



Army Reserve Pacific Talent Management Marketplace

Mahie Crabbe, Christine Nakano, Kristine Rivera, Taryn Takebayashi

ICS 496, Fall 2023

Information and Computer Sciences Department - University of Hawai'i at Mānoa

Sponsor: LTC Mark Lee
Army Reserve



Introduction / Problem:

The Army Reserve requires a **centralized talent marketplace** to efficiently advertise **critical job vacancies** to registered talents.

Talents need to submit their resumes in a **standardized format** and managers need to be able to quickly identify best candidates by their **skills** and **experiences**.

Solution:



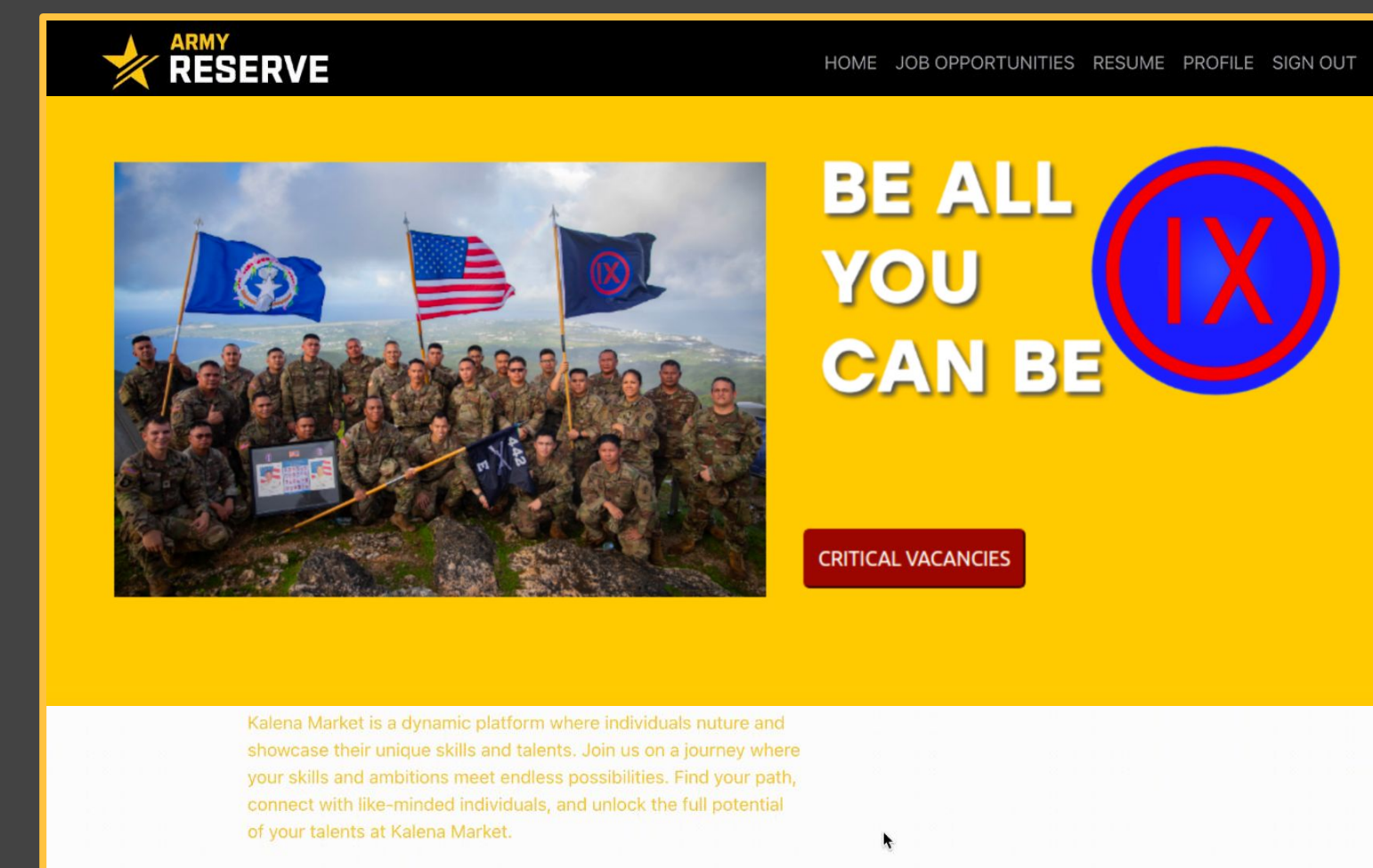
- A web application for talent management in the military, featuring secure login, role-based access, databases for users, job vacancies, and resumes. It allows **users** to manage profiles, jobs, and documents; **managers** to handle job postings and applicant reviews; and **admins** to oversee user and job data management.
- Tech Stack:** React with JWT Authentication, Axios, Node.js Express, MySQL, Flask, Bootstrap, HTML, CSS

