

Job Application List - A Rust Project Proposal

Author: Nathan Metens (metens@pdx.edu)

Rust Final Project Name: Job Application List (job-app-list on GitHub)

Description, topic, and vision:

The topic of this project is software organization and possible web development using Rust. I plan on creating a program that takes user input at the command line that satisfies a job's attributes (job ID, job title, job description, hourly salary, applied (yes/no), link to the application on a separate website). The attributes would be parsed and then Job objects would be created for each job. Each Job object will be stored in a vector inside of an Application object. The Application object will have methods to save the job list into a file (database) where new jobs can be added or created as well as removed if no longer interested in that job. Once all the pieces work together, the job application can create, add, and remove jobs from the database (job file). I'll first implement this as a command-line application.

If I have extra time, I'll attempt to make a basic webpage that shows all the jobs that are in the list (database file) and have options to click on them, go to their links, add some, remove some, apply to them, etc. To create the webpage, I'll need to do some research on web development in Rust. I have some background in web dev in Python, as well as HTML, Javascript, and CSS so this might be useful for this project to show my diverse expertise and how well I can connect different languages and parts.

The goal is to create software that is clean, simple, tested, and modular. I hope to have a well-polished website or command line app and a simple database that I am proud to show on my GitHub. I also want to write almost all of the code myself (the exception being help from sources that I will include in the README such as class notes, chat GPT if necessary, other online resources, the Rust Book, etc.). Everything I write will make sense to me so that I can explain why I did the things I did to get the result I wanted.

Possible Issues:

Some issues I might come across are not being able to find the right resource for a certain methodology I am looking for. I might also make many changes if I get stuck or cannot decide what step to take next. I have already started learning about file handling and object-oriented design in Rust. I will probably use many resources including chat GPT to help me learn and understand concepts that I might need to push through barriers when I get stuck. I will not write any code that doesn't make sense to me. Another issue might be regretting my project and wishing I had come up with a better project idea halfway through. This would have to be the topic of an extracurricular project in the future.

Project GitHub Repo: <https://github.com/nmetens/Job-Application-List>