

# JOBEE - Job Portal

*Graduation Project Presentation*

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# Outline

- **Introduction**
  - Overview
  - Problem Statement
  - Objective
  - Motivation
- **Literature Review/Market Research**
  - Previous Research or Solutions
  - Technologies Reviewed
  - Existing Products/Competitor Analysis
- **Project Scope and Requirements**
  - Functional Requirements
  - Non-Functional Requirements
- **System Architecture/Design**
- **Development Process**
- **Future Work**
- **Conclusion**

# Overview

The project aims to develop a comprehensive job search platform that connects job seekers with employers in the computer science-related field. It features job-matching algorithms and resume management to enhance the job search experience for users.

# Problem Statement

Current job search platforms often suffer from poor job-candidate matching, irrelevant job suggestions, and complex user interfaces, while employers struggle with filtering a large volume of applications to find suitable candidates.

# Objective

- Create a user-friendly platform for job seekers and employers
- Implement advanced matching algorithms for more relevant job suggestions
- Ensure mobile compatibility and enhance data security

# Motivation

The project is motivated by the need for a more effective and personalized job search experience, addressing gaps in existing platforms and providing better tools for both job seekers and employers.

# Literature Review and Market Research

## Previous Research or Solutions:

Job searching has evolved over time, transitioning from traditional paper-based methods to digital platforms. Key research papers and studies have examined this transition to online job portals, highlighting the impact of technology on job searching efficiency and accessibility.

## Technologies Reviewed:

- HTML
- CSS
- JavaScript
- Bootstrap
- PHP
- Laravel

# Existing Products/Competitor Analysis

## LinkedIn:

- **Strengths:** Networking, integrated job search, and extensive candidate/company profiles.
- **Weaknesses:** Limited access to features for free users, overly broad job matches.
- **Unique Selling Point:** Social network plus job search.

## Indeed:

- **Strengths:** Comprehensive listings, easy-to-use interface, job seeker reviews of companies.
- **Weaknesses:** Job filtering is basic, and there are limited advanced search options.
- **Unique Selling Point:** Simplified job search for all industries.

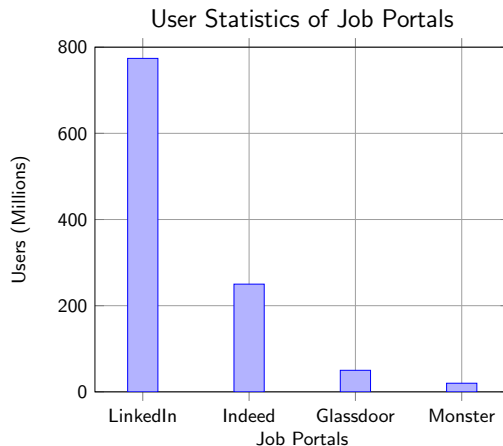




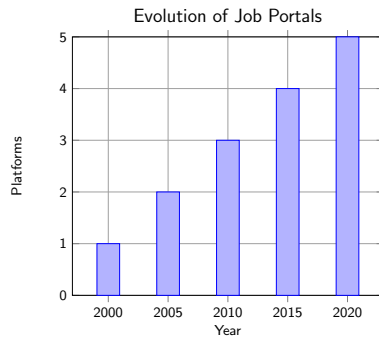
# User Statistics of Job Portals

blue!20 Job Portal	Users (Millions)
LinkedIn	774
Indeed	250
Glassdoor	50
Monster	20

Table: User Statistics for Job Portals



# Evolution of Job Portals



# Project Scope and Requirements

## ● Functional Requirements

- User Registration and Profiles: Users (job seekers) can create and manage profiles.
- Job Search and Filters: Job seekers can search for jobs using filters like location, job type, and job title.
- Resume Upload: Users can upload and manage their resumes.
- Job Application: Ability to apply for jobs directly through the platform.

## ● Non-Functional Requirements

- Scalability: The platform should handle a large number of users simultaneously.
- Security: Ensuring data privacy for sensitive information like resumes and employer data.
- Performance: Quick search and response times, even with a large database of jobs and candidates.
- Usability: The interface should be easy to navigate for users with varying technical skills.

