Functional Requirements Document

Job Beacon Maine

Ellis Fitzgerald Jered Kalombo Joel Kalala Kadin Ilott October 15th, 2025

Overview

Job Beacon Maine is an application that connects students and recent graduates in Maine with employers and job opportunities that align with their skills and interests. It bridges the gap between students seeking relevant job experience and employers searching for qualified candidates.

Many students struggle to find available jobs due to fragmented information, limited networking, and a lack of tailored recommendations. This system will serve as a centralized hub to simplify the job search, track applications, and improve employment through skill recommendations and alumni connections

Functional Requirements

Job Matching Based on Skills and Interests

Problem:

Students and graduates often find it challenging to identify job opportunities that match their qualifications and interests.

Solution:

The system will enable students to create profiles that include their education, skills, and job preferences. Employers will then post openings with details such as required skills and experience. The system will match students to available positions using these data points.

Features:

- Match jobs to students based on their skills and qualifications
- Allows students to update and refine their job preferences
- Notify users when new matches appear

Application Process

Problem:

Applicants have limited visibility into the status of their job applications.

Solution:

The application must allow students to track the progress of each application and receive updates directly from employers.

Features:

- Employers can change application status (eg, received, under review, interview scheduled, rejected).
- Students receive automated notifications about status changes
- Employers can view every applicant for each job posted

Skills Analysis and Recommendation System

Problem:

Many students know the types of jobs they want, but don't fully understand which skills or qualifications they're actually missing to get them.

Solution:

The system will help students identify their weaknesses before they apply and show what they need to learn to improve to meet job requirements.

Features:

- Compare a student's profile (education, courses, skills) with job requirements from real postings.
- Highlight missing or weak skills needed for desired roles, and suggest courses or training programs to obtain the skills required.
- Show a "Skill Readiness Score" or progress tracker to help students monitor their growth over time.

This feature focuses on building competency and qualifications; it's about what you know and what you can do, not how you talk about it.

Interview Preparation Resources

Problem:

Even if students have the right skills, many still struggle to present them confidently in interviews due to a lack of preparation or experience.

Solution:

This feature focuses on helping student communicate and demonstrate their skills effectively during the interview process.

Feature:

- Provide job-specific interview questions and advice based on a student's skills.
- Allow students to save and review past practice sessions.
- Give tips on resumes, portfolios, and how to discuss skill gaps confidently.
- Offer video-based mock interview tools with AI or peer feedback.

This feature focuses on presentation and communication. It's about how you show what you know, not just gaining the knowledge.

Alumni Networking and Referral System

Problem:

Students often miss opportunities because they lack professional connections or mentorship.

Solution:

The system will allow students to connect with alumni working in relevant industries or companies to seek guidance or referrals.

Features:

- Alumni can create verified profiles linked to their institutions.
- Students can request mentorship or referrals
- Display mutual connections based on school, major, or industry.

Non-Functional Requirements

Speed:

- Users should experience minimal delay when searching or applying for jobs
- Search results should appear in under 2 seconds for typical queries

Scalability:

- The system must support a growing user base of students, employers, and alumni without performance degradation.
- The database should allow easy addition of new features (e.g., internships).

Usability:

- The interface must be intuitive, mobile-friendly, and accessible.
- Straightforward navigation for all users

Security:

- Encrypt sensitive data (passwords, resumes, contact information)
- Employers and students should only access information relevant to their roles

Reliability:

- The system must handle failed searches or form submissions gracefully (with clear error messages).
- The system must have a robust database that prevents redundant or incorrect results.

Conclusion

Job Beacon Maine simplifies the job search and application process for students and employers in Maine. By integrating job matching, tracking, skills, analysis, and networking, it provides a complete employment platform built for career growth and opportunity.