

Singleton Pattern

Please download *Test.java* file from Blackboard under LAB 1 folder.

1. Your task is to modify the **Singleton** class inside the *Test.java* file, so that it allows creation of only one instance of **Singleton**.
2. Write a main to test your program.
3. Add a sub-class to your hierarchy with the name **SubSingleton**. Instead of **Singleton** class, use **SubSingleton** to test your main. Modify your code if needed.
4. Lastly, change the number of **SubSingleton** instances that can be created. **Singleton** class allows the creation of just one instance. **SubSingleton** should allow three. Use the following guidelines in your implementation.
 - a. Create a `HashMap<String, Singleton>` to store the instances. Each instance will have a name.
 - b. Create a method called `registerInstances` to create the three instances.
 - c. Override the `getInstance` method, which accepts the name of the instance as a **parameter** and returns that instance. Note that `getInstance` will only return an instance. It will not create any instances.
5. Rewrite the main to test your program.

BONUS: Modify `registerInstances` method to accept an `ArrayList` of names and create that many instance.