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CS 499: Computer Science Capstone

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Milestone 3: Artifact 2 Enhancement

The artifact we will be reviewing is called ClassService.java. This file is in the contact package of the project and will be representing the software engineering and design aspect. The ContactService allows us to make changes to the contact information. This artifact was created in June of 2023 during my CS 320: Software Testing, Automation, and Quality Assurance course. This artifact was chosen for the Algorithms and Data structure category as the improvements being made showcased how we ensured the requirements were checked for within the Contact packages. To enhance the artifact, I did import the UUID for the unique identifier assigned to contacts and reimplemented the calling for this “uniqueId” in each method throughout the code. To improve the code, I also added in exceptions to be thrown that will let us know of the contact information does not meet the necessary requirements. These enhancements allowed to reduce the number of lines of code and clean up any unnecessary lines as well. In addition, I added comments throughout to continue improving the purpose of the code. Due to these enhancements, I was able to accomplish the course outcome; being able demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry-specific goals. As I was enhancing the artifact, I did attempt to use a new method, that while trying to implement, I realized would not work. In this trial and error, I was able to learn about a new method and soon learned how it was supposed to be used and how it was not meant for this type of work. I was also able to reflect on the previous work made in this assignment and see where I may have fell short when first completing the work.