HOW TO MAKE YOUR OWN GAME, BIG OR SMALL

Presented by Erik Briggs

Big or Small doesn't matter

"You have to measure your success by the way your audience responds to your games. No matter how small that audience is, it's yours. Your game is part of the lives and the memories of those people in a way that *WordPerfect* or *Lotus 1-2-3* or *Windows* can never be."

- Orson Scott Card

Are you a dreamer?

"Dreams make you click, juice you, turn you on, excite the living daylights out of you. You cannot wait to get out of bed to continue pursuing your dream. The kind of dream I'm talking about gives meaning to your life. It is the ultimate motivator."
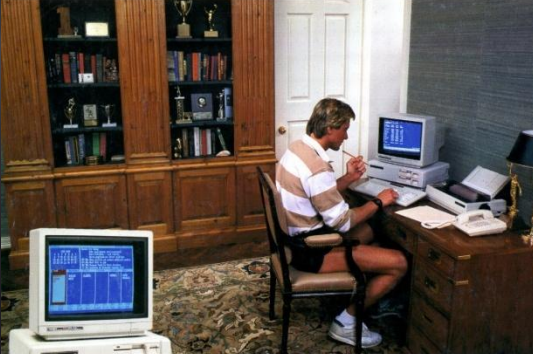
- Jim Collins

My Background

- First computer at age 5 (Texas Instruments)

- First PC at age 8 (Tandy 1000 sx)

My Background – cont.

- Atari

- Nintendo

- Super Nintendo
- On, and on, and on

My Background – cont.

- I knew early that games were something I could really love
- Games almost prevented my graduating High School (Ultima Online)
  - I learned the danger of them
  - Was intrigued by "addiction"
- Even when I lived in the Philippines, and had no access to games, they still made an impression
- Studying Psychology only helped cement my interest in games
  - Many aspects of game design tie directly into my field of choice
- In 2004, I Beta-Tested a game I will never forget…

Project Wish

What is it?

Intro to the Project

"Project Wish is an ongoing project to develop an EMMORPG based on the spirit of the now-defunct game, Wish. We are in no way affiliated with Mutable Realms, nor are we trying to copy or reverse engineer their game.

This project is following the spirit of what we feel Wish would have brought to the MMORPG genre, had it been finished. That being said, everything in this project is 100% our own creation. "

Project Wish – cont.

- How it began?
  - There was this game we were beta-testing…
  - It got canceled?!?!?!
  - We weighed our options
  - The adventure began in Jan. 2005
  - Accepted applications
  - Met in IRC and MSN

The PW Story

- Website came first (forums)
  - Place to gather
  - Forums are commonplace and comfortable
- Divided our talent into teams and started researching
  - Chose Ogre 3d due to community, progress, track record
- Leaders made choices
- We had frequent meetings to stay in sync
- Over 50 people to start

The PW Story - Hindsight is 20/20

Mistakes from 2005

- 50 is way too many to start with, especially if they are all learning
- No set design, and therefore direction
  - Recreating Wish was not enough
- Too many tools (really for programmers) – non-programmers can't be expected to use programming tools
- Too many egos – lead to fights
- Website was lacking – forums weren't enough
- Leadership was inconsistent
- People came and went as they pleased

The PW Story – Revival in 2006

- New Website (CMS)
- New blood
- New lessons learned
- New direction
- Old blood returned
- DWARF
  - Which lead to much more

The PW Story 2007 - Now

- More dedicated people joined, not just the standard high turnover
- Gift of hindsight led to new focus
- Synergy – team thrives on progress from any front
- Design is documented
- More careful recruiting
- Team is more streamlined, with less bloating

Recap - When the journey began…

- **What was it in 2005?**
  - Time to learn
- **What was it in 2006?**
  - Time to decide
- **What was it in 2007?**
  - Time to prove
- **What is it now in 2008?**
  - Time to step up

Lessons - The Keys to Consistent Progress

- Set achievable goals (with deadlines)
- Make consistent (scheduled) progress/updates
- Keep motivation high
- Give yourself multiple tasks to avoid burnout

So, what are your goals?

