

FINAL PROJECT

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JOB BOARD

Introduction

The JOB Board is a web-based application designed to facilitate job postings and applications, creating a platform where employers can post job vacancies and prospective employees can apply for these positions. It aims to simplify the hiring process by providing a direct channel of communication between job seekers and employers.

Features

- **Job Posting:** Employers can create listings for job vacancies, including details such as job title, description, company name, and requirements.
- **Job Application:** Job seekers can apply for open positions directly through the platform. Applications can include a resume and a cover letter.
- **Dashboard for Job Seekers:** Users have a personal dashboard where they can track their job applications and their statuses (e.g., Applied, Screening, Interview).
- **Dashboard for Employers:** Employers have access to a dashboard where they can see all applications for their job postings, update application statuses, and manage job listings.
- **Search and Filter:** Both job seekers and employers can search and filter jobs/applications based on various criteria such as job title, status, and date applied.
- **Authentication and Authorization:** The system includes user registration, login/logout functionality, and profile management. Different permissions are set for job seekers and employers.

Software and Hardware Requirements (Local Environment)

Software Requirements:

- Python (3.7 or newer)
- Django (3.x or newer)
- Database Management System (SQLite for development, PostgreSQL for production recommended)

- Web Browser (e.g., Chrome, Firefox)
- Text Editor or IDE (e.g., VSCode, PyCharm)

Hardware Requirements:

- Processor: 1GHz or faster
- RAM: 2GB or more
- Disk Space: At least 1GB available for project files and database

High-Level System Architecture

- **Front-end** is developed as a single-page application (SPA) where possible, making heavy use of django templates to communicate with the back-end and update the UI dynamically.
- **Back-end** is built using the Django framework, providing a robust and secure system for handling data and business logic. It exposes RESTful APIs to be consumed by the front-end for actions that require data fetching or updates.
- **Database** uses Django's default SQLite in development, with a recommendation to switch to PostgreSQL in production for enhanced performance and scalability.

Database

Tables:

User: Stores information about users, including job seekers and employers.

- id: Primary key.
- username: Unique identifier for the user.
- password: Hashed password for user authentication.
- email: User's email address.
- Additional auth fields provided by Django's AbstractUser.

Job: Contains details of job postings.

- id: Primary key.
- job_title: The title of the job.
- company_name: Name of the company offering the job.
- job_description: Detailed description of the job.
- posted_by: ForeignKey linking to the User who posted the job.
- created_at: DateTime the job was posted.

JobApplication: Keeps track of job applications.

- **id:** Primary key.
- **job:** ForeignKey linking to the Job being applied for.
- **user:** ForeignKey linking to the User applying for the job.
- **full_name:** Applicant's full name.
- **email:** Applicant's email.
- **phone_number:** Contact number.
- **cover_letter:** Cover letter for the application.
- **resume:** FileField storing the resume.
- **status:** Status of the application.
- **applied_on:** DateTime the application was submitted.

