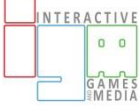


	<p style="text-align: center;"> Rochester Institute of Technology Golisano College of Computing and Information Sciences School of Interactive Games and Media 2145 Golisano Hall – (585) 475-7680 </p>	
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Data Structures & Algorithms for Games & Simulation II
IGME 309, 2015-16 Spring
E03 – Singletons

Objective:

Get familiar with the syntax and uses of Singleton based classes.

Details:

There is no starter code for this ICE but you can base your solution on an empty ICE01 template.

You will need to program 2 classes:

Mesh – It is meant to contain information regarding models to be used in a graphical application.

Members:

Name field; of the type `std::string` that will contain a name identifier of the object

Constructor; that will take an `std::string` and will initialize with it the name field.

An operator overload of the `<<` so the class could be printed on the console using the `std::cout` function.

All members of the class should be private with the exception of the constructor and the overload.

MeshManager – It's a singleton-based class that will control the creation of Mesh objects for which on top of the regular members of a singleton-based class it should contain the following members:

An `std::vector` (list) that will contain Mesh objects.

An `AddModel` method that will INSTANTIATE a Mesh object and add it to the list of models.

A `PrintContents` method that will print out all the information in the list of models (the model's name)

The main function of your application should be:

```
int main(void)
{
    MeshManager* oMeshManager = MeshManager::GetInstance();

    oMeshManager->PrintContents();

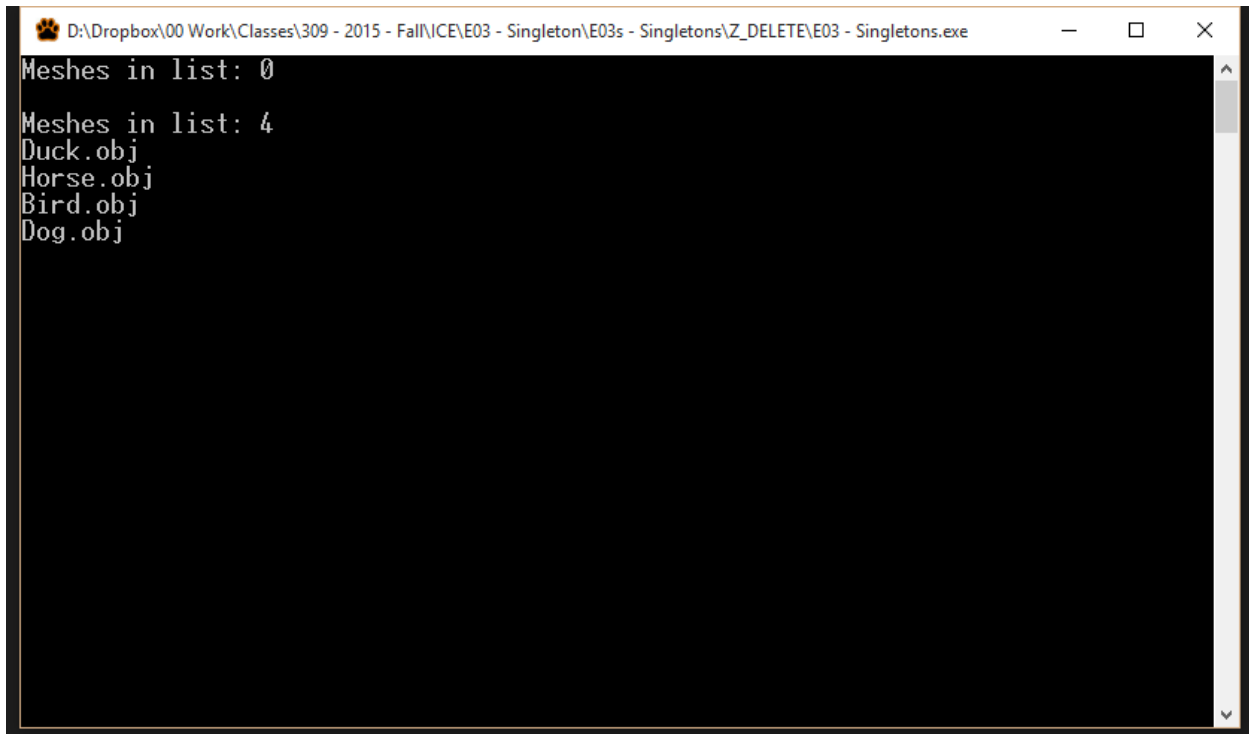
    oMeshManager->AddModel("Duck.obj");
    oMeshManager->AddModel("Horse.obj");
    oMeshManager->AddModel("Bird.obj");
    oMeshManager->AddModel("Dog.obj");

    oMeshManager->PrintContents();

    MeshManager::ReleaseInstance();

    getchar();
    return 0;
}
```

And the output should look like this:



```
D:\Dropbox\00 Work\Classes\309 - 2015 - Fall\ICE\E03 - Singleton\E03s - Singletons\Z_DELETE\E03 - Singletons.exe
Meshes in list: 0
Meshes in list: 4
Duck.obj
Horse.obj
Bird.obj
Dog.obj
```

Try adding more objects and printing the content on to the console a couple of times.

Make sure you follow the coding standards for all code you create.

Demonstrate your code to the instructor or TA and show them the code.