- Springboard to break into the biz!
- I like _____ (fill in the blank)
  - Art (Concept, Modeling, Texturing, Animation, Interface, Web)
  - Programming (Tools, Game engines, AI, Networking, Logic)
  - Audio (Foley, fx, Composing themes)
  - Writing (Script, back-story, dialogue)
  - Design (not just ideas, the big picture)
  - Management/Leadership
- Start a game company
- Just to have fun and learn something new
- Hanging out with friends

Turn Goals Into Reality

- You need to take action!
- Learn all you can about your area
- Create a portfolio:
  - Consisting of your best work (hopefully professional quality)
  - Setup a website for it (mainly artists)
- Understand the process well enough to impress

Best way to learn to design

"The best way to move game design forward is simply to develop, design, and construct a game. And make sure you finish it. No matter how bad, how simple, how slow your finished product is, you will learn an immense amount simply by building a game on your own.

"Read, experiment, design, develop, play, and most important of all, have fun. In the end, having fun is what games are all about."

- Ben Sawyer (adapted)
From "The Ultimate Game Developer's Sourcebook"

Programming

"Ideas are cheap. A dime a dozen, as they say. It's the implementation that's important! The trick isn't just to have a computer game idea, but to actually create it!"

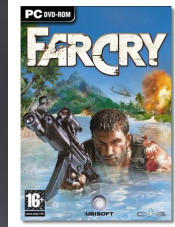- Scott Adams

Examples

- Good
  - Crytek (Far Cry)
  - S2 Games (Savage, 2004 IGF Grand Prize)
  - Project Offset – now with Intel
  - Shattered Reality Interactive (Kaos War) – in progress
  - Popular Mods:
    - Trauma Studios (Desert Combat for BF1942)
    - Threewave (CTF for Quake)
    - NWN
  - Crayon Physics (2008 IGF Grand Prize)
  - Team Fortress Software
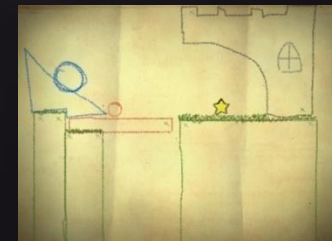
Examples – cont.

- Bad
  - The one(s) you never even heard about
  - Money-motivated games (not idea or innovation-driven)
  - Those who suffered from poor leaders/ decisions (Mourning, Irth)
  - Limbo of the Lost

What is the vision?

"A visionary [game] doesn't simply balance between idealism and profitability: it seeks to be highly idealistic and highly profitable … it does both to an extreme."

- Jim Collins

Indies Must Ask Themselves

- Is making a game possible?
- Is getting funding possible?
- Is publishing a game possible?
- Am I making a game or a company?

The minute you believe "No" is the answer to any of these questions is the same minute it becomes true.
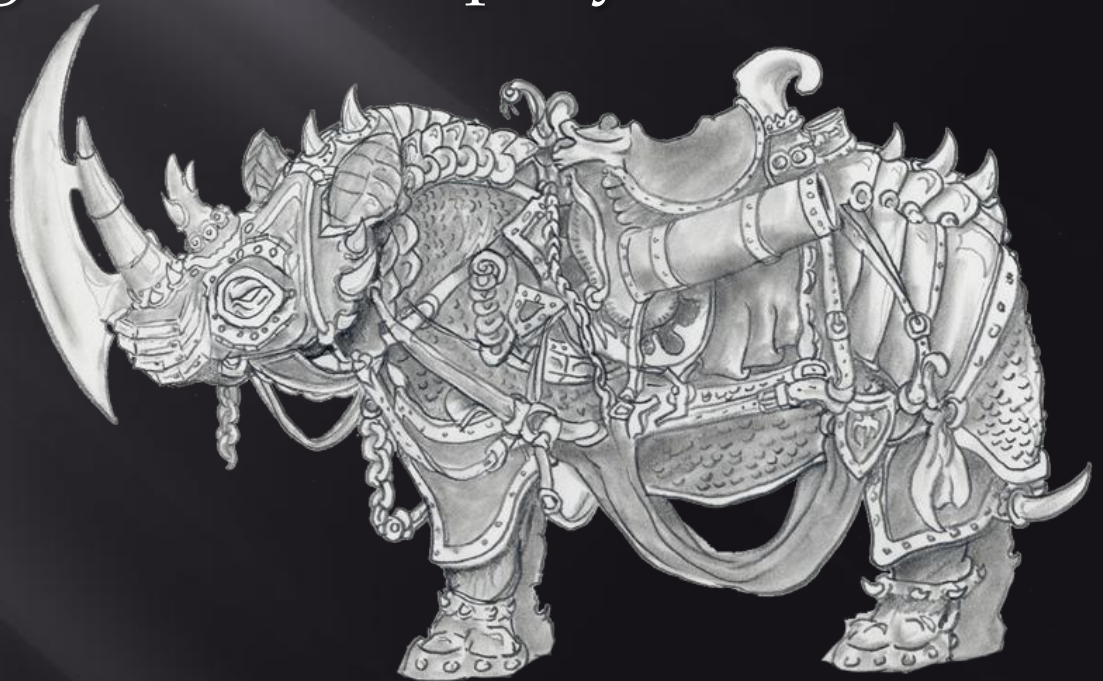
Game vs. Company

