Data-driven 2D Game Development, Syllabus

Intro Remarks
Syllabus Policies
C++ Basics

SAX XML Parsing with expat
Data Driven Programming

Makfile
Valgrind
Inkscape

2d Animation
Inkscape
STL vector
XML: data-driven programming
Model-View-Controller

Intro to SDL
Drawing a surface
Using a game clock
Simple animation

2D Vector Class
Grammars
and L-Systems

Viewport/World
Flyweight and Factory
Packing 2 Sprites

Game Timer
Writing Text
HUD

Scrolling Backgrounds
Building a Viewport

Parallax
Scrolling

Particle Systems
Explosions

Collision Detection

GUI

Sound and Music
Artificial Intelligence

XML Schemas
Validating XML Semantics

Inheritance and Polymorphism
Explosions
L-Systems
HUD

Hierarchical Spatial Data Structures
Quadtrees

Learning Lua

Software Testing

Build a Video Game
Experiment or Study