



# PROJECT PROPOSAL

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## UB JOB PORTAL

**GROUP 2**

CMPS4131 - Software Engineering


University of Belize

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# Team Profile

Name	Strengths and Qualifications	Signature
Josias Manzur	Front-End Design C++ HTML Javascript/JQuery CSS JSON	j.manzur
Jaheim Lozano	Design	J. Lozano
Jahmur Lopez	Front-end, MongoDB Ubuntu Server	glopez
Daniel Majil	Design Database HTML	
Tadeo Bennett	Programming(back/front), Debugging, Design	Tadeo B

## Project Description

Navigating the job market in Belize can be difficult for both University of Belize graduate students and students seeking internships as per their course curriculum. This system should support students in their search for jobs relative to their field and experience and help companies find talented students from UB. Factors which have to be taken into account in building such a system are:

- Students will be able to view jobs made available by companies
- Students may apply for posted jobs and receive feedback about their application status.
- Information about students, including their resumes, is provided to the system and can be viewed by potential employment companies.
- All students may view information regarding any particular job.
- Website will handle documents sent between student and employer.
- Communication between student and employee to ensure a seamless process of recruitment.

## Project Programming

### Database Management

- Relational Database: Tools such as SQL and Postgresql can store user data, company data, job postings etc.
- NoSQL Database: MongoDB can handle unstructured data, such as resume content, depending on the system's needs.

### Data Analysis and Processing

- Data Visualisation: Tools like Matplotlib, Seaborn, or D3.js can help visualize job market trends, skill demand, etc., based on the data collected.

### Communication

- Real-Time Messaging: The system may provide features such as real-time messaging to enable communication between a student and a potential employer.

-Email Notifications: System events such as new job postings, messages, etc. trigger email notifications for students and companies.

### Security

-Authentication and Authorization: Secure authentication and authorization methods will ensure proper database manipulation. Sessions will be utilized as well.

## Typical System Customers

This innovative platform aims to transform the job-seeking experience for the University of Belize graduates by linking them with potential professional opportunities. The system is customized for the specific needs of both firms and graduates, and it provides a simple interface for companies to promote their job offerings with their perks being student-friendly. By automating the hiring procedure, our platform seeks to enable graduates to easily explore and secure job opportunities that match their abilities and aspirations. Through this program, we aim to bridge the gap between talent and opportunity by creating an exciting environment that benefits employers and the bright minds emerging from the University of Belize.

## Problem Diagnosis

### Domain

Many students have graduated from the prestigious University of Belize for many years, but the challenge they face is securing a job after graduation. Companies across Central America advertise job opportunities, but the students' alumni won't have direct access to the job listings because they're posted on the companies' web page or in the newspaper. To allow the students to respond to a job offer directly, another portal would need to be added to the University of Belize called the "UB Job portal." This new portal will not only be an additional feature to the school's website but also aid the student alumni of the University of Belize to have the assurance that after graduation, they'll be able to secure their jobs to continue their careers.

## Issues

Many of our fellow University of Belize graduates encounter a major hurdle in their job search journey. The current scenario leaves job opportunities scattered across various platforms, making it quite a challenge for students to locate and respond to potential openings. Moreover, the absence of a centralized job portal within our university's ecosystem exacerbates this issue, depriving students of direct access to listings tailored to their specific fields and experiences. Additionally, the existing communication channels between students and companies need to be more cohesive, creating a gap in efficient interaction, document exchange, and overall engagement between job seekers and employers.

## Treatment

To tackle these challenges head-on, we're rolling out the UB Job Portal. This centralized platform will be the go-to hub for job listings, simplifying the search process for our graduates. We're putting extra effort into making the portal user-friendly, ensuring that both students and employers can seamlessly navigate through postings, upload resumes, and communicate effortlessly.

## Plan of Work

For the project to be completed successfully, we use our skills and experience of what we know and work together. Because of each member's qualification, the workload is easier, and it puts less stress on completing the task.

We will conduct this project by first gathering all the necessary data and information. Once we acquire all the information we need, we will have to decide what interface we will use regarding the front-end, which will likely take the most time due to the information that will be provided.

We are still discussing the programming language and what front end will be best. For now, we are in the process of gathering the information needed for the project. This project should last at least 4 months. The estimated completion time is May 7, 2024 , considering if everyone will pitch in. Errors will be encountered while doing the project. All we have to do is make sure we identify the errors and fix them. Once we can do that, then we can complete the project.