- Game
  - Starts with an idea/concept
- Company
  - Starts with people

"In fact, leaders... that go from good to great start not with '**where**' but with '**who**'. They start by getting the right people on the bus, the wrong people off the bus, and the right people in the right seats... first the people, then the [idea]."

- Jim Collins

Dreaming is not enough!

"The critical ingredient is getting off your butt and doing something. It's as simple as that. A lot of people have ideas, but there are few who decide to do something about them now. Not tomorrow. Not next week. But today. The true entrepreneur is a doer, not a dreamer."

- Nolan Bushnell, founder of Atari and Chuck E. Cheese's

Where to begin?

- Find what motivates you, find your passion!
- Don't be afraid to try and fail.
  - "The Only True Failure is the Quitter" – Unknown

- Google – <u>it is a skill</u>
  What you are looking for exists, you just have to know how to find it
- Peer-support – 2 is better than 1
- Learn, learn, learn, learn, learn

Resources

- Gamedev.net
- Game Engine websites (Torque)
- 3d-engine sites (Ogre3d.org)
- Gamasutra
- Tom Sloper's Advice site
- IGDA
- DevMaster.net
- XNA

Tools of the trade
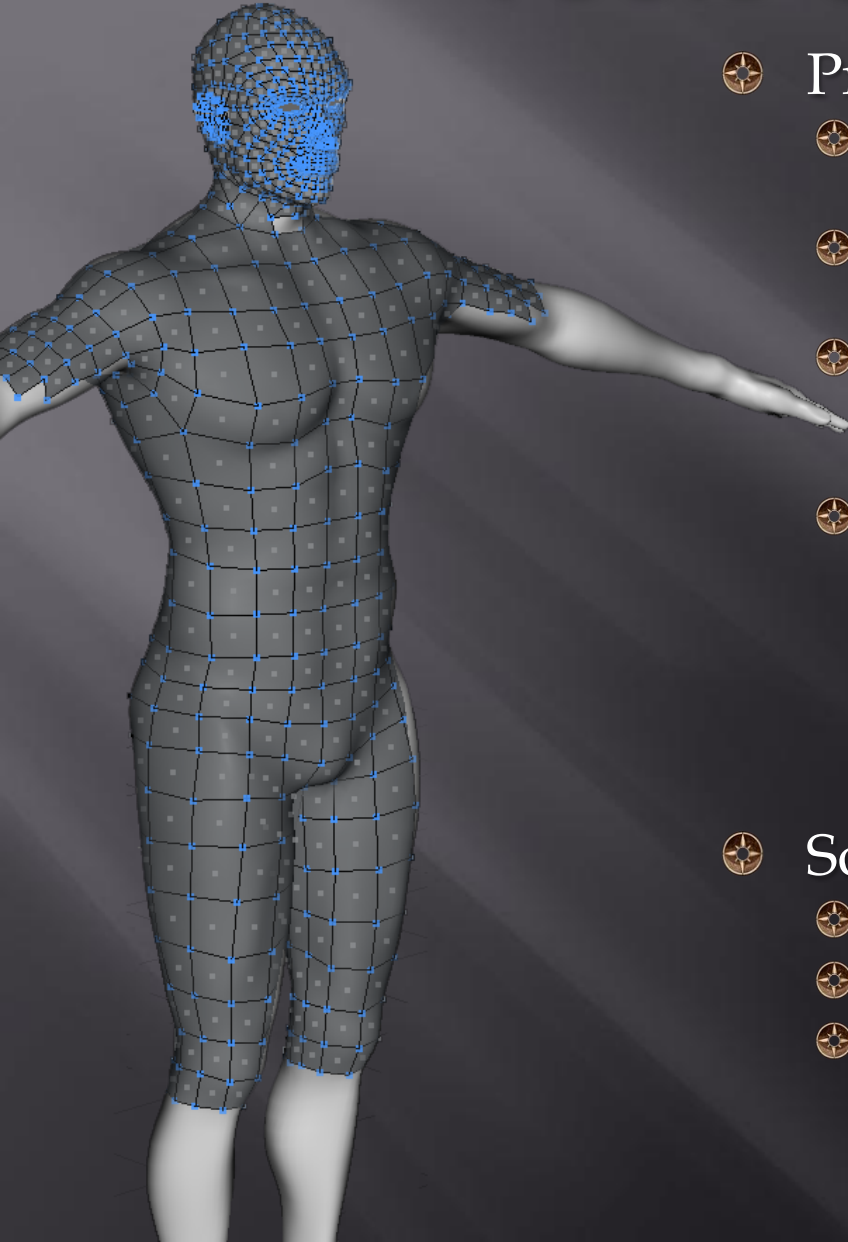
- Programming
 - MS Visual Studio Express Editions (C#, C++, etc.) – free and not (Standard, etc.)
  - Open Source world (developing in linux) – (Eclipse, Codeblocks, etc.) – free
  - Middleware
    - Most anything you could want (AI, Sound, Networking, Tree rendering, lots more)
  - Engines (full-blown, specialized, etc.)
    - UE3
    - Offset
    - Ogre 3D
    - Torque
    - CryEngine
- Sound
  - Audacity – (free)
  - Fruityloops – (cheap)
  - Reason, Cubase/Nuendo, Sound Forge

