

JAM Project Proposal
Team Name: JAM
ITWS 2110 Web Systems Development
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Summary

Everyone needs to get a job to make a living and people have to find many opportunities to apply to. Furthermore, there is already a small chance of being hired, especially at big competitive companies. The number of people who are unemployed in the US and are looking for a job is in the millions, meaning there will be a lot of competition for specific jobs, especially since the outbreak of COVID-19. So, the best option is to apply to many different places and to hope you make it in. With applying everywhere, the main problem of organization arises, and it is difficult to manage where you are in each process and the many people you will be meeting and contacting from the company that you would like to work for. It is important to stay organized through the job application process. Most people do not even note any information given to them and are unorganized throughout the entire process. Some people try to stay organized by writing it down, but then it is still difficult to track down specific information and the list can get big and unmanageable very easily. When applying to companies, they already have a system to manage all their applicants, so why not have something for the client to make their lives easier. This is where JAM (Job Application Manager) comes in handy. It helps the applicants keep track of all their job applications for the places they apply to, and allows them to quickly access any sort of information they will need for their specific opportunity. Within the system, it keeps track of dates for specific deadlines and allows the user to record useful information about that specific job application such as contact info, specific names of people, and any other sort of extraneous information that would come in handy when trying to secure the job. The point of JAM is to create a simple solution for the user to keep track of their

applications and their statuses, so we went for a minimalistic look on the front page to reflect this. Our site will also have a filtering system, so they can find their applications that have not been started, are in progress, and are completed or overdue. This would resolve the issue for many people applying for their opportunities since no other company is trying to solve this issue.

Problem/Market/Competitors

There is nothing on the internet that qualifies enough to be a self job application manager. This is a new market and JAM would be the only contender within it as this market is niche and often overlooked by many people, as it cannot be seen until looked closely upon. Something that could be related to our competitor would be other websites that have it so you can bookmark the opportunity and know that you applied there such as LinkedIn, Handshake, Glassdoor, etc. What JAM does is a step-by-step process that follows along your application process. It is a self planner for those who have a hard time keeping track of all their opportunities and information in an organized manner. With using JAM it is able to be used throughout multiple job-applying websites.

Functional Requirements

JAM will have many functional requirements. The minimum system requirements for JAM are pretty basic, such as just having the latest Chrome or Firefox browser, or other browsers that can support the technologies we are using. The main functionality of the website will be to input job application information and have the website store that data. To go along with that, we will also be implementing a date system, where job applications can be organized by the dates they are due. The website will then remind the user of those dates when they start to come up. As well as this, the user would also be able to filter the opportunities based on their current status. It

will also have an account system, with the functionality of the website being different for users without accounts and users with accounts. Users that load the website without an account will be able to interact with the website, however, they will not have their data be saved on the server. The purpose of this is to allow users to try out the website to get a sense of how to use it and what it's like, but to also encourage them to register an account so they get access to features such as full functionality of the web app, where data is stored and saved every time changes are made; security features that help protect the user's data; and easier management of everything as having an account will allow the user to keep all their data in that account.

Non-functional Requirements

We also implemented a variety of different non-functional requirements to our application. The first requirements revolved around security. Because the application requires a lot of user input, it is imperative to sanitize any inputs. By doing this, we ensure that the website will not fall victim to any Cross-Site Scripting attacks or any SQL Injections. Also, in order to protect against any high traffic Denial-of-service attacks, we would implement a service like Cloudflare. Next, we had to start thinking about capacity and scalability. In order to keep up with any amount of users, the production build of the website would be hosted on a service like Amazon Web Services (AWS). As well as this, we would need to make sure that the database was quick enough to handle many users adding themselves at a time. We also wanted to make our application very light client-side to ensure that people with any level of hardware would be able to comfortably run the website. To further ensure that any user would be able to utilize the site, we would also implement an option to disable any animations to reduce the amount of Javascript running on the client's machine. In the event of crashes or any failures in the site, we would have a service like Google Analytics or Sentry to monitor how it is doing and report when

there are any crashes so they can be fixed in a timely and efficient manner. And finally, going along with the idea of crash analytics, we would also regularly take backups in case anything goes wrong.

Technologies

For the front end, our website will utilize both HTML and CSS. Javascript will also be used to handle both aesthetics as well as functionality. Along with using regular Javascript, we will also utilize the JQuery library to handle the more complex aspects of the website, such as using the inbuilt JQuery animation library to make the development process more streamlined and simpler. We will then use PHP to handle the backend, such as using it to handle the user authentication system as well as the registration process. PHP will also be used to communicate with the database. MariaDB will be the SQL database that will be used in JAM. We will primarily be using the database to store all of the job applications that users, including the dates, descriptions, titles, etc.