Methodology / Process:

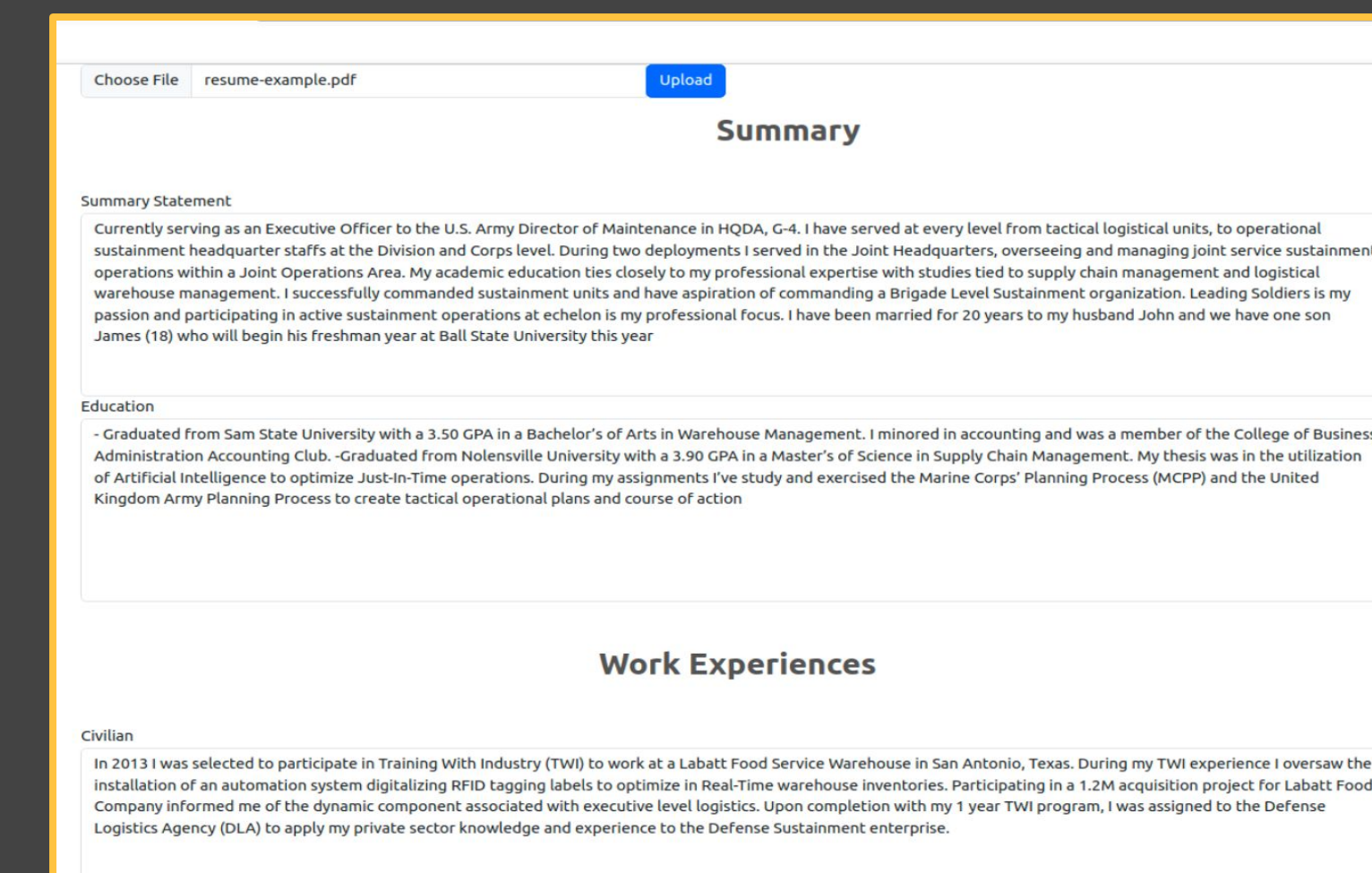
Agile software development:

- Requirement Gathering and Analysis: understanding the needs and expectations of the client
- Design: create a mockup
- Development: actual coding and development work, incrementally using GitHub branches
- Delivery: present updates at client meetings
- Check for bugs and defects after every update.
 - Reported defects via discord and perform fixes when possible
 - Gather feedback from client
- Documentation: Includes creating user guide, software architecture and code documentation

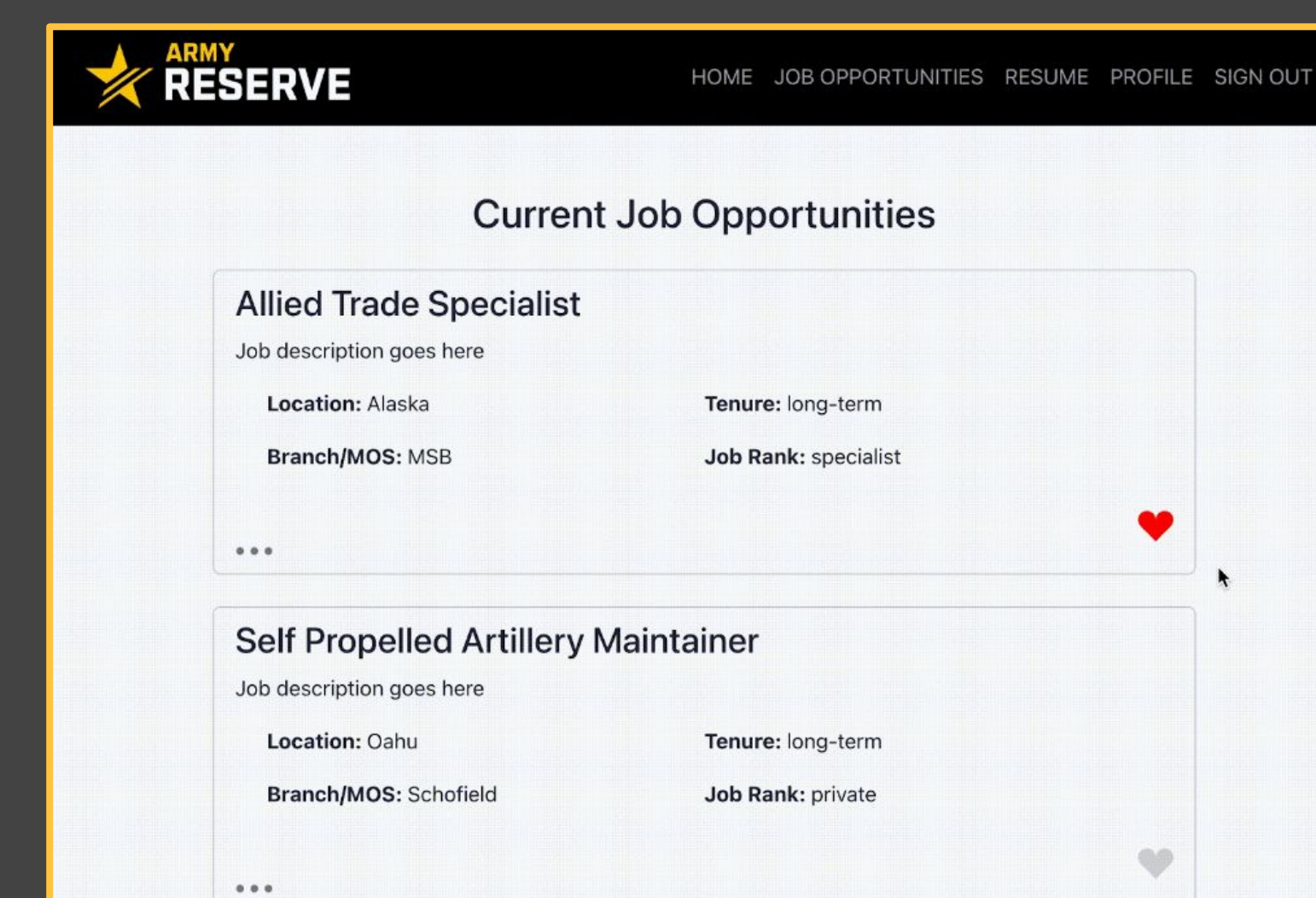
Images:



