



# Ready Set Go!

Get started writing real games

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# Overview

- Tools
- Books
- Resources
- Design and Coding
- Demo – build a game right now
- Data structures
- Methodology
- What you know

# Prerequisites

- You know how to read, write and do arithmetic, right?
- You enjoy building games, right?
- You know how to program, even a little, right?
- You are creative, right?

# Prerequisites

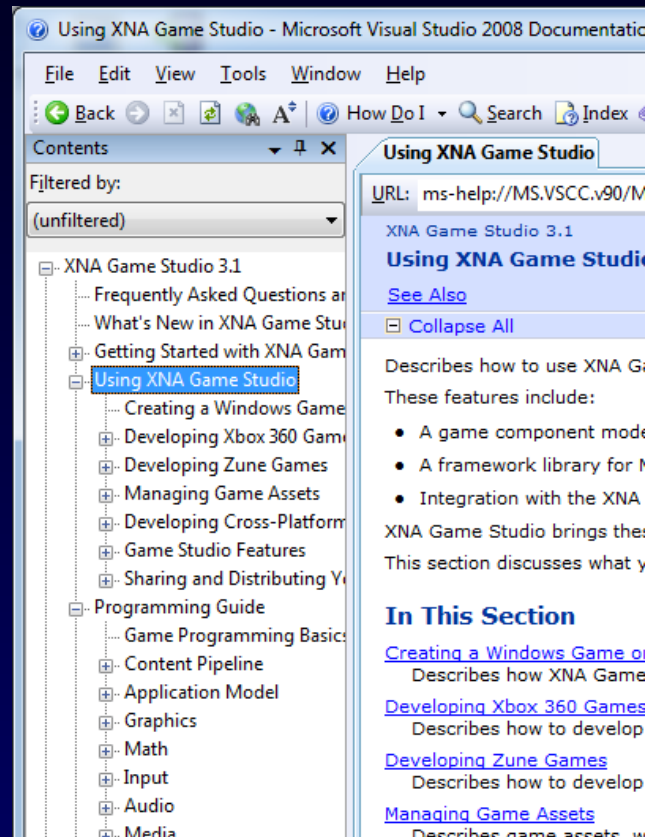
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- You enjoy building games, right?
- You know how to program, even a little, right?
- You are creative, right?
- You are not lazy, right?

# XNA Development Tools

- Visual Studio Professional 2008
- XNA [3.1](#) or [4.0](#)
- 3DSMax 2010 (if you have money)
  - I have heard there are free edu licenses now?
- Blender (if you don't have money and have time to learn)
- Photoshop (if you have money), Paint Shop Pro (on the cheap), Gimp (Free)
- Git
- Notepad++
- JigLibX if you need physics
- XNAnimation if you **NEED** animated models (and want to get bogged down on your first few games)
- Xnua (via [PantherEngine](#)) if you want a scripting language (Lua)

# Look it up!

- Visual Studio Help/How Do I is a key resource
  - Almost everything I know about XNA came from here.

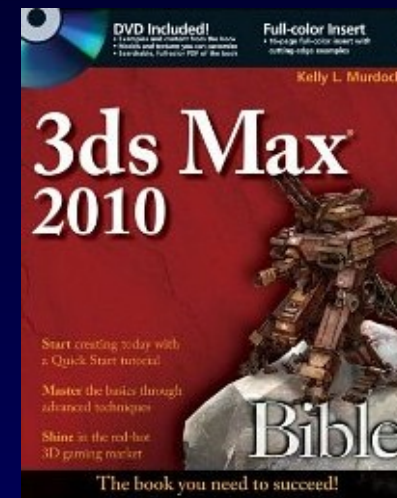
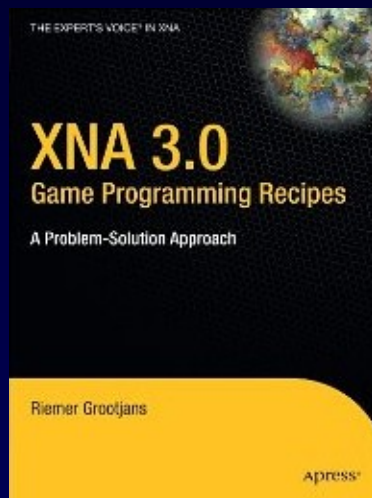


# Look it up 2.0!

- I use Google and msdn constantly.
- If only I got paid every time I Googled “[msdn dictionary](#)” (Dictionary is a .net class)
- If you don't understand a compiler error, Google it!
- If you get stuck on a syntax issue, have a friend look at it.

