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Milestone Four

The artifact submitted is a program that was made in MongoDB originally. The purpose of the program was to add business inspection results, and be able to search for them, update them, and delete them. It was made in the course CS 340, which I took last term.

I included this program in my portfolio because I believe that it presents a unique opportunity to showcase an important skill in programming; creating a graphic user interface (GUI). I added a basic interface to the program that will enable the user to select an option. The options are “Create an Inspection Result”, “Find an Inspection Result”, “Update an Inspection Result”, “Delete an Inspection Result”, and “Exit the Program”. This makes it easier for the user to navigate the program as opposed to just simple console prompts. To create this interface, I had to use frames, buttons, labels, action listeners, and a box layout. This demonstrates a proficiency in creating a GUI to enhance a user’s experience within a program. The specific course goals that this assignment demonstrated a proficiency in were CS-499-03 and CS-499-04.

I did not fully meet my objective originally outlined in Module One. I was able to create a basic user interface, but I failed to make the program entirely controllable from just the interface. Instead, the user must still use the console when entering information like the actual data values for a business inspection record. I failed to learn how to change what was being displayed on a frame at a given time. I believe that creating multiple states for the frame may have been a possible solution, but I was unable to implement this. This being established, much of the original objective was achieved. The interface was created, and the user can see information on it and select an option. They can even close the program from a button on the frame. The program currently requires that the console still be used for part of the functionality, but a partial interface was implemented. I would like to propose changing my expected outcome. Implementing a full interface was overly ambitious. Instead, I would like to propose that the enhancement be that an interface be created that serves as a menu, proposing options to a user and allowing them to select one. The console will still be used when inputting data.

The process of creating this interface was highly informative. I haven’t created an interface in probably about three years and this was more than just a refresher as I took this project further than a class had gone in teaching. I learned a lot about where code should be placed within a program. For example, I initially tried to have the action listeners for the GUI call methods when a button was pressed, but then realized it would be simpler and cleaner to place the code from the methods inside the action listener and then delete the method altogether. This assignment also helped me to learn about the various buttons, text areas, and other components that can exist within a frame. Altogether, I learned more from this project than I had expected and honestly had to scour the internet to learn about the various ways of creating a GUI and how I could implement one in this project.