Tasks:

1. Get a working copy of Lab1 – preferably your own (even if you have to borrow pieces of the solution)!
2. (**15 points**) Add a LogManager class to the project (.h and .cpp). Make an instance of this LogManager class dynamically in the Application class as part of its startup routine. Make sure to deallocate this memory when the Application is shutting down!
3. (**30 points**) Maintain a C++ ofstream object that is opened when the LogManager is created. Have one method called "log" that takes a string as an argument and writes that message to the log file including the date/time in this format:

   ```
   1/15/2019@09:53:15am  This is the log message
   ```
4. (**65 points**) Add (at least one) new method, an overload of the log method that also takes an Ogre::ColourValue and a float. The text should be drawn to the screen, using Ogre's overlay system (via code, not a script), in the color given and should stay on-screen for the given number of seconds (sort of like Unreal's system). This method should also log the message to the file.
5. (**10 points**) Quick test of our LogManager capabilities: print out a message whenever a key goes down. You can get these points even if you don't finish #4.