

Exercise 3 – Game Engine

Implement an Event System

- implement an Event system or use an existing library with an abstraction layer in between (facade pattern, adapter pattern, ...)
- push your results on github

Questions

A library is a collection of symbols (i.e. functions, variables, ...)

What is the difference between a dynamic linked library and a static library? The static library is compiled with the program (linked at compile time), after changes on the library, the whole program must be compiled again, but using static lib gives faster execution. The dynamic (shared) library is linked at runtime to the program, can be changed without having to recompile the program

Describe a logging system with your own words: it logs defined events (what happens in the program) that can be grouped by severity (e.g.: INFO, WARN, DEBUG, ERROR, FATAL) and otherwise formatted, as a way to give feedback to the developer and the user alike. It is useful to be able to know where something went wrong.

What is a Design Pattern?

Design patterns are general concepts for solving common problems.

Name and describe 2 Design Patterns (except façade or adapter):

Iterator: concept to traverse the elements of different data structures (array, matrix, tree, graph, stack,...) whithout exposing the underlying data structure (abstract), e.g. depth first iterator, breadth first iterator object Observer: A publisher informs the subscribers of a change in its state.