Exercise 3 - Simple logging

1. Requirements

There are five actions a player can do. Sorted according to duration type, these are:

**Durative:**

* Rotating clockwise.
* Rotating counterclockwise.
* Moving forwards.

**Instantaneous:**

* Firing a bullet.
* Going into hyperspace.

There are three actions that can be performed by the game itself. These are all instantaneous.

* Spawning an object.
* Removing an object.
* Adding a life to the player’s counter.

Furthermore, UFOs can perform two instantaneous actions as well.

* Firing a bullet.
* Changing their direction.

Of these, the spawning of objects, the removing of objects, the player going into hyperspace and adding a life to the player’s counter should be logged. It should also note certain events, such as the constructing, starting/game overs, pausing and restarting of the game and the start of new levels. Gaining points and the writing of highscores (in addition to errors with writing/reading highscores) should also be logged. When the player is hit by a saucer, an asteroid or a bullet, an asteroid is hit by a bullet or a saucer is hit by a player’s bullet, this is also logged.

Instantaneous actions should simply be logged once.

All logged actions should note the time.