Front-end Modules

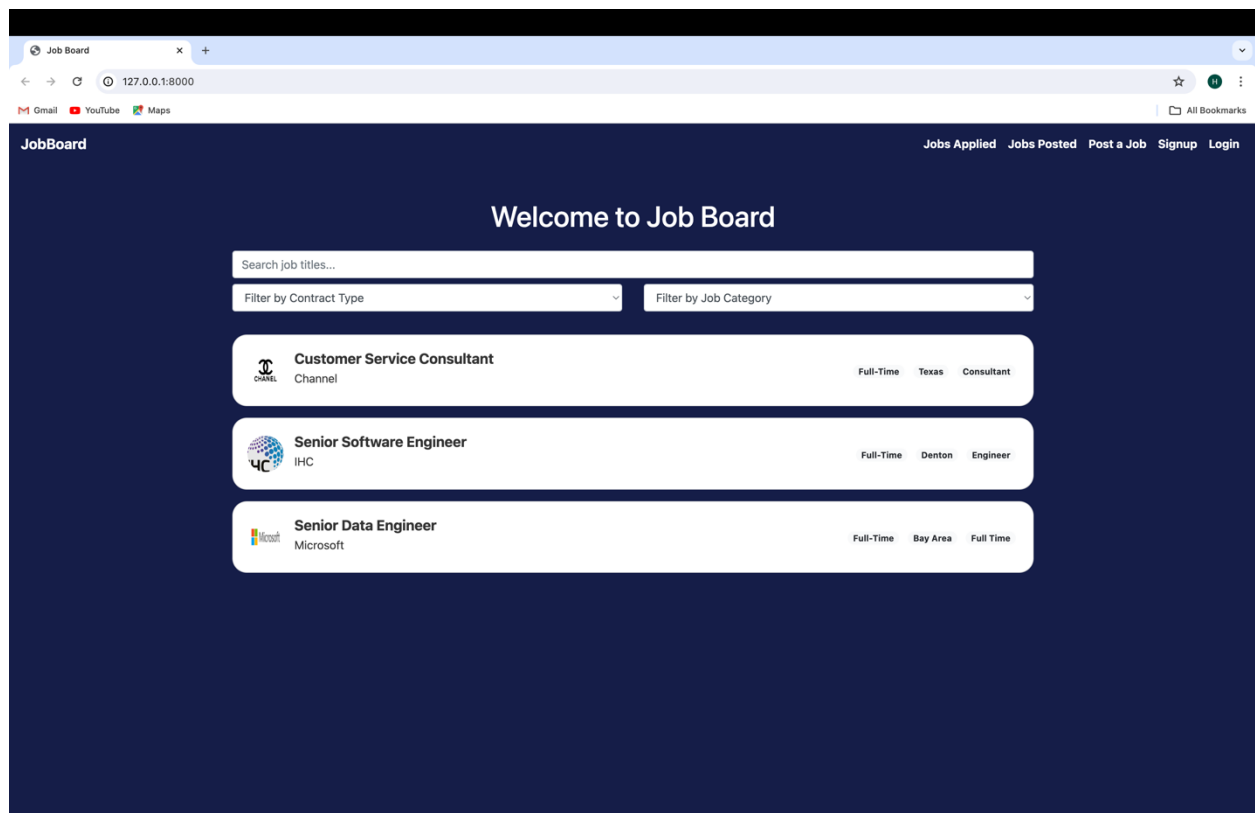
- **User Interface (UI)**
 - **Technologies Used:** HTML5, CSS3 (with Bootstrap for grid layout and responsiveness), and JavaScript (with jQuery for DOM manipulation).
 - **Architecture:** Follows a component-based architecture to reuse UI components (e.g., job cards, forms, buttons) across different pages. Utilizes AJAX for dynamic content updates without page reloads.
 - **Features:**
 - **Responsive Design:** Ensures the website is accessible and provides an optimal viewing experience across a wide range of devices (from desktop monitors to mobile phones).
 - **Navigation Bar:** Includes links to different sections of the site, with conditional rendering based on user authentication status (e.g., Show "Dashboard" if logged in).
- **Form Handling**
 - **Technologies Used:** JavaScript for front-end validation and AJAX for asynchronous form submission. Django forms are used to generate server-side form structures and handle validation.
 - **Features:**
 - **Client-side Validation:** Improves user experience by providing immediate feedback on input errors before submission.
 - **Server-side Validation:** Ensures data integrity and security by validating input on the server using Django's form validation mechanisms.

- **AJAX Form Submission:** Enhances UX by allowing forms to submit data asynchronously and update the UI based on the response without a full page reload.

Back-end Modules

- User Management
 - **Technologies Used:** Django's built-in authentication system, extended with custom user models if needed.
 - **Features:**
 - **Authentication and Authorization:** Supports user registration, login, logout, and password management..
- Job Management
 - **Technologies Used:** Django models for data representation, Django ORM for database operations.
 - **Features:**
 - Employers can create, read job listings through intuitive interfaces. Each action is securely handled in the back-end to ensure data integrity and authorization.
- Application Management
 - **Technologies Used:** Django models and ORM, Django's form handling capabilities.
 - **Features:**
 - **Application Submission:** Job seekers can apply to job listings with their details and upload resumes. The system handles file uploads securely and associates applications with the corresponding job and user.
 - **Status Tracking:** Each application's status is tracked (e.g., "In Review", "Interview", "Offered"), with updates communicated to the job seeker.
- Search and Filter
 - **Technologies Used:** Django ORM for querying the database, custom query parameters for filtering.
 - **Features:**
 - **Keyword Search:** Allows users to search job listings using keywords found in job titles, descriptions, or company names.
 - **Advanced Filters:** Users can filter listings or applications based on criteria such as location, job type, status, etc., improving the site's usability and navigation.