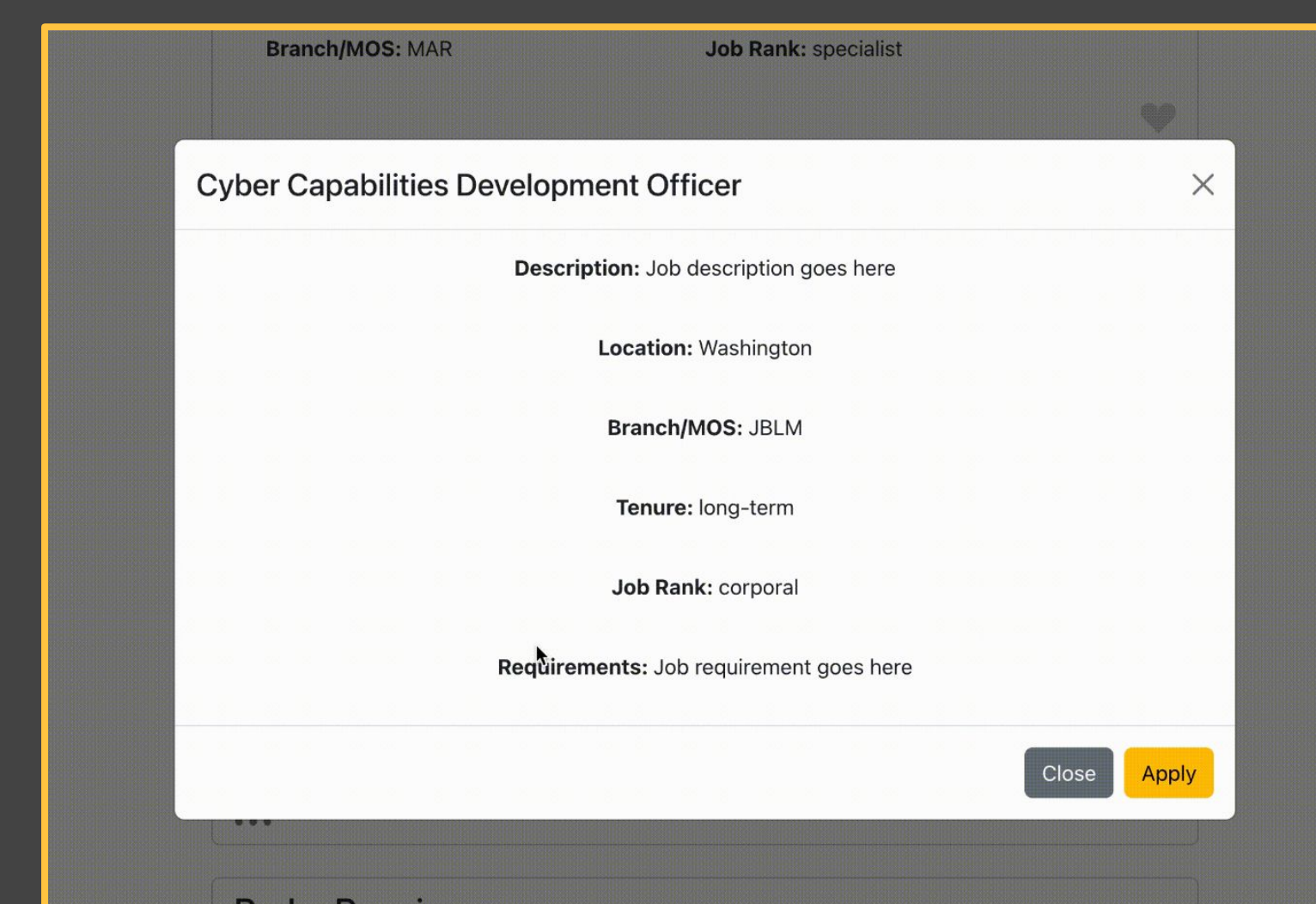
Homepage



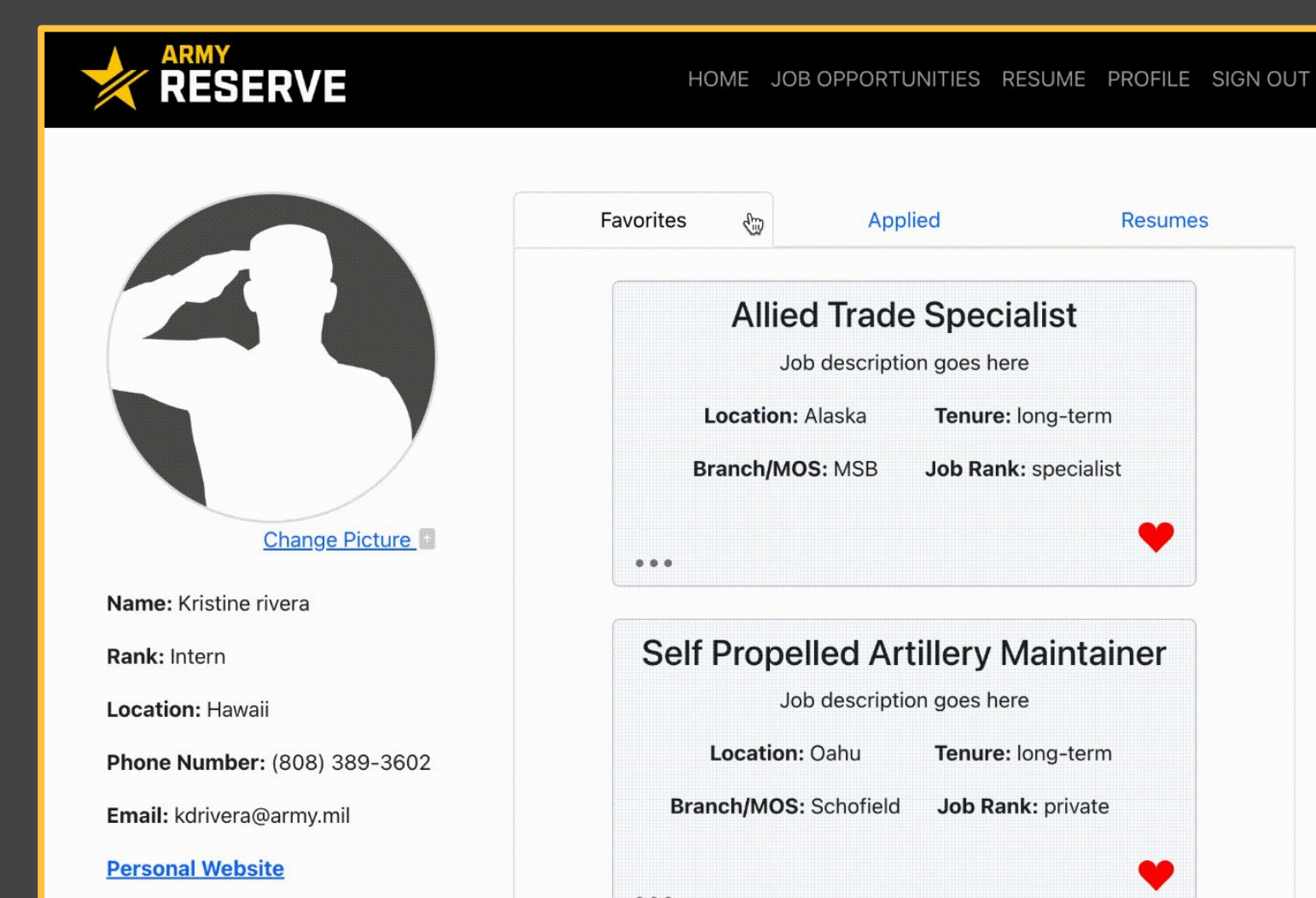
PDF Scrapper



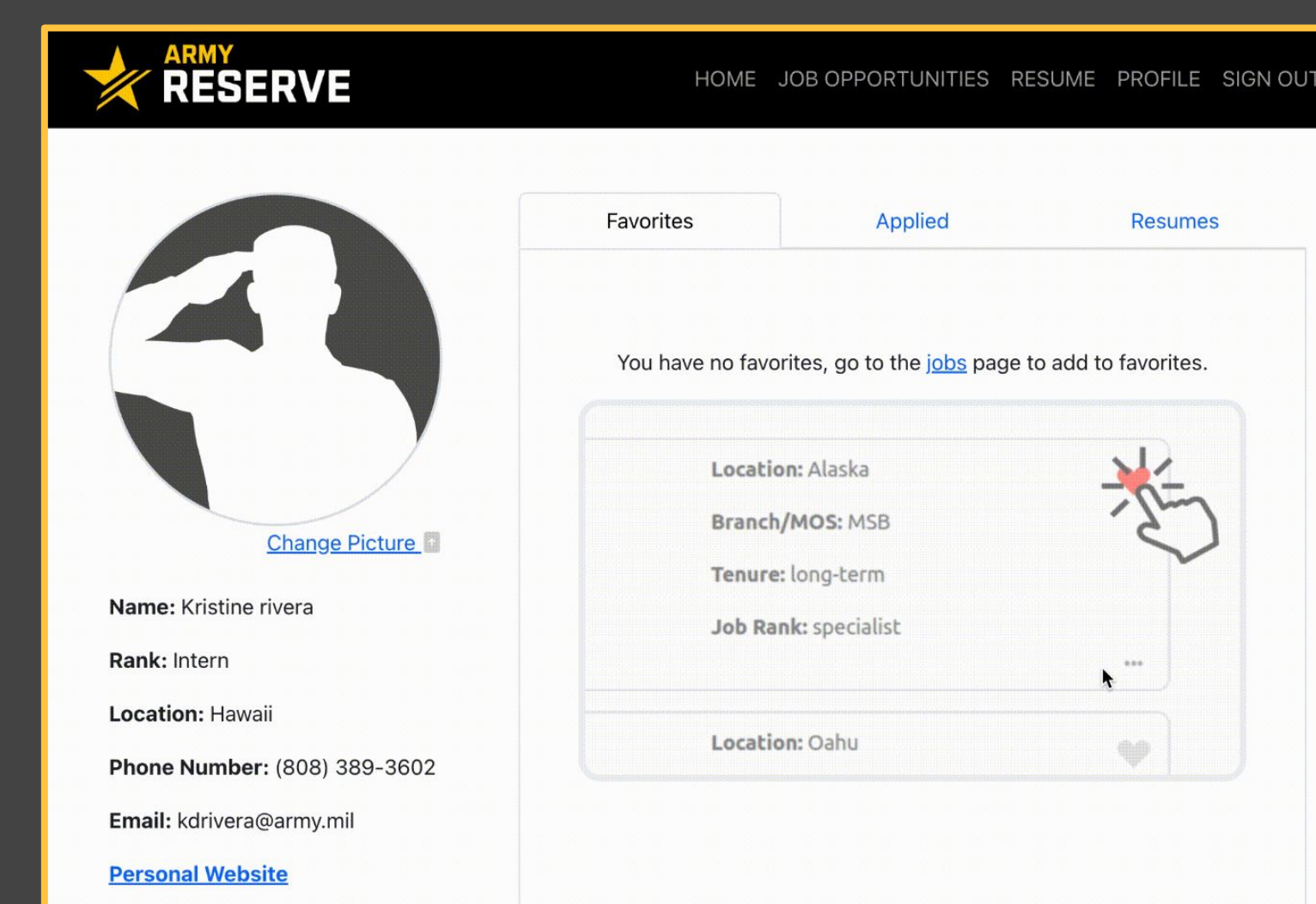
Job Opportunities List



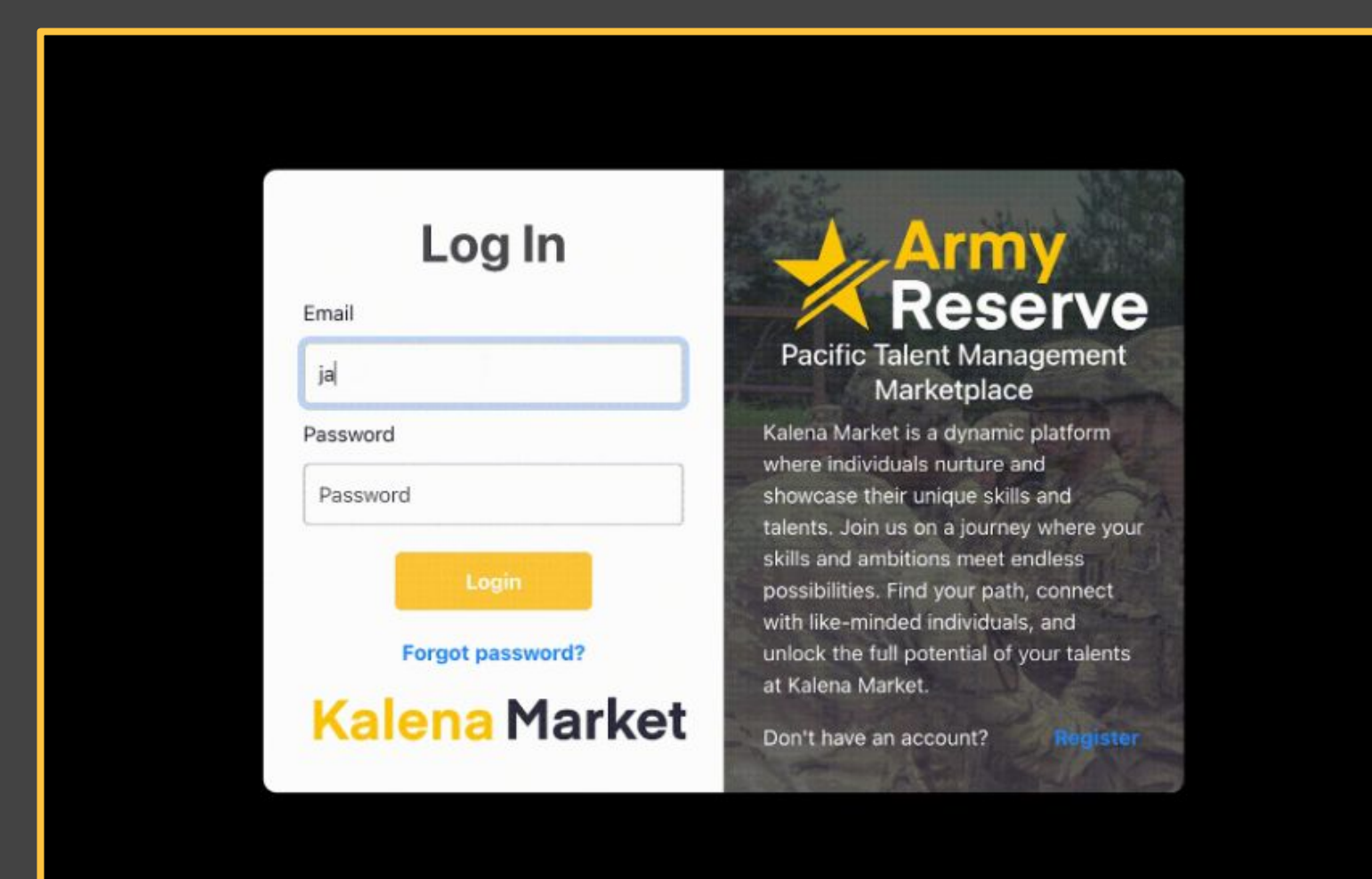
Job Opportunity Details



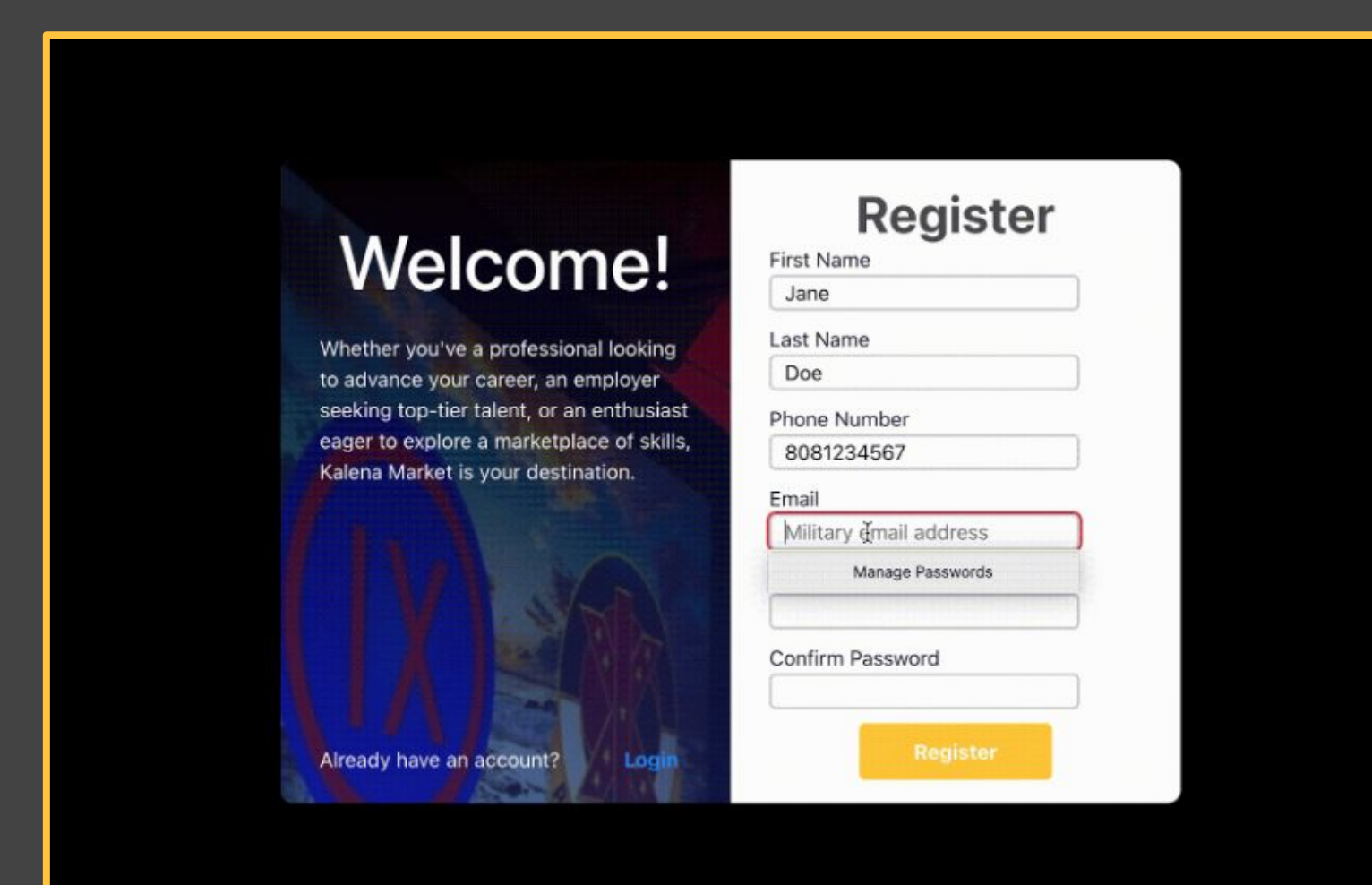
Profile Page



Like Button



Log-in



Register

Accomplishments:

- Database & User Authentication
- Home Page
- User Profile Page
- Jobs Opportunities Page
- Feature: PDF Scraper using standardized PDF (Talent Profile)
- Feature: Like Button

Challenges / Issues:

- Learn multiple technologies to execute this project, including setting up a virtual machine (VMWare) for standardized work environment.
- Configuring a tech stack suitable for client and software team in the allotted project time frame.
- Coming to a consensus on what we could implement within the time frame we had.
 - Created mockups and performed demos for our client to confirm the product in-progress met their expectations.

Learnings:

- Adaptability to (clients) various technologies and constraints.
- Communication
- Better to rely on a CSS framework like Bootstrap than just using CSS.
- JWT Authentication
- Setting up a MySQL database, Node.js server, and Flask server (enabling use of Python library, PDFQuery, to scrape PDF files)
- Debug and connect the back-end with the help of Postman, and Curl.