Tools of the trade – cont.
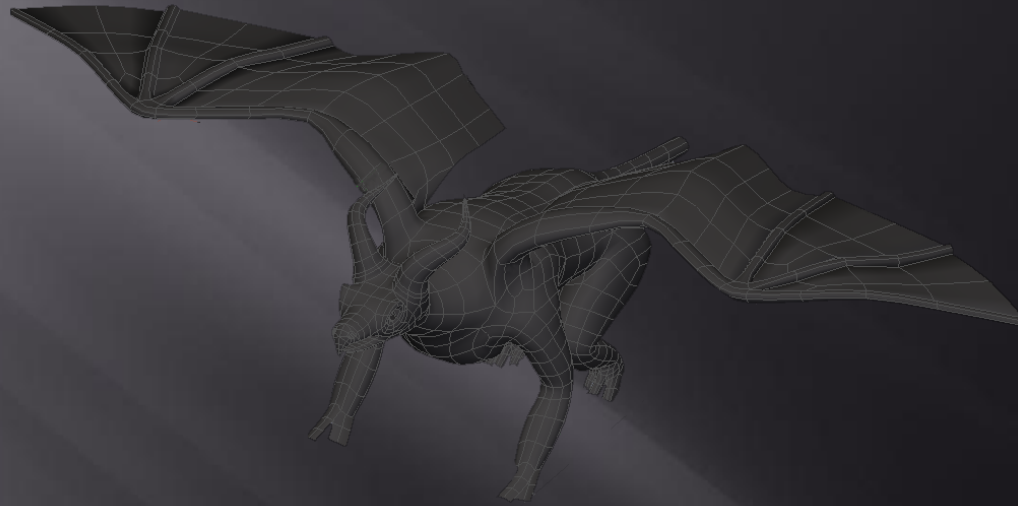
- Design
  - <u>Freemind</u> – Mindmapping software – Open source (free)
- Art
  - <u>The GIMP</u> (OS Photoshop clone) – free
  - <u>Blender</u> (OS Modeling/Animation) – free
  - <u>XSI ModTool</u> – free
  - Big boys: Photoshop, Painter, 3dsmax, Maya, XSI, Modo, Silo, Zbrush, Mudbox, etc.
  - <u>Crazybump</u> (was beta), <u>Topogun</u> (in beta)
  - <u>MapZone</u> – texture creation
  - <u>Wacom</u> tablets

The workstation - 2005

- Hardware
  - 1 x 17" LCD monitor
  - 1 x computer
- Software
  - MS Office
  - Blender

The workstation – 2007

- Hardware
  - 2 x 19" LCD monitors
  - 1 x computer
  - 1 x server
  - 1 x external HDD
- Software
  - ZBrush
  - Hexagon

