Overview of CG course

Computer Graphics

- **Introduction to Computer Graphics**

- **OpenGL, WebGL**

- **Two-Dimensional Graphics**

- **Three-Dimensional Graphics**

No of credits: 3

Lectures: 2

- **Curves and Surfaces**

- **Advanced Graphics Techniques**

Practice: 1

- **Good programming skills in Python or C/C++**

- **Data Structures & Algorithms**

- **Simple Linear Algebra**

- **Geometry**

- **On-going assessments:**

  - Diligence (D - Attendance): **10%**

  - Assignments (A - Presentation based on project): **20%**

  - Workshops (W - Personal programming practice): **20%**

- **Final exam (FE - written exam): 50%**

- **Total score = 0.1*D + 0.2*A + 0.2*W + 0.5*FE**

[1].Hearn, Baker & Carithers, Computer Graphics with OpenGL, Pearson, 4th edition, 2014

[2].Edward Angel & Dave Shreiner, Interactive Computer Graphics: A top-down approach with shader-based OpenGL, Addison Wesley, 6th edition, 2012

[3].Dave Shreiner, The OpenGL Programming Guide, The Redbook, Addison-Wesley, 8th edition, 2013
(www.opengl.org: Standards documents, Sample code)

[4]. Slides

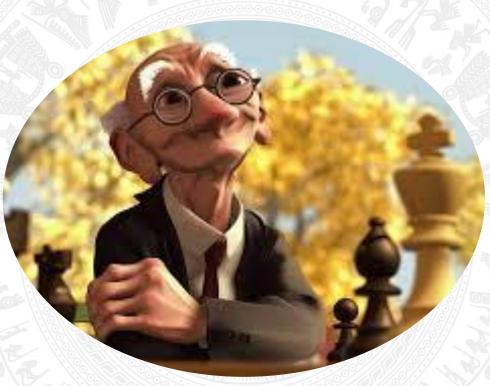Language programming: Python, C++, Java

- **Download and install Dev-C++ (http://www.bloodshed.net)**
- **The installation with a simple C program**
- **Download and install GLUT**

  - Download **GLUTMingw32**
  - **glut.h** ⇨C:\Program Files (x86)\Dev-Cpp\MinGW32\include\GL
  - **libglut32.a** ⇨ C:\Program Files (x86)\Dev-Cpp\MinGW32\lib
  - **glut32.dl**l ⇨ C:\Windows\System32 (or similar location)
  - Tell the linker where the libraries are by:
    - clicking Tools/Compiler Options/Compiler/Add the following commands when calling the linker
    - adding **-lglut32 -lglu32 -lopengl32** (should be added in that order)
- **Test Dev-cpp with GLUT**

Nhân bản – **Phụng sự** – **Khai phóng**

Enjoy the Course...!