



# Software Architecture Structure

## Final Report (Job Seeking Platform)

**Group:** SE2

**Team members:**

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# Job Seeking Platform Overview

This document outlines the core functionality of the Job Seeking platform.

## Roles

The platform supports two primary user roles:

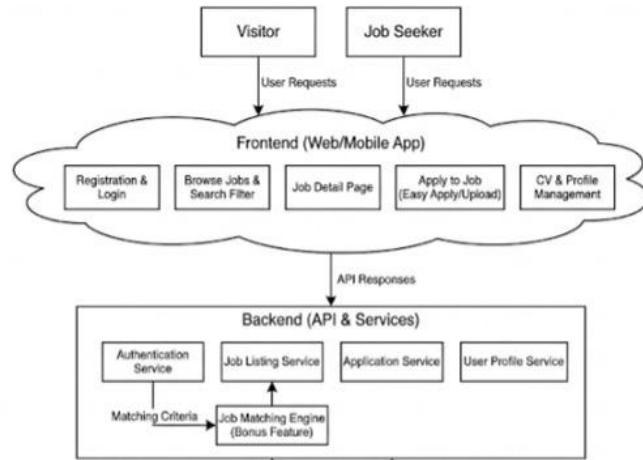
1. **Visitor:** This actor is not logged in. Visitors are able to perform actions like browsing jobs and using the search and filter functionality to explore available listings
2. **Job Seeker:** This actor is logged in. Job Seekers can access all features, including managing their profile and CV, saving jobs, viewing application status, and applying to positions

## Core Features

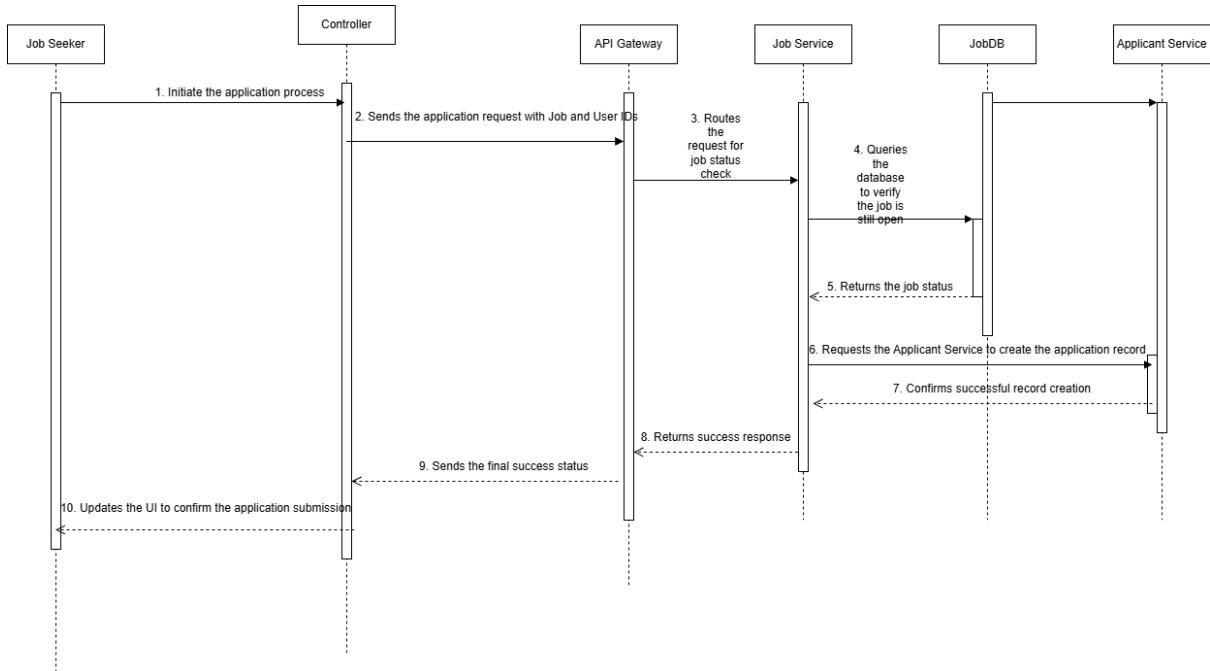
The platform's core functionalities are:

