JAKE’S DECLASSIFIED
125 SURVIVAL GUIDE
How to make awesome games and not go crazy
ABOUT ME

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• 4th Year BS/MS Student
• Spring 2014 – Vein: Rivers of Blood
• Summer 2014 – Xbox: Team HEMI
MY GOD! WHAT HAVE I DONE?

CSE 125 is Hard (But totally worth it)!

• One of the most work-intensive undergrad CS courses
• No Base Code, No right or wrong answers
• You get out what you put in
  • There’s always something to do
  • The game is never done until it’s done
• It’s a group effort
GOOD NEWS

VIDEO GAMES
LET’S GET IT STARTED

Brainstorm
• Come up with a few ideas
• Discuss them, pros, cons
• Pick something everyone likes

Think about
• Gameplay
• Presentation (15 Minutes)
• Ease of Development
WE’RE ALL IN THIS TOGETHER

Split up Roles
• Graphics
• Networking
• Gameplay

Don’t get married to one job

Pair programming is great!
LIFE IN THE FAST LANE

Get the core working ASAP
- Render a primitive
- Network two clients
- Load a model

Ideally want fast iteration cycles, add things quickly
TAKING CARE OF BUSINESS

Version Control:
• Work Locally, store remotely
• Commit early, commit often
• ALWAYS have a stable branch, do changes in feature branches and merge them in

Work in the Labs
• Schedule time when several team members can all work in the labs together
THE SECRET

Have meetings often and keep them short
• Meet multiple times per week (in person)
• Discuss plans and issues
• Reassign jobs or even roles
• Have concrete work items after every meeting
• Don’t get sidetracked
• Don’t let anyone fall behind
THE WORLD’S SIMPLEST GAME

```java
while (true) {
    update();
    draw();
}
```
GRAPHICS

DirectX

Windows Only (also Xbox, but that's not really an option)
Industry Standard
Lots of support and examples
Built into Visual Studio (great tools)
Does more than just graphics
Better Shader system (Compute!)
Quirky if you've taken 167

OpenGL

Cross Platform
Wrappers for every language
You probably used it in 167/5
Only option for Mobile or Web
Lots of new attention with Steambox
PRO TIPS

Use Vertex Buffers for speed

Pass by Reference

Use meaningful names and have meaningful comments

Use config files so you don’t have to recompile for small tweaks

Code warning-free

Load everything when the game starts, free it when the game ends (don’t call new in the game loop if you can help it)

Keep track of hackey fixes so you can go back and fix them later
HELP! I’M STUCK!

Talk to your teammates
Talk to your classmates
Talk to me!
Talk to Geoff!

Lots of great online resources (graphics, collisions, game logic, asset management, etc.)
HAVE FUN!

You have awesome teammates and are working on an awesome project, make the most of it!

GOOD LUCK!