Name: Evan Hill

Degree and Major: Bachelor of Science in Computer Science with a Double Major in Applied Computing: Business Concentration

Project Advisor Name: Michael J. O’Neill

Expected Graduation Date: May 2025

Problem Statement:

Picture this: Every student who goes into college leaves with the knowledge, skills, and passion necessary to manage their personal finances well, not just while in college but also after they graduate and get out into the workforce.

However, at present, we are far from this ideal state of affairs. While there are some students (such as myself) who are passionate about personal finance and are prepared/preparing to manage our finances well after college, students like this are definitely in the minority. Even though CSU offers personal finance classes and has personal finance peer coaching programs where student coaches can meet with other students one-on-one to help them with their personal finances and can go out to freshman seminar classes to present on personal finance, the coaches’ current presentation and student engagement methods during the presentation are not the most engaging and definitely could use an upgrade to make them more engaging in order to get the students being presented to more passionate about personal finance while still empowering them with the knowledge they need to succeed.

I know this because I’ve seen it firsthand. I’ve worked as a personal finance peer coach here at CSU and did both one-on-one coaching and presenting to freshman seminar classes. While most of the one-on-one coaching recipients are passionate about getting their finances in order (because if they weren’t then they wouldn’t sign up for a meeting), the students being presented to in the freshman seminar classes are definitely more of a mixed bag. Some are fairly passionate about their finances, but most seem to be more indifferent or even outright uninterested in learning these essential skills. I think this problem is not helped much by the peer coaching program’s current implementation of the budget game which they give at these presentations.

My solution, therefore, is to use my computer science skills to create a digital budget game for the peer coaching program with the CSU Center for Personal Financial Management (CPFM) to use in their freshman seminar programs to better engage the students and get them more passionate about learning personal finance skills.

Project Description: My project will be a digital version of the budget game that will use a web scraper and a database to find and store up-to-date salary and cost data to be used in the game.

Proposed Implementation Languages: Oracle SQL and APEX for the database, Oracle APEX for the game app (which can connect easily to the database because both the app and the database will be stored in the same Oracle APEX Workspace), and Python for the web scraper.

Libraries, Packages, Development Kits, etc. to be used in in the proposed implementation languages(s):

Additional Software/Equipment Needed: An Oracle APEX Workspace

Personal Motivation: My personal motivation for undertaking this project is largely because I want to give back to the CPFM by giving them a new and improved budget game for them to use in their freshman seminar presentations in order to better connect with the incoming freshmen and better help them get interested in personal finance.

Outline of Future Research Efforts:

-Create Database Schema with all requisite tables with Oracle SQL in Oracle APEX.

-Create Web Scraper using Python, run the Web Scraper which will generate a CSV file with the data scraped from the internet (the data should include salary information for all the jobs and price information for all the expenses), then upload Web Scraper data (the CSV file) to the database.

-Create Game Application in Oracle APEX using data from the database tables.

-Test project thoroughly as per the test plan document.

-Deliver the finished product.

Schedule: (See Separate WBS Document)