Users and Stakeholders

With any product, it is important that we evaluate the different users and stakeholders to ensure we provide the best user experience and impact on the world. First, it benefits millions of prospective job candidates/seekers since they are actually the ones applying to the opportunities, meaning they are less likely to forget about an opportunity if the system reminds them about any deadlines coming up. Also, it helps them stay organized in a way that they can plan out all their applications, therefore getting to apply to more opportunities in general.

Second, it benefits many college students applying to get their internships or job opportunities. Most college students do not have that much experience when it comes to the job

application process. A lot of students, in order to ensure that they get an opportunity, will apply to as many places as possible - hoping that one will land. Companies often look at the application as a track record of your previous success and if you have no experience to show them, they are less likely to go with that college student and go with someone who has real-world experience.

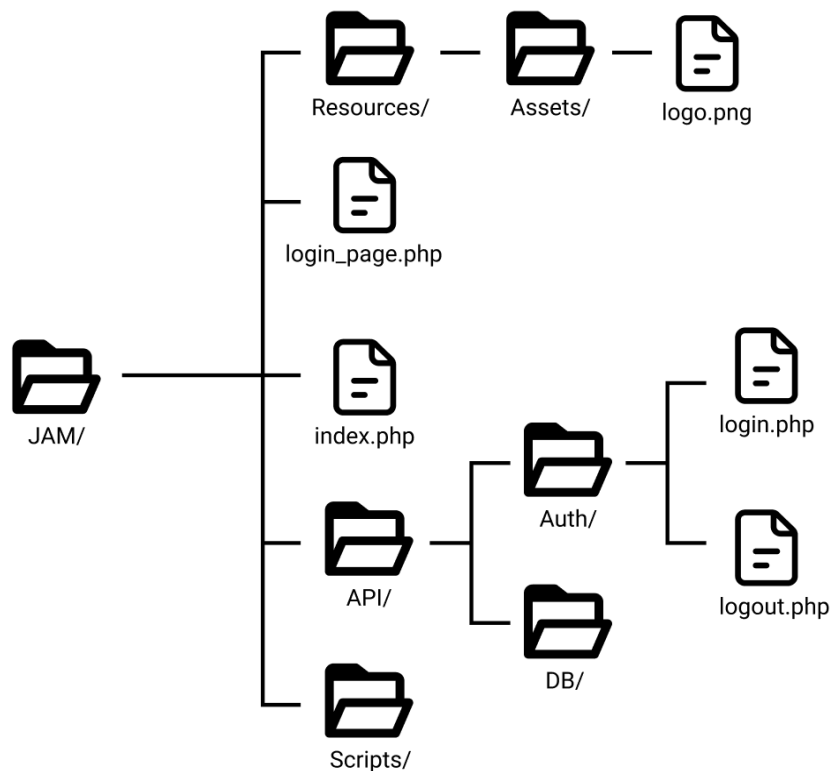
Lastly, it benefits the countless employers who are hiring for their company. Employers will get organized job candidates if they have a habit of organizing their things such as using JAM to organize all their job applications in a single space and making sure to get all of them on time. Employers can also benefit from JAM by advertising on the JAM platform to get job candidates.

With this in mind, it revolves around recruiters for companies and anyone who is applying for any opportunities through an online application process.

Project Schedule

Task	Deadline
Project Proposal, Presentation, TikTok	September 16
Design Full Prototype (Figma)	October 2
Start HTML & CSS	October 9
Connect HTML with JavaScript	October 16
Setup MariaDB	October 23
Finish HTML & CSS	November 6
Finalize JavaScript & MariaDB	November 13
Finish Project (last few things)	November 20
Final Project Presentation + Demo	Final Project Presentation Date

Site Map



Wireframes/Mockups

Logo

Log In

Email Address

Password

Button



Log into your account

Email Address

Password

Login

Don't have an account

[Register →](#)

Logo

Opportunities

Icons



Opportunities ▾



Op. 1 Title

Company Title

Due Date

Notes:
Place to keep small notes about the opportunity like names of people and other extra information that there is a place for

In progress

→

Op. 2 Title

Company Title

Due Date

Notes:
Place to keep small notes about the opportunity like names of people and other extra information that there is a place for

Not Started

→

Op. 3 Title

Company Title

Due Date

Notes:
Place to keep small notes about the opportunity like names of people and other extra information that there is a place for

Completed

→

Opportunity Title

Close icon

Company: Company

Due Date: mm/dd/yyyy

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Application Link: HTML Link

Progress: In Progress



Opportunity Title



Company: Company

Due Date: mm/dd/yyyy

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Application Link: HTML Link

Progress: In Progress

CLOSE

TIK TOK LINK: <https://vm.tiktok.com/ZMRCaJbcL/>

GOOGLE DRIVE TIK TOK:

https://drive.google.com/file/d/109M6gMNBN266RyiOGMa7C_vZHLNjOkqb/view?usp=s
haring