# Books

- O'Reilly Safari is my friend (\$9.99 5 book shelf)
  - <http://my.safaribooksonline.com/>
- Other XNA books I use



# The language is easy, the API is hard

- You'll spend 10% of time on Language and 90% on API.
- Other platforms (API's) I've learned and where.
  - (Lamp) - Linux, [Apache](#), [MySQL](#), [php.net](#),
  - [ActionScript](#)
  - [Java](#)
    - [Android](#)
  - [Amazon EC2](#)
  - [Facebook](#)
  - [Dojo](#) (used a Safari book to learn JavaScript)

# Design

- I like a one page initial design
  - If I'm working alone this is typically kept in my head
- Only design enough to get a working shell of a game or game mechanic working in a few days.
- For your first dozen games, do 2D or very simple 3D games.
- For your first six games, keep the camera in a fixed location.
- Add quirky behaviors and keep it fun.

# Coding Rules

- Don't start with a blank page.
- Write you next game using your current game
  - Reuse Reuse Reuse.
- Add comments and method description headers
  - The code NEVER describes itself in 6 months.
- First, make it work. Then if it's slow tweak it. Don't worry about speed on your first pass. You'll get good at this as you gain experience.
- Find a partner, but don't wait on them and tell them not to wait on you.

# Demo

- Build a game using C# and XNA 3.1 (in 20 minutes...)
  - It's best to have a goal and a deadline!

# Data structures

- Keep it simple
- Arrays are your best friend
- Dictionary is extremely handy
- Talk it over with friends
- Don't over think.
- Encapsulate 'like/similar' data with classes
- Rewriting is a necessity. You'll do better the second time, but don't wait for perfection to get started!

# Development Methodology

- Agile
  - Always have a working game
  - Design as you go
  - Always have a working game
  - Make small incremental changes
  - Always have a working game
  - <http://agilemanifesto.org>
    - Individuals and interactions over processes and tools
    - Working software over comprehensive documentation
    - Customer collaboration over contract negotiation
    - Responding to change over following a plan

# You already know a ton

- You know how to read
- You know how to write
- You know how to do math
- You know how to use Google
- You probably know a lot more about game programming than you realize.
- You have everything you need.
- What are you waiting for?

# What? You need more incentive?

- According to Cat Kocher, Sr. Internship Specialist at Blizzard, Blizzard is “Looking for students who seek and complete gaming projects outside of class time, or go above and beyond with their class projects – game development experience is required, but we expect it won’t be paid... personal and class game projects are key to being noticed!”

# Use your skills

- Panther Games Gauntlet
  - June (individual games)
  - July (teams of 2)
  - August (design challenge)
- All game genres and platforms welcome\*
- Contact [boyd108 -at- mail.chapman.edu](mailto:boyd108@mail.chapman.edu)

\* except Pirate Ninja Aliens



**Panther Games**  
Presents  
**The 1st Panther Games Gauntlet!**

This summer, whether you're on campus or not, join your fellow game developers, programmers, artists, level designers, character artists, scripters and game players in creating the very things you love to play - video games! The plan will be:

- 1. June** - Develop a game on your own! Using whatever engine and tools you want, whatever assets you can scavenge, build a game on your own and showcase where your talents lie! You'll have four weeks (that's 28 days for the non-math thinkers out there) to develop, build, test and release your game. At the end of June, everyone will have a chance to play each others' games and find out who they want for their team in July!
- 2. July** - Develop a game with a partner! Put your head together with one other person and build a game. We'll vote on a genre (pirate/ninja/aliens will not be an option...) and let the teams decide their game style! You'll have four weeks again, but this time your manpower has doubled. At the end of the month, every team will have a chance to play each others' games.
- 3. August** - Game design challenge! Make up teams of 1-4 and develop a game idea to potentially pitch to a company. Your team will need to develop a game design document in full and build at least one playable sample level of the game. The team with the most complete design document, polished sample level and best game idea will win the title of Panther Games Gauntlet Champions!

If interested, please email Chris Boyd at [boyd108@mail.chapman.edu](mailto:boyd108@mail.chapman.edu) to sign up. You don't have to be on campus this summer nor do you necessarily have to be a Chapman student (graduating seniors, friends, etc. may participate).

# Summary

- You have the tools
- You have the time
- You enjoy building games
- You have the knowledge
- You have the incentive
- What are you waiting for. Build some games this summer!
- These slide notes are already posted to <http://www.gamedev360.com>