

Aula Prática 5

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The objective of this tutorial is to introduce the student to some of the most basic 3D concepts. In this specific one we will understand the concept of Gouraud ambient and diffuse shading. It is important that you not only copy and run the code but carefully examine each section marked as !![NEW]!!. It is strongly suggested that you download and open the references at the end of this document, and read it during these exercises in order to fully understand the basic concepts of OpenGL.

1. Download the 5th Framework from the following link:
http://www.dcc.fc.up.pt/~mcoimbra/lectures/CG_1213/cg_framework_v5.zip
2. Launch Visual Studio and open the project file “cg_framework.sln”
3. Open the file “main.cpp”
4. Note that “step14.txt” has already been integrated into the “main.cpp” file
5. Read the code comments very carefully and run it
6. [Optional] Download and solve Exercise Sheet 1 or 2:
http://www.dcc.fc.up.pt/~mcoimbra/lectures/CG_1213/CG_1213_ExerciseSheet_2.pdf

Download and study the following references:

- Ed Angel, “Introduction to Modern OpenGL Programming”, SigGraph 2012
http://www.dcc.fc.up.pt/~mcoimbra/lectures/CG_1213/SIGGRAPH_2012.pptx
- Ed Angel, Dave Shreiner, “An Introduction to Modern OpenGL Programming”
http://www.dcc.fc.up.pt/~mcoimbra/lectures/CG_1213/SIGGRAPH_2011.pdf