GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

DWARKA, SECTOR - 16 C, NEW DELHI - 110078

UNIVERSITY SCHOOL OF INFORMATION, COMMUNICATION & TECHNOLOGY

MASTER OF COMPUTER APPLICATIONS (SOFTWARE ENGINEERING)

SYNOPSIS

IT 762 - DISSERTATION (MAJOR PROJECT)

ELEVATEX AI – SMART AI FOR SUCCESS

MENTOR	MENTEE

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1 Introduction

In today's competitive job landscape, students often struggle with interview preparation, resume building, and managing multiple job applications efficiently. To address these challenges, I propose a platform that utilizes AI to provide essential career-related services. This platform will include AI-powered mock interviews, insights into industry trends, an AI-driven resume builder, and an AI-based cover letter. Instead of developing custom AI models, I plan to integrate the Google Gemini API, which will power these features through advanced AI prompting methods, ensuring high-quality results while simplifying development.

2 Proposed Work

2.1 The platform will consist of the following core functionalities:

1. **AI Mock Interview**: Students can participate in mock interviews with an AI that evaluates their responses and provides feedback.
2. **AI Cover Email Generator** – Generates personalized cover letters tailored to specific job.
3. **Industry Insights**: AI will gather and present job market trends, in-demand skills, and updates from various industries.
4. **Application Manager**: Helps students track the status of their applications, manage contacts, and store relevant job links.
5. **AI Resume Builder**: The AI will generate optimized resumes based on user input, focusing on improving ATS compatibility.

2.2 Technology Stack:

- **Frontend:** React.js, Next.js, TailwindCSS, ShadcnUI
- **Backend:** JavaScript, Next.js, PrismaORL
- **Database:** NeonDB, PostgreSQL
- **Authentication:** Clerk
- **AI Integration:** Google Gemini

3 Timeline

Phase	Task	Duration
1	Requirement Gathering & Research	2 Weeks
2	UI/UX Design & Prototyping	4 Weeks
3	Backend & API Development	5 Weeks
4	Frontend Development & Integration	5 Weeks
5	Testing & Debugging	3 Weeks
6	Deployment & Final Review	2 Weeks
7	Documentation & Report Writing	3 Weeks

Total Estimated Time: **24 Weeks**

4 Conclusion

This project aims to offer students an AI-driven career platform that simplifies job preparation and application management. By leveraging Google Gemini API for AI functionality, we ensure efficient development while creating a seamless user experience. The platform will empower students to refine their job-searching skills, facilitating a smoother and more organized transition from academia to the professional world.

5 References

[1] NextJS documentation: https://nextjs.org/docs
[2] Google Gemini API documentation: https://ai.google.dev/gemini-api/docs
[3] Prisma documentation: https://www.prisma.io/docs
[4] Tailwind CSS documentation: https://tailwindcss.com/docs/
[5] ShadCN UI documentation: https://ui.shadcn.com/docs
[6] Neon documentation: https://neon.tech/docs/introduction
[7] Clerk documentation: https://clerk.com/docs
[8] PostgreSQL documentation: https://www.postgresql.org/docs/
[9] Vercel documentation: https://vercel.com/docs