1. **Registration & Login:** Secure process for users to create accounts and access personalized features
2. **Browse Jobs:** Users can easily view job listings, displaying key information such as job title, company logo, location, salary, remote/onsite badge, and posted date
3. **Search & Filter:** Allowing Job Seekers to narrow down listings using criteria like keyword, job type, salary range, experience level, and company
4. **Job Detail Page:** A page for each listing, featuring the full description, requirements, benefits, company overview, and the essential "Easy Apply" button
5. **Apply to Job:** Offers two application methods: Easy Apply using a stored CV, or upload new CV with an optional cover letter, followed by an "Application Sent" confirmation
6. **CV & Profile Management:** Job Seekers can upload, preview, replace, and delete one primary CV (PDF). They can also manage their profile, including name, photo, location, skills (tag input), work experience (simple list), and education. A table showing applied jobs + date applied + status (Applied / Viewed) is also available

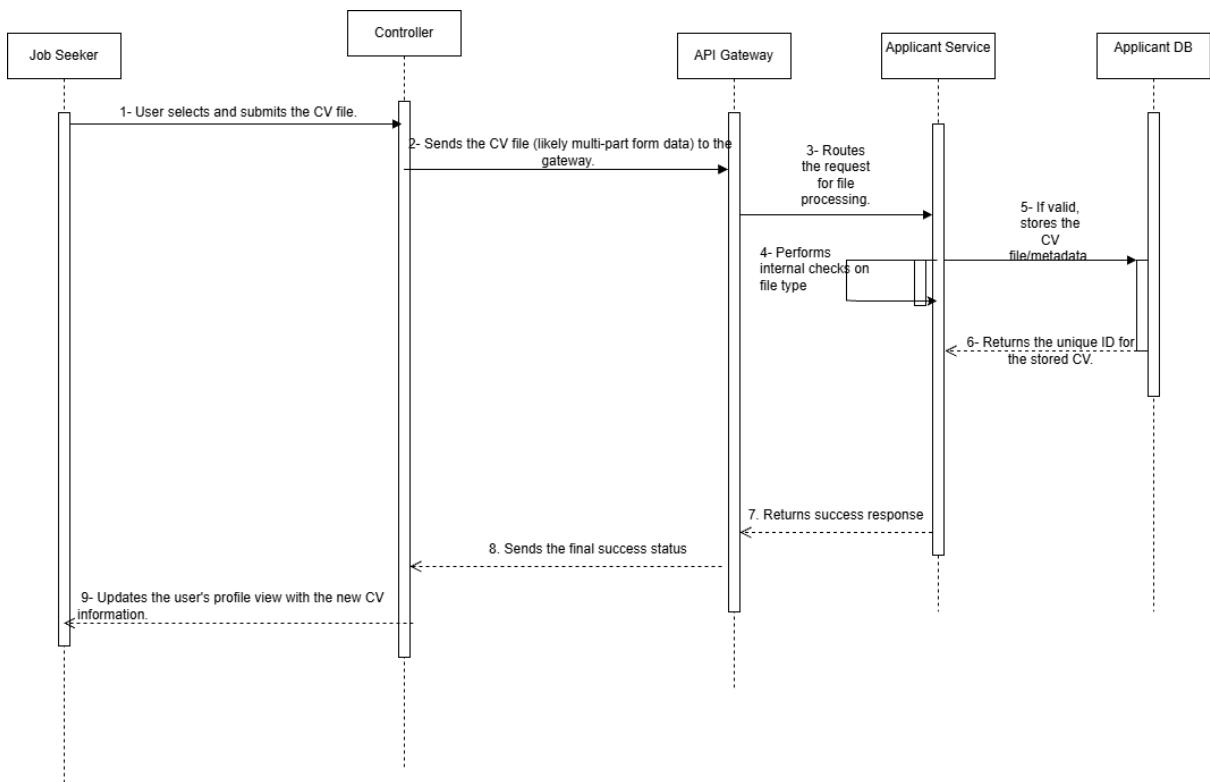
# Architecture Overview Diagram



## Sequence Diagram 1



## Sequence Diagram 2



# Database Schema

Reviews

review_id	int pk
job_id	int
reviewer_id	int
rating	int
comment	string

Saved\_Jobs

save_id	int pk
job_id	int
seeker_id	int

Users

user_id	int pk
username	string
email	string
password_hash	string
role	string
cv_file	string

Jobs

job_id	int pk
employer_id	int
title	string
description	string
location	string
salary_range	string

JobBoard



## Welcome Back

Sign in to continue to your account

Email Address

Password

OR

 Sign in with Google

Remember me [Forgot password?](#)

**Sign In**

Don't have an account? [Register](#)

JobBoard

 Browse Jobs  Saved Jobs  CV Manager

 John Doe 

### Find Your Dream Job

Discover opportunities from companies around the world

**Search Jobs**

3 Jobs Found

Browse through our latest opportunities 

 Senior Frontend Developer  
TechCorp   
Looking for an experienced frontend developer to join our team.  
**Senior Level**  
 Cairo  Full-time  \$ \$120k - \$160k  1 week ago

 Senior Frontend Developer  
TechCorp   
Looking for an experienced frontend developer to join our team.  
**Entry Level**  
 San Francisco, CA  Freelance  \$ \$120k - \$160k  3 days ago

**John Doe**

Senior Frontend Developer  
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**About**

Passionate frontend developer with 5+ years of experience building modern web applications. Specialized in React, TypeScript, and creating delightful user experiences.

