



Assignment #3 - Abstract Classes



Instructions

This assignment will challenge you to write a simple Java program that leverages the power of **Abstract Classes**. You may work in a group of two for this assignment if you want to. Both group members must submit the same PR URL to Brightspace (it doesn't matter who commits the code to their repo, but you both need to submit the same PR URL to Brightspace). Complete each of the following tasks:

- Think up a use case for an abstract class
 - Remember, an abstract class shouldn't be something that would ever make sense to actually instantiate. Its purpose is to serve as a definition of state and behavior for related subclasses.
 - Create the abstract class
 - It should have at least 2 instance variables and 3 abstract methods
- Create 2 additional classes which extend your abstract class, implementing the required methods from the abstract class
- Create an Interface with at least 3 methods
 - Your abstract class should implement this interface
- Create a **Main** class with your main method
 - Instantiate at least one instance of each of your subclasses
 - Add your instantiated objects to two different collections (arraylist or array etc.)
 - One collection should be of the type of your Interface you created
 - One collection should be of the type of your abstract class you created
 - Put all of your objects in both collections
 - Loop through both collections
 - Call your interface methods in your interface type loop
 - Call your abstract methods in your abstract class type loop

Clone the assignment repo from [Github Classroom](#). Create a new branch, push your code to your repo, then create a pull request as per our regular workflow. Submit the pull request URL to Brightspace under [Assignment](#)

[Download](#)[Print](#)[Open with docReader](#)

Activity Details

You have viewed this topic

Last Visited Apr 5, 2021 10:36 PM

