
    // Constructor for setting up the GUI
    public JobPortal() {
        setTitle("Job Portal");
        setSize(500, 400);
        setLayout(new CardLayout());
        // Job Seeker Panel
        Panel seekerPanel = new Panel();
        seekerPanel.setLayout(new GridLayout(4, 2));
        seekerLabel = new Label("Job Seeker Registration");
        nameLabel = new Label("Name:");
        emailLabel = new Label("Email:");
        resumeLabel = new Label("Resume:");
```

```
nameField = new TextField();
emailField = new TextField();
resumeField = new TextArea();
seekerButton = new Button("Submit");
seekerButton.addActionListener(this);
seekerPanel.add(seekerLabel);
seekerPanel.add(new Label("")); // Empty cell for alignment
seekerPanel.add(nameLabel);
seekerPanel.add(nameField);
seekerPanel.add(emailLabel);
seekerPanel.add(emailField);
seekerPanel.add(resumeLabel);
seekerPanel.add(resumeField);
seekerPanel.add(seekerButton);
// Employer Panel
Panel employerPanel = new Panel();
employerPanel.setLayout(new GridLayout(5, 2));
employerLabel = new Label("Employer Job Posting");
jobTitleLabel = new Label("Job Title:");
jobDescLabel = new Label("Job Description:");
jobLocationLabel = new Label("Location:");
jobTitleField = new TextField();
jobLocationField = new TextField();
jobDescField = new TextArea();
employerButton = new Button("Post Job");
employerButton.addActionListener(this);
employerPanel.add(employerLabel);
employerPanel.add(new Label("")); // Empty cell for alignment
employerPanel.add(jobTitleLabel);
```

```
        employerPanel.add(jobTitleField);
        employerPanel.add(jobLocationLabel);
        employerPanel.add(jobLocationField);
        employerPanel.add(jobDescLabel);
        employerPanel.add(jobDescField);
        employerPanel.add(employerButton);
        // Adding panels to the frame
        add("seeker", seekerPanel);
        add("employer", employerPanel);
        // Show the Job Seeker Panel by default
        setVisible(true);
    }
    // ActionListener method to handle button clicks
    public void actionPerformed(ActionEvent e) {
        if (e.getSource() == seekerButton) {
            String name = nameField.getText();
            String email = emailField.getText();
            String resume = resumeField.getText();
            // Print registration details to the console
            System.out.println("Job Seeker Registered:");
            System.out.println("Name: " + name);
            System.out.println("Email: " + email);
            System.out.println("Resume: " + resume);
            // Clear fields after submission
            nameField.setText("");
            emailField.setText("");
            resumeField.setText("");
        } else if (e.getSource() == employerButton) {
            String jobTitle = jobTitleField.getText();
```

```
            String jobLocation = jobLocationField.getText();
            String jobDesc = jobDescField.getText();
            // Print job posting details to the console
            System.out.println("Job Posted:");
            System.out.println("Job Title: " + jobTitle);
            System.out.println("Location: " + jobLocation);
            System.out.println("Description: " + jobDesc);
            // Clear fields after posting
            jobTitleField.setText("");
            jobLocationField.setText("");
            jobDescField.setText("");
        }
    }
    // Main method to run the application
    public static void main(String[] args) {
        new JobPortal();
    }
}
```

APPENDIX B


Job Portal
Job Seeker Registration
Name:
Email:
Resume:
Submit


Job Portal
Job Seeker
Employer
View Jobs


Job Portal
Name:
john
Email:
john@gmail.com
Resume:
Experienced in Java, Python, and Software Develop
Submit

V

REFERENCES

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