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 by November 17th.