Project ID: 94

Project Title

Ai Apply: One-Click Job Application Engine

Client Name

Kushagra Bhatia And Alevtina Fokina - Co-Founders Of Jobgen. Ai

Group Capacity

3 groups

Project Background

Tired of filling out job applications manually? So is the world.

At JobGen.AI, we're reinventing the job search experience — and this project gives students the opportunity to be part of that breakthrough.

The core system already exists:

Our Chrome Extension detects job ads (e.g. on LinkedIn or Seek), sends them to our backend, and receives a tailored resume generated by our AI engine.

Now, we want to take it further by building the next frontier of automation. This project will complete the loop by enabling the extension to:

- 1. Auto-fill job application forms
- 2. Upload the AI-generated resume and cover letter
- 3. Simulate clicking "Apply" completing the entire process in a single flow

The goal is to empower users with a smart, assistive agent that searches, tailors, and applies — fast, accurately, and without the grunt work.

Project Scope

This project aims to expand the existing Chrome Extension to fully automate job applications after the resume is generated. When user click on the apply job, Chrome Extension detect job ads as they are listed on LinkedIn, Seek, and sends the job data to JobGen.AI & receives a resume (already built)

Students will:

- Integrate the flow: Search (already built) -> Tailor (already built) -> Apply (to be built)
 - Receive the tailored resume in response
- Identify job application forms and classify field types (text, dropdown, Likert scale, etc.)

- Map and auto-fill form fields using user profile data
- Upload the tailored resume and simulate form submission

This is where AI meets browser automation — and you'll help bring it to life.

Project Requirements

Front-end (Chrome Extension):

- Detect job listings and extract job data, send job data to the backend (already built)
 - Receive a tailored resume, cover letter
 - Detect and classify input fields in application forms
 - Auto-fill each field with mapped user data
 - Upload AI-generated resume and cover letter
 - Simulate the "Apply" action on the platform

Back-end (Already available via JobGen.AI engine):

- Accept job data + user profile
- Generate a tailored resume using OpenAI
- Return resume + optional field-mapped recommendations for autofill

Required Skills

- JavaScript (DOM parsing, Chrome Extension APIs)
- Java + RESTful services
- JSON, API design, and web automation
- Basic NLP/AI understanding (using OpenAI or other LLM APIs)
- Chrome dev tools, browser debugging

Expected Outcomes

- Enhanced Chrome Extension with end-to-end form autofill
- Clean, documented codebase (GitHub)
- Setup instructions, architecture diagrams, and API documentation
- Final report detailing technical design, AI use cases, and future roadmap

Disciplines

Software Development; Web Application Development; Artificial Intelligence (Machine/Deep Learning, NLP); Generative AI (GenAI); Cloud Computing; Internet of Things (IoTs); Human Computer Interaction (HCI);

Other Resources

- Access to the existing Chrome Extension codebase
- Sample resumes, job descriptions, and job application forms
- Mock API endpoints or OpenAI API keys for testing
- Weekly mentoring with JobGen.AI founders