CS499 Milestone Two Narrative

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Artifact two is a Student Information System that is from IT315 Object Oriented Analysis and Design. In this course the focus was on the design aspect not the actual coding of the system. The goal was to learn more about the design process behind software projects and project management. At the time the programming of this software system seemed difficult and intimidating, so I wanted to challenge myself to create it for my capstone. Artifact two is meant to show my expertise in software design and this project shows that. The improvement on the project was the creation of the Student Information System using Java.

The Student Information System consists of three classes: main, courses, and students. The courses class is used to create new courses for the university and the students course is used to create new students. Courses includes the course name, class room location, is online boolean, and a has prerequisite boolean. Students has a first name, last name, major, student id, and gpa reached boolean. This is the information that is required to create a course or student. These requirements were determined in IT315 with some minor changes for this project. A constructor was used in each course to simplify the creation in the main class of courses and students. Originally, the design was not going to include a constructor, but the main class was getting large. The addition of the constructor allows for a cleaner look and feel of the project.

In the main class methods were used for each creation of a course or student. Each method has a system print request that is used to print the name of either the course or student. These methods can then be called in the main method to print out the information and keeps the main method simple and readable. Finally, in the main method a student can be called and then the courses they will take will be called as well. This allows the system to print the student name followed by their courses creating a clean course list. Creating readable code that is simplified where it can be was a goal I had for this project. My original draft was not as clean, so some of these changes were added to help with readability.

Overall, the system works as intended but I am open to any feedback that can be used to improve the project. I was trying to find a way to store the courses inside an array, but was not able to since they are objects. Is there a better way to store the courses for each student?