

## CS 5500 Homework 2: Creational Design Patterns

### 5) ANALYSIS:

a design pattern is a general repeatable solution to a commonly occurring problem in software design.

For my submission, I have used.

1. Factory pattern: Benefits includes that the business logic of creation of a class from the actual logic of the class is split because if factory method doesn't exist, every class that adds on the system needs to have a factory method inside, and when one has to change something about the creation then they may have to deal with all of that set of classes. Also another advantage could be code reusability.
2. Singleton pattern: The benefit of using a singleton is to have one AND only instance of a class. This it to avoid too many instances of the same class, wherein the individual instances may NOT make a significant difference in the operations being carried out. This is accomplished by controlling the number of objects/instances being created of that class.

### REFERENCES:

1. [https://sourcemaking.com/design\\_patterns](https://sourcemaking.com/design_patterns)
2. Coderanch