Output 1:



Output2

The screenshot shows a web browser window with two tabs: 'Select project to change | D...' and 'Job Board'. The address bar displays '127.0.0.1:8000/signup/'. The browser's toolbar includes icons for Gmail, YouTube, and Maps, along with search, star, and download buttons. The 'Job Board' application has a dark blue header with the title 'JobBoard' on the left and navigation links 'Jobs Applied', 'Jobs Posted', 'Post a Job', 'Signup', and 'Login' on the right. The main content area features a white 'Signup' form with the following fields: 'Username' (containing 'Vijayalakshmi'), 'Email address' (containing 'hs759@njit.edu'), 'Password' (masked with dots), and 'Password confirmation' (masked with dots). A yellow 'Signup' button is at the bottom of the form. Below the form, a link states 'If you already have an account, [login here.](#)'

JobBoard

Jobs Applied Jobs Posted Post a Job Signup Login

Signup

Username
Vijayalakshmi

Email address
hs759@njit.edu

Password

Password confirmation

Signup

If you already have an account, [login here.](#)

The screenshot shows a web browser window with the following details:

- Browser Tabs:** Job Board, Resume Samples and Exam..., Java Developer Resume Ex...
- Address Bar:** 127.0.0.1:8000/apply/10/
- Page Header:** JobBoard (left), Jobs Applied Jobs Posted Post a Job Vijayalakshmi Logout (right)
- Form Title:** Apply for Job
- Form Fields:**
 - Full name:** Vijayalakshmi Nambaru
 - Email:** hs759@njit.edu
 - Phone number:** 9085581231
 - Cover letter:** I am Full Stack developer with three years experience in the Gaming domain and I am seeking for opportunities in Data Science field
 - Resume:** Choose File Resume_Template.docx
- Submit Button:** Submit Application

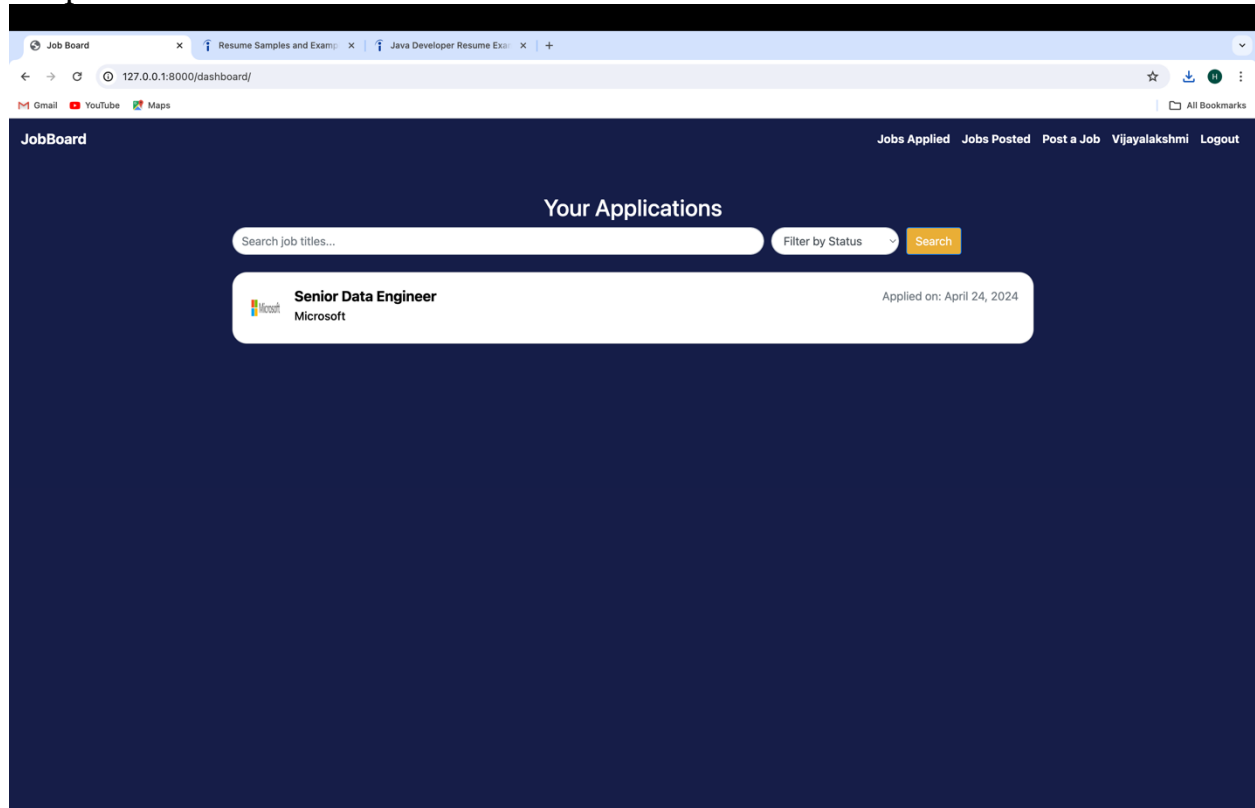
Post a job:

