

## Object Oriented Design Patterns

### Singleton Lab

#### Description

This lab will focus on creating a Registry Singleton object that is responsible for returning a number of Singleton objects, namely:

- LogManager
- PrintManager
- WindowManager
- MessageManager

All singletons must be created using the Static method approach with a Private constructor. The singleton objects can act as dummy objects that implement a print method which outputs a message to the screen. NOTE: you could output the Object REF to ensure a single instance is being returned.

For this lab you will need to download the code covered in our Singleton pattern lecture. You can use this code as the basis for creating the Registry Singleton, LogManager and PrintManager singleton classes.

You will also need to create a test programme that thoroughly tests the Registry Singleton class. Classes you will need are as follows:

LogManager.java  
PrintManager.java  
WindowManager.java  
MessageManager.java  
Registry.java  
RegistryTest.java

Code samples from the lectures are available on Moodle (Ref: Dr Stephen Sheridan, TU Dublin)