

Part B:

- Identify the data manager, data container, viewer/observer, and facilitator/helper classes in your solution.
 - Data Manager
 - Person, Student, Undergraduate, Graduate, Employee, Faculty, Staff
 - These are our data manager classes because this is what we use to store the data from our input and some of the functionality happens
 - Data Container
 - Course
 - This is our data container class because it is where we are storing other instances of objects from our data manager classes.
 - Viewer/Observer
 - CourseReport
 - This is where our User Interface that our user interacts with is implemented
 - We are using an instance of our Course class here in order to collect all the data we need
 - Facilitator/helper
 - ArrayLists, Math, Scanner, etc.
 - These were the classes that we imported from java in order to assist with some tasks
- What Data structure(s) did you use to implement the data container classes?
 - The main data structure that was used in our data container classes was the ArrayList data structure. We used this multiple times in our Course class to implement classes including our instructors, teaching assistants, undergraduates, and graduates. By using the ArrayList data structure we were able to store multiple instances of these objects which were later referenced in functions to retrieve data from them.
- Describe the Approaches that you used to test the code - black-box, white-box, boundary value testing, equivalence partitioning, etc.
 - Our approach to testing this project was to create a test input file that we could easily run through our code with a white-box approach. We would test each function at a time with the code in view at all times in order for us to be able to instantly make adjustments and fix bugs. Another strategy that we used was to use print statements and breakpoints after function calls to ensure that the right functions were being called when they are supposed to be.

Part C:

- How often did you meet?
 - We were able to meet in person and discuss our plans for the work that week at least once a week. This was because we had a lot of the same classes so this gave us a place to set up a time to work together on the project. Depending on the week we would talk in discord frequently to help each other with the tasks that we were both currently working on whether it be the same or different. Doing both of these things gave us a really good system for working together and allocating time to get the work done every week.
- What modality or platforms did you use for communication (Slack, Discord, Text, Email, WebEx, Zoom)? List all that apply, and also describe how you used them. Which one(s) did you find the most effective?
 - When we first got paired together we reached out by email to establish our first contact and exchanged phone numbers which we constantly used to text to inform and update each other on the status of the project or for help with something.
- What platforms did you use for collaboration?
 - We would talk in discord a lot when we needed to work on something together or work out a bug. If we had any files that we needed to send between each other we also sent them either on discord or by email, this allowed us both to have the most updated version of our work so we never got confused.
- How did you split up the work and why?
 - Each week when the homework got released we would both take a look at it separately and then either reach out to each other over discord or text or talk in person about which ones needed to be worked on together and which ones could be worked on separately. We would allocate time to fix issues and work on stuff together on discord and figure out which of the problems that could be worked on individually would be worked on by who. We both made sure that it was fair and even as well, however there was never a problem with dividing the work.