**Experience**

**Senior Frontend Developer** (TechCorp)  
2021 - Present  
Leading frontend development for enterprise web applications.

**Frontend Developer** (StartupXYZ)  
2019 - 2021  
Built responsive web applications using React and TypeScript.

**Skills**

React, TypeScript, JavaScript, Tailwind CSS, Node.js, Git, REST APIs, Responsive Design, Testing, Agile

**Profile Strength**

Completeness **100%**

- Profile photo added
- Bio completed

**JobBoard**

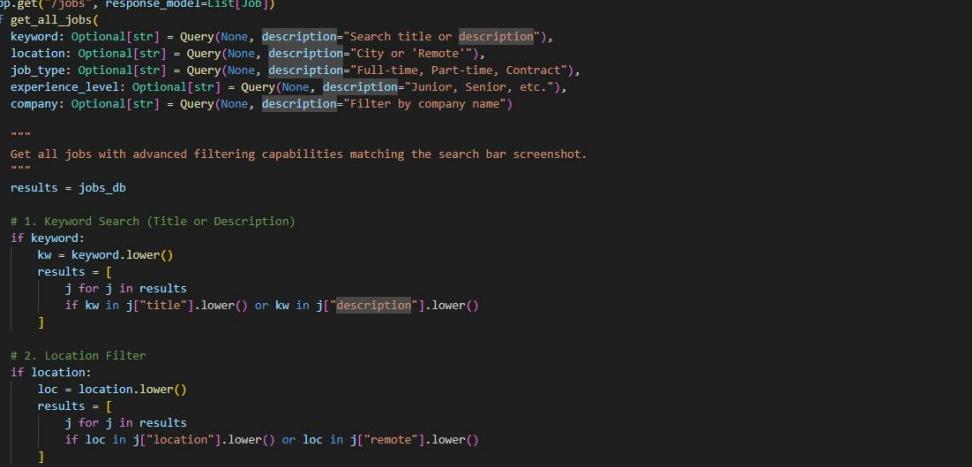
Browse Jobs | Saved Jobs | CV Manager | John Doe

## CV Management

Manage your resumes and CVs for job applications

+ Upload New CV

CV NAME	LAST MODIFIED	SIZE	STATUS	ACTIONS
Senior Developer Resume ★ Primary	2 days ago	245 KB	Active	<span>Star</span> <span>Eye</span> <span>Download</span> <span>Check</span> <span>Trash</span>
Full Stack Portfolio CV	1 week ago	312 KB	Active	<span>Star</span> <span>Eye</span> <span>Download</span> <span>Check</span> <span>Trash</span>



```
File Edit Selection View Go Run ... ← → Search JobServiceAPI.py X

C:\Uni>Year 3>Semester 1>Software Architecture Structure>Job Seeking Platform>JobServiceAPI.py > ...

137
138 @app.get("/jobs", response_model=List[Job])
139 def get_all_jobs(
140     keyword: Optional[str] = Query(None, description="Search title or description"),
141     location: Optional[str] = Query(None, description="City or 'Remote'"),
142     job_type: Optional[str] = Query(None, description="Full-time, Part-time, Contract"),
143     experience_level: Optional[str] = Query(None, description="Junior, Senior, etc."),
144     company: Optional[str] = Query(None, description="Filter by company name")
145 ):
146     """
147     Get all jobs with advanced filtering capabilities matching the search bar screenshot.
148     """
149     results = jobs_db
150
151     # 1. Keyword Search (Title or Description)
152     if keyword:
153         kw = keyword.lower()
154         results = [
155             j for j in results
156             if kw in j["title"].lower() or kw in j["description"].lower()
157         ]
158
159     # 2. Location Filter
160     if location:
161         loc = location.lower()
162         results = [
163             j for j in results
164             if loc in j["location"].lower() or loc in j["remote"].lower()
165         ]
166
167     # 3. Job Type Filter
168     if job_type:
169         results = [j for j in results if j["job_type"].lower() == job_type.lower()]
170

Activate Windows
Go to Settings to activate Windows.
```