TIEA311 Tietokonegrafiikan perusteet

kevät 2018

(“Principles of Computer Graphics” – Spring 2018)

TIEA311 Tietokonegrafiikan perusteet – kevät 2018 (“Principles of Computer Graphics” – Spring 2018)

Adapted from: *Wojciech Matusik*, and *Frédo Durand*: 6.837 Computer Graphics. Fall 2012. Massachusetts Institute of Technology: MIT OpenCourseWare, https://ocw.mit.edu/.

Frontpage of the local course version, held during Spring 2018 at the Faculty of Information technology, University of Jyväskylä:
`http://users.jyu.fi/~nieminen/tgp18/`

TIEA311 - Local plan for today

Today (Wed, Feb 7, 2018) in Mattilanniemi . . .

- Assignment 0 ”aftermath”
- Go through the last slides of previous time.
- Assignment 1 – now full speed!
- Discuss Assignment 1, with C++, if lecture room technology allows

Assignment 0 aftermath: How to do it “right”

- The “right way” to implement OBJ reading?
- In programming, “the **best way**” is somewhat **ill-defined**.
- All you can (should) do is **better than your earlier code**.
- **One measure** of a “**good enough** way” is that the code is successfully used in real products
- But never forget **safety** (as the most important measure), **readability**, **maintainability**, **performance** (which only matters in selected places! Almost never “comes first”!)...
- That said, two alternatives from real software to read OBJ meshes:
  - `https://github.com/openscenegraph/OpenSceneGraph/blob/master/src/osgPlugins/obj/obj.cpp`
  - `https://github.com/davll/ICG_SSAO/tree/master/source/nv`
- (The former is properly open source; about the latter I’m not certain - it seems to originate in some Nvidia SDK ...)

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Now: Discuss Assignment 1, with C++, if lecture room technology allows

Connection between theory, practice, and learning. Concrete C++ coding, if Santa has brought us a working Visual Studio setup in the lecture hall.

[In 2018, Santa was a Good Santa – the action is in the Finnish lecture video. Some ”live-coding” and thoughts about how to work and think towards becoming an IT pro.]