

Advanced Programing

09/12/2020

Francisco Jimenez Garcia
jimenezga@esat-alumni.com



Index

Algorithms

Programming Paradigms

Implementation and Debugging

Database

Personal Tasks and Workgroup Plan

Conclusions and Future Work

ALGORITHMS

An algorithm is a finite sequence of well-defined, computer implementable instructions, typically to solve a class of problems or to perform a computation.

In this practice i use the and algorithms to determine the relative path to a file in the selected folder. Using brute force I determine the route of the file in my game folder so i don't depend on absolute routes, it still not the most efficient algorithm i could use, there are some libraries where they have optimized this proceed.

Programming Paradigms

PROCEDURAL

Procedural programming is a programming paradigm, derived from structured programming, based on the concept of the procedure call. Procedures, also known as routines, subroutines, or functions, simply contain a series of computational steps to be carried out. Any given procedure might be called at any point during a program's execution, including by other procedures or itself.


OBJECT ORIENTED

Object-oriented programming (OOP) refers to a type of computer programming (software design) in which programmers define the data type of a data structure, and also the types of operations (functions) that can be applied to the data structure.

In this way, the data structure becomes an object that includes both data and functions. In addition, programmers can create relationships between one object and another. For example, objects can inherit characteristics from other objects.

EVENT ORIENTED

Event-driven programming is a programming paradigm in which the flow of program execution is determined by events - for example a user action such as a mouse click, key press, or a message from the operating system or another program. An event-driven application is designed to detect events as they occur, and then deal with them using an appropriate event-handling procedure. The idea is an extension of interrupt-driven programming of the kind found in early command-line environments such as DOS, and in embedded systems (where the application is implemented as firmware).



My Application uses the object oriented programming. The code is structured in a mother class called GameObject from which derive most of the other classes.

Implementation and Debugging

I mostly use the IDE of Microsoft, Visual Studio to debug the project. When my app closed without apparent reason, I run it in the IDE so I can see where did that happen and why but putting breakpoints, watching the stack memory and using the console to watch the data of some variables.