The screenshot displays a web browser window with multiple tabs. The active tab is titled 'Job Board' and shows a 'Post Job' form. The browser's address bar indicates the URL '127.0.0.1:8000/post-job/'. The form is set against a dark blue background and includes the following fields:

- Company name
- Logo (with a 'Choose File' button and 'No file chosen' text)
- Job title
- Job description (a large text area)
- Contract type (a dropdown menu currently set to 'Full-Time')
- Location
- Working language
- Job category
- Job link
- Contact email
- Company size
- Industry
- Minimum salary
- Maximum salary

The macOS dock at the bottom of the screen contains icons for various applications, including Safari, Finder, Mail, Messages, Photos, Calendar, Clock, Notes, Reminders, Music, TV, App Store, and others. A notification for the App Store is visible near the dock.

Output 4



Job Description:

Select project to change | D | x HARSHITHASARIPALLI@1560 x Job Board x Job Board x Salesforce: The Customer C x +

127.0.0.1:8000

Gmail YouTube Maps All Bookmarks

test

Channel

Full-Time test test

test

rereup

Full-Time test Consultant

MTS Engineer1

Salesforce

Full-Time Bay Area, California Full Time

Job Title: Member of Technical Staff (MTS) Engineer

Location: San Francisco Bay Area

About Salesforce:

Salesforce is the global leader in customer relationship management (CRM) software. Our cloud-based CRM platform helps companies connect with customers, partners, and employees in entirely new ways.

Job Description:

As an MTS Engineer at Salesforce, you will be part of a dynamic team responsible for designing, developing, and maintaining cutting-edge software solutions. You will collaborate with cross-functional teams to deliver high-quality products that meet customer needs.

Key Responsibilities:

Design, develop, and maintain software applications using Salesforce technologies.

Collaborate with product managers, architects, and other stakeholders to understand requirements and translate them into technical solutions.

Write clean, efficient, and maintainable code following best practices.

Perform code reviews and provide constructive feedback to team members.

Troubleshoot and debug issues, ensuring high performance and reliability of the software.

Stay updated with the latest technologies and trends in software development.

Qualifications:

Bachelor's degree in Computer Science, Engineering, or related field.

Strong programming skills in languages such as Java, JavaScript, Apex, or similar.

Experience with Salesforce platform and technologies (Salesforce CRM, Apex, Visualforce, Lightning Components) is a plus.

Solid understanding of object-oriented programming, data structures, and algorithms.

Excellent problem-solving and analytical skills.

Strong communication and collaboration skills.

Benefits:

Competitive salary and benefits package.

Flexible work environment.

Opportunities for career growth and development.

