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4-2 Milestone Three: Enhancement Two: Algorithms and Data Structure

The artifact chosen for Enhancement one was my Contact and ContactService classes. This project was created in CS 320: Software Testing, Automation, and Quality Assurance. These classes were later tested to ensure that the exceptions were handled properly.

I chose this artifact as it shows that I can run unit tests as well as create array lists with getters and setters in Java. Java is a language I would like to write code in, so this is another reason this project was chosen. This program was lacking was a console log that someone would be able to be asked for data and input that data. By adding a console log someone would be able to interact with the array list “contactList”. The user is now able to run the application and it will display enter contact, display contacts, and exit. The user chooses an option, and a switch case takes input from the user to display the data that correlates to the user’s choice. I created a main method that contains all the code that runs the console log. The artifact now allows the user to see the options displayed as well as enter their choices. This was done with logic and the main method that called different methods from the class contactServices.

I created code that took input from the user and added it into the array list. The next step was to make sure that the user could see all the data that was entered into the array list. Before this update, the user could only see the information of the contact that was last created. Artifacts one and two show my skill in updating the algorithm to be able to update and display the information that the data structure (array list) held. I made sure to use public void for my displayContacts method so it could be called in my Contact class. When working on this project in the past two weeks I was able to show innovative skills and techniques to implement solutions to achieve the desired goal of having a console log that I was able to add to the array list as well as print that data. This shows that I can manipulate a data structure with logic and algorithms to achieve the desired outcome.

While trying to get my algorithms to work I had a hard time when trying to get my while loop right. I learned that I needed to end it with choice=scanner.nextInt(); this allows the loop to end when the user enters their choice. From there the system ran the proper switch statement. It took me some time to get Contact contact = new Contact(); right. I had to step away from the computer to let my mind take a break. I came back focused and typed things in for about 15 minutes and realized I had the solution up tup in my Contact method, I just needed to use that along with my addContact method in ContactServices and I was good to go.