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Instructions

Welcome to your final project in PROG 1440 - Object Oriented Programming!

This project provides you with a lot of freedom about how you approach things. You must create a new Java program that contains **ALL** of the following:

- A **Main** class with a **main** method as the entry point to your program
- An enumeration with multiple entries and an associated field value for each enum entry along with a method for retrieving that value. Your enumeration must be used as an instance variable in a class or in some other meaningful manner (don't just declare an enum and not use it).
- An inheritance structure with a parent class and at least two subclasses
- An inheritance structure with an abstract class and at least two subclasses
    - Abstract class should have at least two abstract methods and two methods with bodies
- An interface with at least three methods. Your interface should be implemented by at least two of your classes
- A class with multiple **static** methods and at least one **static** field (member)
- Choose one of your subclasses and properly document it using **JavaDoc** documentation standards
- Demonstrate effective use of each of the following **at least once!**
    - Conditional operations (if, else if, else)
    - Loops (for, do, do while)
    - Switch statement
    - ArrayList or array to group collections of values
- In your **main** method, execute your program, putting to use all of your classes to perform tasks relevant to your program.

You will be graded on your demonstration of understanding and implementation of each of the items listed above.

Beware of the following things to adhere to:

- Using a **System.out.println()** command as the main code in any of your methods of any classes, interface method etc. is **not** acceptable. You will lose points for this.
- Your code must adhere to clean code principles:
    - Be cautious of putting too much code in a single method
    - Use of blank lines
    - Naming conventions of variables, classes, enum entries etc
    - Indentation
- Your program should not be fancy, it will only make it harder to gauge your understanding of the material. Write a program the fulfils the requirements in as straight-forward way as possible that meets all the listed requirements. You only have limited time to complete the project.
- This must be a brand new Java project, do not copy/paste existing code from previous labs or assignments.

Your final project will be submitted via GitHub Classroom as per usual. Clone the repository from GitHub Classroom, create a branch, submit your work to that branch then create a pull request. Submit to Brightspace the URL of your pull request to Final Project.