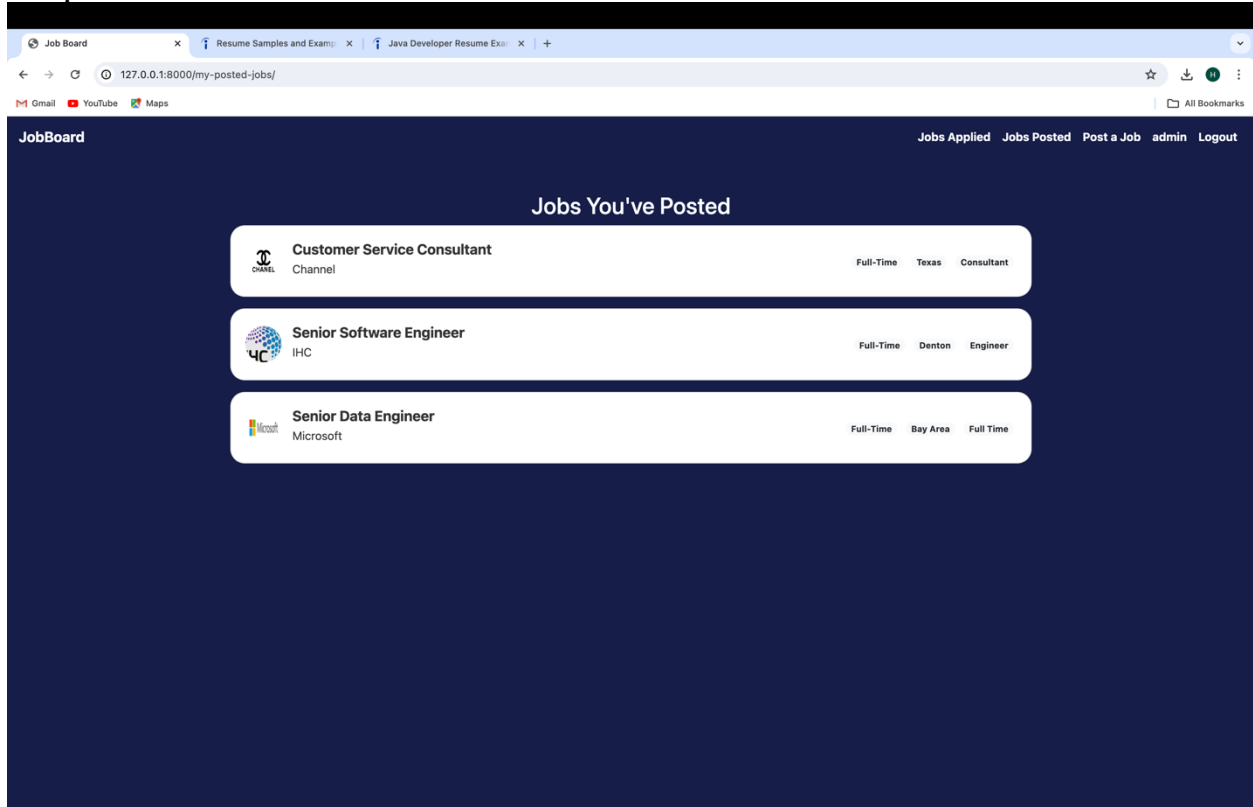
Work with a diverse and inclusive team.

Link: More Info

Email: hrecruting@salesforce.com

Pay: 150000.00 - 200000.00 per year

Apply



Job Board

127.0.0.1:8000/post-job/

Gmail YouTube Maps

All Bookmarks

Logo

Choose Fileamazon.png

Job title

Software Developer Engineer(SDE1)

Job description

Strong computer science fundamentals in data structures, algorithms, and object-oriented design.
Experience with web technologies such as HTML, CSS, JavaScript, and React.
Excellent problem-solving and analytical skills.
Ability to work effectively in a team environment.
Preferred Qualifications:

Contract type

Full-Time

Location

Seattle

Working language

Java

Job category

Full Time

Job link

https://hiring.amazon.com/

Contact email

hr@amazon.com

Company size





100000

Industry

Job Board

Jobs Applied Jobs Posted Post a Job admin Logout

Jobs You've Posted

-  **Customer Service Consultant**
Chanel Full-Time Texas Consultant
-  **Senior Software Engineer**
IHC Full-Time Denton Engineer
-  **Senior Data Engineer**
Microsoft Full-Time Bay Area Full Time
-  **Software Developer Engineer(SDE1)**
Amazon Full-Time Seattle Full Time

Output 9

The screenshot displays a web browser window with the address bar showing '127.0.0.1:8000/jobs/10/applications/'. The page title is 'Applications for "Senior Data Engineer"'. It features two application cards for Vijayalakshmi Nambaru and Hari. Each card includes contact information, a cover letter, application date, status, and a 'View Resume' button. Below the status is an 'Update Status' dropdown menu with an 'Update' button. The first card's dropdown is set to 'Interview', and the second's is set to 'Applied'.

Applicant Name	Email	Phone Number	Cover Letter	Applied On	Status	Update Status
Vijayalakshmi Nambaru	hs759@njit.edu	9085581231	I am Full Stack developer with three years experience in the Gaming domain and I am seeking for opportunities in Data Science field	April 24, 2024	Applied	Interview
Hari	hs759@njit.edu	8624487392	None	April 19, 2024	Applied	Applied

Conclusion

The JOB Board is a comprehensive platform that efficiently connects job seekers with potential employers. Through its rich feature set and intuitive interface, it simplifies the recruitment process, making it easier for users to manage job listings and applications. The system's modular design, built on Django, ensures flexibility and scalability, making it suitable for a wide range of recruitment needs.