

Course: CS 4513

Semester: Fall 2020

Advisor: Professor Strauss

Project Name: Application Discord

Team members:

Leo Liu	yl5898
Rihui Zheng	rz1276
Md Abedin	mka374
Kyle Lin	kl3399

Problem Statement:

Every year, hundreds of thousands of students are thrown into the same process of seeking software engineering internships. However, every company that opens up such opportunities have different release dates for their internship applications. As an unnecessary extra burden, these dates aren't consistent between consecutive years. Currently, the only feasible way to keep up with all of the open internships is to manually check each company's careers page and LinkedIn page regularly; this makes the entire software engineering internship application process not only tedious to keep up with but also very time consuming to follow.

That's not all, after submitting applications to internships, students may find it very difficult to keep track of all the applications that one has applied to and the status of each application. Most people in this situation use a spreadsheet that they maintain to keep track of these, but the main problems with this method are that these spreadsheets are often very barebones and all of the data in them must be updated manually. These primary issues with utilizing the spreadsheet method make it extremely easy to miss important deadlines and forget critical information.

Application Discord

Our software will be designed to notify the students looking for internships without them needing to check the company website, LinkedIn, or other career development websites. When an internship opens, the software will notify the user through Discord - an online instant messaging platform. Our software will also offer a convenient place for users to keep track of applications that they have applied for, allowing them to see the statuses of their applications, all relevant dates and notes, and perhaps even offer suggestions to other internship opportunities.

Motivation

As university students ourselves, each member of our team knows exactly what it feels like to dive headfirst into the ocean of software engineering internship opportunities each year. To be quite frank, it is overwhelming no matter how many times you go through it. Very often, we would find ourselves wondering whether an internship opportunity had opened up yet or not and we would even miss our chance because we weren't keeping close enough tabs on it. As a team, we decided that enough was enough; we have the technical ability to solve this problem - and we will.

Project Description

Application Discord is a Discord bot that will have integrated web scraping capabilities to go through companies' career pages looking for software engineering internship openings. Upon finding such openings, the bot will ping the user on Discord to notify them of it. In addition, the bot will also upload the user's resume, extract information from the resume to automatically fill out the application form through a browser's autofill function, and submit the application after the user's review.

Our project will also offer a webpage that aids the user with keeping track of their internship applications. The website will show information such as the status of the applications, the deadline for the applications, suggestions for other applications the user hasn't applied for yet, and the internship information if the user is accepted (hourly rate, start date, etc). The website will also show the stats of all the internship opportunities the user has applied for, as shown in figure 1.

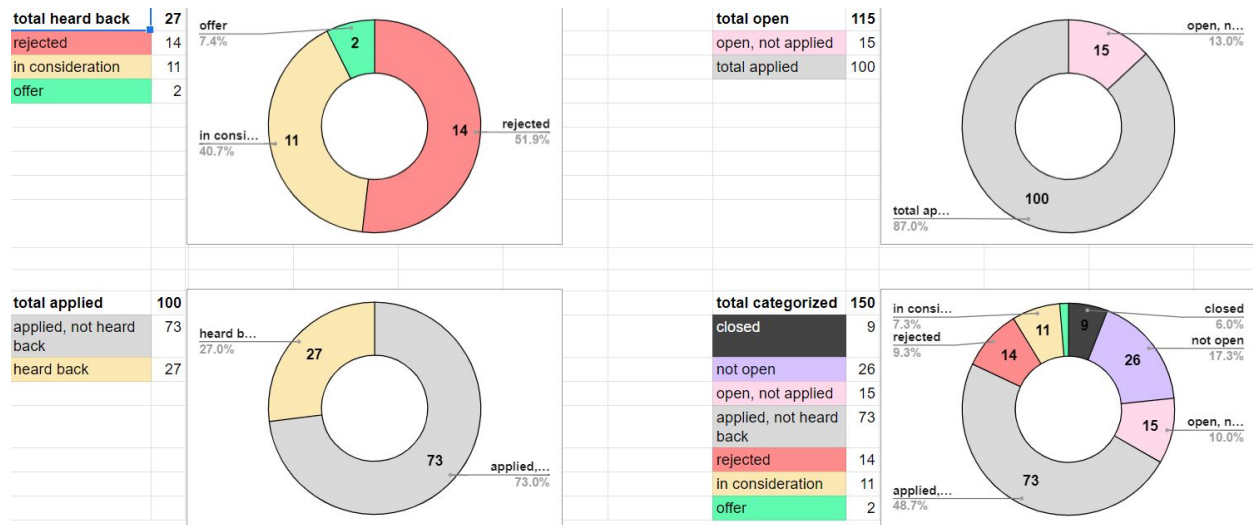


Figure 1: An example of how application status statistics could be visualized in our project