# **SEIS 635 Workplace**

# **Automation Project:**

**Overview**

As part of my current Fall 2019 Grad Programs in Software's SEIS 635 course in "Software Analysis and Design", I am looking for possible software development project ideas that a team of 2-3 students could implement during the rest of this semester. This work is part of the academic requirements in my class, which teaches theory and practice of software engineering and application development. This document describes what workplace automation projects would be suitable here, with a separate accompanying form to complete if you want to contribute your own project idea.

If you have any sort of workplace task that might be automated, please consider contributing it to this effort. Our students will be working in Java over the next 7 weeks of the semester, with this project providing them experience in specifying, analyzing, designing and implementing a software application.

**Proof of Concept**: Keep in mind that the final versions of these software applications will not be ready for your immediate workplace use at UST. They will be "proof of concept" demonstrations that can later be polished and integrated into your current workplace tools. Neither will these applications directly connect with UST systems, due to concerns about IT security and the like. But my hope is that these projects will give our students real-world software development experience while to make your work easier than before.

**Data Privacy**: Another issue with these projects is data privacy, since some automation tasks may require working with student data that is regulated by FERPA and other concerns. In these situations, I will provide my student teams with equivalent "cleansed" data sets: all names, IDs, and other protected data will be replaced with generic non-protected "aliased" data that cannot be used to recover any of the original data. I will work with you on acquiring the original data and cleansing it via a secure process, so that our students can work with realistic data sets in their software implementation and testing.

**Examples:** Possible automation projects might include:

* Extracting subsets of spreadsheet data and performing some kind of analysis on it;
* Keeping track of inventories or requests or events;
* Tracking incoming email requests that require special handling

**Still interested?** Then become one of our SEIS 635 "automation project sponsors" by filling out the accompanying Sponsor Survey form and returning it to me at **evlevel@stthomas.edu** or in person. I'm hoping to have a candidate list of projects ready for my students sometime next week.

If you submit a project survey, I'll follow up by doing a 15-minute interview with you to better understand what you'd like. After that, student teams working on your project may email you with further questions if you're OK with this; otherwise, I can filter their questions and communicate with you directly. Students will not be visiting you and interrupting your work during the project, especially since we are a Friday evening course and our graduate students typically work elsewhere during the day.

Thanks!

-Eric-