

Project 1 - Requirements

Implementation of a graphic application in C (C++) that uses the OpenGL libraries and the programmable rendering pipeline by means of vertex shaders and fragment shaders implementation.

Specifically, the project consists on the realization of a game in 2D graphics, in which interactions with the user and collision management are provided.

Requirements to be fulfilled:

- a) For the modeling of the characters it is necessary to resort not only to the basic primitives, but also to the interpolating curves of Hermite.
- b) The geometry modeling of the scene must take place in the coordinate system of the object.
- c) The passage to the normalized device coordinates must take place in the Vertex Shader through the use of the Modeling Transformation and Projection matrices.
- d) Management of the interactions with the mouse and the keyboard.
- e) Management of the collisions between objects using Bounding Boxes.
- f) Management of forms of animation.
- g) Use of fragment shaders to create special effects.

Delivery date scheduled for November 15th.