# Project Scope

- The platform will include the development of search algorithms, filtering options, and resume management.
- Target Users that looking for employment opportunities in various industries.

# System Architecture

## Overview

This architecture is a simple representation of how Jobee interacts with the web server and database.

- **Client (Browser):** End-users (job seekers) access the website.
- **Web Server:** Handles HTTP requests and runs the Laravel application (Apache).
- **Laravel Application:** Core of the website with models, controllers, views (Blade templates), and routes.
- **Database:** Stores job listings, user profiles, applications, etc. (MySQL).

# System Architecture

system\_architecture\_diagram.png

# key modules and components

## Authentication and User Management

This module handles the registration, login, and management of different types of users on the platform.

- **Registration and Login:** Uses Laravel's built-in authentication system.
- **Role Management:** Controls access to specific features based on the user's role.
- **Profile Management:** Allows job seekers to manage personal profiles, upload resumes, and update contact information.

### Laravel Features:

- **Laravel Breeze:** Provides authentication scaffolding.
- **Laravel Policies and Gates:** Manages authorization for user roles.

# key modules and components

## Job Listings Module

This is the core feature of Jobee, where job seekers browse job opportunities.

- **Job Search and Filtering:** Job seekers can search for jobs based on keywords, categories, locations, job types (full-time, part-time, remote).

### Laravel Features:

- Eloquent ORM: For database interaction to store job posts.



# key modules and components

## Job Application Management

This module handles job applications by job seekers and facilitates the connection between job seekers and employers.

- **Application Submission:** Job seekers can apply for jobs, attach resumes.

### Laravel Features:

- File Uploads: For resumes.

# key modules and components

## Dashboard (Admin, Job Seeker)

Different users interact with the job portal through dedicated dashboards tailored to their roles.

- **Admin Dashboard:** Manage users, job listings, site content, and analytics.
- **Job Seeker Dashboard:** Manage profiles, apply for jobs, save/bookmark jobs.

### Laravel Features:

- Blade Templates: For dynamic and responsive dashboard layouts.

# Technology Stack

## Backend

Laravel (PHP), MySQL.

## Frontend

Blade, HTML5, CSS3, Bootstrap, JavaScript.

## Web Server

Apache.

## Security

Laravel Auth, CSRF Protection.

## Testing

PHPUnit.

# Security Measures

- **Authentication & Authorization:** Laravel's built-in authentication with role-based access control (RBAC) for job seekers and admins.
- **CSRF Protection:** Laravel includes CSRF tokens by default for secure form submissions, preventing cross-site request forgery.
- **SQL Injection Prevention:** Eloquent ORM and prepared statements to prevent SQL injection attacks.
- **File Upload Security:** Validating file types to avoid malicious uploads.

# Methodology Used

## Waterfall Approach

The development of **Jobee** is structured using the **Waterfall Approach**. This ensures each stage is completed before moving on.

# Development Tools



**Visual Studio Code**



**XAMPP**



**PHPMyAdmin**



**GitHub**

# Future Work

To elevate the user experience and streamline operations on **Jobee**, we plan to implement the following enhancements:

- **Employer Dashboard:** A comprehensive dashboard tailored for employers to manage job listings, monitor applications, and analyze hiring trends.
- **Job Applications Tracking:** A robust tracking system that allows both job seekers and employers to keep tabs on application statuses, ensuring transparency and timely follow-ups.
- Our immediate focus will be on the following strategic move: Initiating the development of a user-friendly mobile application to provide seamless access to Jobee's features on-the-go.

# Conclusion

In conclusion, a well-designed job portal can significantly streamline the job search and recruitment process for both job seekers and employers. By incorporating user-friendly interfaces, advanced search filters, and efficient communication tools, job portals can bridge the gap between talent and opportunity. As the demand for skilled professionals continues to grow, having a robust and versatile job portal is crucial in helping users navigate the complexities of the job market and secure their dream roles. With a comprehensive approach and continual updates, job portals can remain indispensable tools in the ever-evolving world of employment.



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ANY  
QUESTIONS

# Thank You!