Programming Pangolins

CSC 470

Mr. Jenkins

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Project Proposal Final

* What will the project do?

Our project will be a payroll management system. This program will do the basics for payroll: generate a NACHA file, generate employee pay stubs, enter/edit employee information, and let the employees view their information. Generating the payroll for each employee will include the basic deductibles (state taxes, FICA, medical, etcetera), but we will not go too in-depth here since the project could easily have scope creep. If possible, there are optional features we have in mind (view past payrolls, time clock), but our group will have to finish the key features first.

* What problem does it solve?

This solves the problem of generating NACHA files and pay stubs. It will also help employees to view their information to ensure it is correct. While this is a simple payroll management system, it should be usable to generate fairly accurate NACHA files and pay stubs.

* What is the target audience for your program?

The target audience would be controllers/accountants so that they can generate the needed files for payroll. It will also help employees view their information to ensure it is correct and to see how much they make (salary or hourly).

* What technology will you use to create, manage, and complete the project?

To manage the documents, we will use Microsoft OneDrive to collaborate on any text documents and to share any other necessary files. To discuss the project, we will use Discord. Furthermore, GitHub will be our version control, and our program will be in C#. We will use Excel/Visio for designs and diagrams. We have not decided on bug tracking, testing, and other software since none of us have used them before, but as we cover those topics, we will discuss them in our group. Lastly, we are debating between a SQL database or JSON files for long term storage.

* Have you already thought of classmates you would like in your project group?

Yes, our group will consist of Ryan Porter, Blake Humes, Brooks Robinson, and Evan Slominski.

* What challenges do you foresee with your chosen project?

One of the main challenges of this project will be eliminating scope creep and complexity. Payroll management systems in modern businesses are extraordinarily complex and offer many helpful features. However, our group is not comprised of expert accountants and programmers, so we must limit the features and tamper down the complexities — taxes, deductions, etcetera — due to the limited experience and time. Payroll management is a very deep rabbit hole, but we believe that we can simulate it with reasonable accuracy.

Additionally, another challenge is who will do what. Should we assign the team members to what they are best suited for or to areas where they will be challenged more? Finally, a few other challenges might be recording and fixing bugs with a bug tracker, updating the design and requirements, creating and doing tests, and writing any other document. Since everyone might not have experience in these, it may be more time-consuming and complicated than expected.