

Computer Game Development
DIGM 360-001 (CRN: 14041)
Instructor: Will Muto
Midterm

Due: Tuesday, October 30th at 3:00 pm. Please drop off all required files on a CD to my mailbox in the Department of Cinema and Television office in University Crossings. Your CD should be labeled:

Name
Drexel Username (i.e. wlm24)
DIGM 360 Fall 2007 Midterm

The exam is graded out of a possible 100 (+10 possible extra credit) points. Each day late is a ten point deduction to the final grade. All work should be done individually.

Part 1 (40 points each): For each task, choose one engine from those we reviewed (3D GameStudio, Processing, Blitz3D, X3D, Torque, and -- if you are feeling especially brave -- Ogre) and implement it to the best of your ability. **You can either use assets (models/textures) of your own creation, or assets provided via the engine package; no other downloaded assets should be used.** You can use an engine more than once.

1. Your studio landed the contract for the next-gen 3D re-release of the Genesis classic, "Sonic Spinball", and you have been charged with level prototyping. Create a full level based on a pinball table theme (textured/lit), which can be explored by a keyboard and/or mouse controlled "character" ("character" does not necessarily mean a rigged biped).
2. You are prototyping the interface and game play for the new hot puzzle game, "Rubik's Cube Commotion". The producers demand that the entire cube is rotated via the WASD keys, and clicking on each individual component block will rotate it separately (do not worry about rotating whole rows at a time). To add to the challenge, the middle block in each side of the 3x3 cube randomly changes color every 10 seconds. (Extra credit – 5 points: a clock should display time elapsed).

Part 2 (20 points): Complete a short write up (2-3 pages, double spaced) which answers:

- Why did you choose the engines you did? Would you use them again for a similar game?
- What were the strengths and weaknesses of each engine that you used?
- How did you create your assets?
- How did you approach the logic problems (scripting)?
- What were problems that you encountered? How did you work around these issues?

Extra Credit (2.5 points each):

- What is the fastest car in Stunt Playground, and what is its speed (± 5 m.p.h.)?
- What is the money value awarded to the player for destroying a bomb in the open-source space-shooter Vortex?