



Project Deliverable Phase 2

Team – 3

Powered Resume Builder

Submitted To:

Prof. Joumana Dargham

Submitted By:

Darshansinh Dilipsinh Devda (40261713)

Pranaykumar R. Chauhan (40266722)

Burhanuddin Savliwala (40273764)

Amal Gupta (40293339)

Chadi Abboud (40189413)

Solution Proposal for Powered Resume Builder

1. Executive Summary

The Powered Resume Builder is an innovative AI-driven solution designed to assist job seekers in creating personalized, ATS-optimized resumes. The platform will provide users with a streamlined, user-friendly experience, helping them tailor their resumes to specific job descriptions, improve the quality of their applications, and increase their chances of being shortlisted. By leveraging AI, real-time feedback, and cross-platform accessibility, the Powered Resume Builder will revolutionize how job seekers create their resumes, ensuring that they meet industry standards and are optimized for Applicant Tracking Systems (ATS).

2. Objectives

The objectives of the Powered Resume Builder project are:

- To build an AI-powered platform that helps users create personalized resumes based on job descriptions.
- To provide real-time feedback and suggestions to optimize resumes for ATS compatibility.
- To ensure the platform works seamlessly across multiple devices, providing an optimal user experience on both mobile and desktop platforms.
- To allow for template customization, enabling users to personalize the design of their resumes.
- To offer an analytics dashboard, providing users with insights into how their resumes perform and suggestions for improvement.

3. Solution Overview

The Powered Resume Builder will consist of the following key features:

- **AI-Powered Personalization:** The platform will analyze job descriptions and automatically tailor the content of the resume to match the skills, qualifications, and experience required by the employer.

- **Real-Time Feedback:** Users will receive suggestions on how to improve their resume, including keyword optimization and formatting recommendations to meet ATS standards.
- **Cross-Platform Accessibility:** The platform will be accessible from both web and mobile devices, providing users with the flexibility to create and update their resumes anytime, anywhere.
- **Template Customization:** Users can choose from a variety of templates and customize them to their liking, ensuring the resume reflects their personal style while maintaining professional standards.
- **Analytics Dashboard:** The platform will include a dashboard that allows users to track the performance of their resumes, including metrics such as keyword relevance and overall ATS score.

4. Solution Approach

To ensure the success of the Powered Resume Builder, the following phased approach will be taken:

Phase 1: Research & Planning

- Conduct market research to identify target users, gather feedback, and understand their pain points in the resume-building process.
- Define functional requirements, technical specifications, and design the user interface (UI) and user experience (UX).

Phase 2: AI and Backend Development

- Develop the AI model that will analyze job descriptions and suggest resume modifications based on industry best practices.
- Build the backend infrastructure, including the database to store resumes, templates, and user preferences.

Phase 3: Frontend Development

- Create the frontend of the platform using modern web technologies such as React (for web) and React Native (for mobile applications).

- Develop responsive, intuitive UI/UX that ensures the platform is easy to navigate across devices.

Phase 4: Integration & Real-Time Feedback System

- Integrate the AI-powered resume feedback system that provides users with actionable insights as they build their resumes.
- Implement the resume optimization features, such as keyword tracking and ATS score prediction.

Phase 5: Testing and Quality Assurance

- Conduct extensive testing, including functional testing, usability testing, and performance testing to ensure that the platform is robust and performs well under different scenarios.

Phase 6: Launch & Continuous Improvement

- Launch the platform in a phased manner, gathering user feedback for ongoing improvements.
- Continuously enhance the AI algorithms and add features based on user demand and market trends.

5. Technology Stack

To build the Powered Resume Builder, the following technologies will be used:

- **Frontend:**
 - React for web development
 - React Native for mobile application development
- **Backend:**
 - Node.js with Express for handling server-side logic
 - PostgreSQL or MongoDB for database management
- **AI and Machine Learning:**

- Python (TensorFlow, PyTorch) for developing AI models that suggest resume optimizations
- **Cloud Infrastructure:**
 - AWS for hosting, data storage, and computing needs
- **Testing:**
 - Jest and Selenium for unit and UI testing

6. Budget Estimate

Development Costs:

- UI/UX Design: \$10,000 - \$15,000
- Frontend Development: \$30,000 - \$40,000
- Backend Development: \$40,000 - \$50,000
- AI/ML Development: \$20,000 - \$30,000
- Testing and QA: \$15,000 - \$20,000
- Market Research and User Studies: \$5,000 - \$8,000

Operational Costs (Annual):

- Cloud Hosting and Infrastructure: \$12,000 - \$18,000
- AI/ML Computing Power: \$15,000 - \$20,000
- Customer Support and Marketing: \$15,000 - \$20,000
- Database Management: \$8,000 - \$12,000

7. Risk Assessment and Mitigation

Potential Risks:

- **Technical Risks:** Difficulty in AI model training or integration challenges.

- Mitigation: Collaborate with AI specialists and perform regular code reviews.
- **Operational Risks:** Users not fully adopting the platform or reluctance to trust AI suggestions.
 - Mitigation: Implement user education, onboarding, and clear transparency about AI suggestions.
- **Financial Risks:** Budget overruns due to unforeseen development or operational costs.
 - Mitigation: Regular budget monitoring and using cost-effective cloud solutions.

8. Conclusion

The Powered Resume Builder is designed to empower job seekers by providing them with an AI-driven, ATS-optimized resume-building tool. With its personalized recommendations, ease of use, and multi-platform accessibility, the platform will address the challenges of resume creation and improve job seekers' chances of landing their desired roles. By following a structured approach, leveraging the latest technologies, and focusing on continuous improvement, the Powered Resume Builder is poised to make a significant impact on the resume-building industry.