The workstation – 2008

- Hardware
  - 2 x 19″ LCD monitors
  - 1 x 17″ LCD
  - 1 x laptop
  - 2 x computers
  - 1 x server
  - 2 x external HDD
  - 1 x tape backup drive
  - 1 x Wacom Tablet (9″ x 12″)
- Software
  - ZBrush
  - Hexagon
  - Photoshop
  - Topogun
  - XSI
  - MS Visual Studio
  - Freemind

The Process Begins - small

- Many small complete games will look better on a resume than a few larger incomplete games

- Petri Purho is still a student at Helsinki Polytechnic in Finland
  - He made Crayon Physics in 7 days

- There is something to be said about making "simple" games.
  - Check out: http://www.experimentalgameplay.com/

Getting Experience

"We believe that, as game developers, there are many ways of improving our craft. Reading books, attending seminars, enrolling in university programs, enlisting the help of a mentor — all of these are worthwhile and can contribute to the breadth and depth of one's game development skillset. In the end, however, there's just no substitute for experience."

-Ad Lib Game Development Society
(ALGDS)

Small vs. Large Projects

- Small projects start with a specific, reachable goal
- Large Projects goals are lofty, and tend to take much longer
- More people = more variables
- Small projects are typically programmer-heavy
- As projects grow, the ratio of programmers goes down
- Projects following "programmer-centric" processes (Agile for example) no longer see the benefits
- Artists, Writers and Sound/Music team members are not programmers
- Real Life happens to both small and large projects

The Process Begins - LARGE

- Ambitious projects are a dime a dozen, but don't let that stop you
- Starting with the proper people is more important than a Design Document
- Don't be afraid of Open Source libraries – they can make your life much easier (Don't let the ambition stand in the way of common sense)
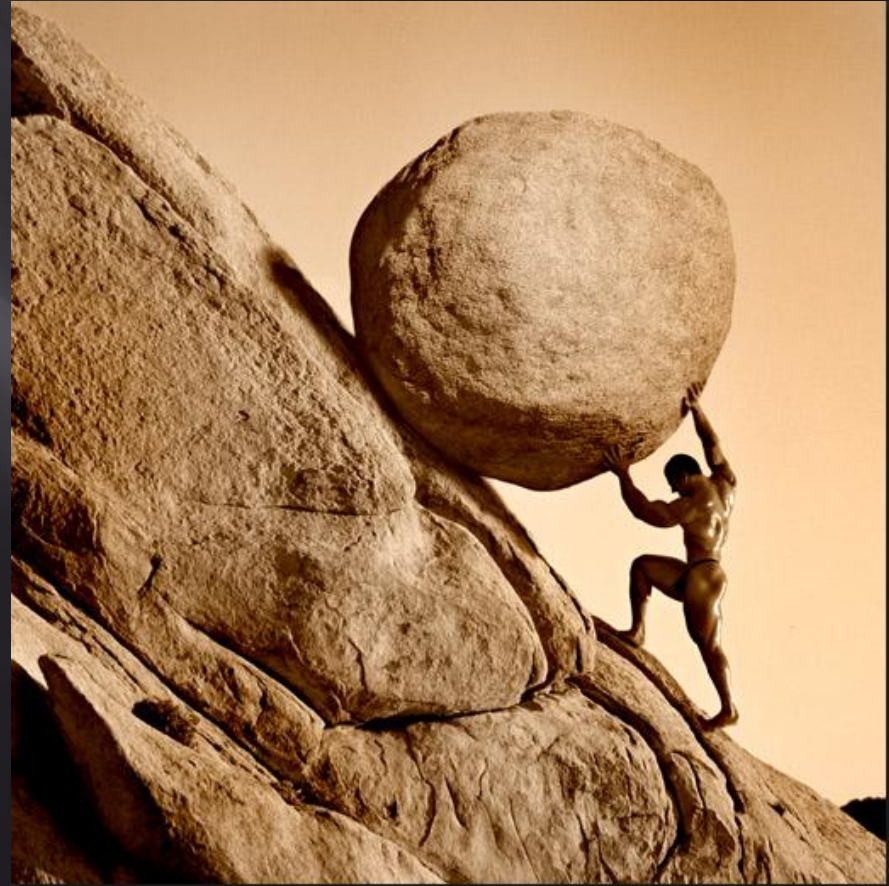
Custom Tools

- Large-scope = More work
- Totally engine-dependent
- If you go Home-grown, you have to be ready for the extra work
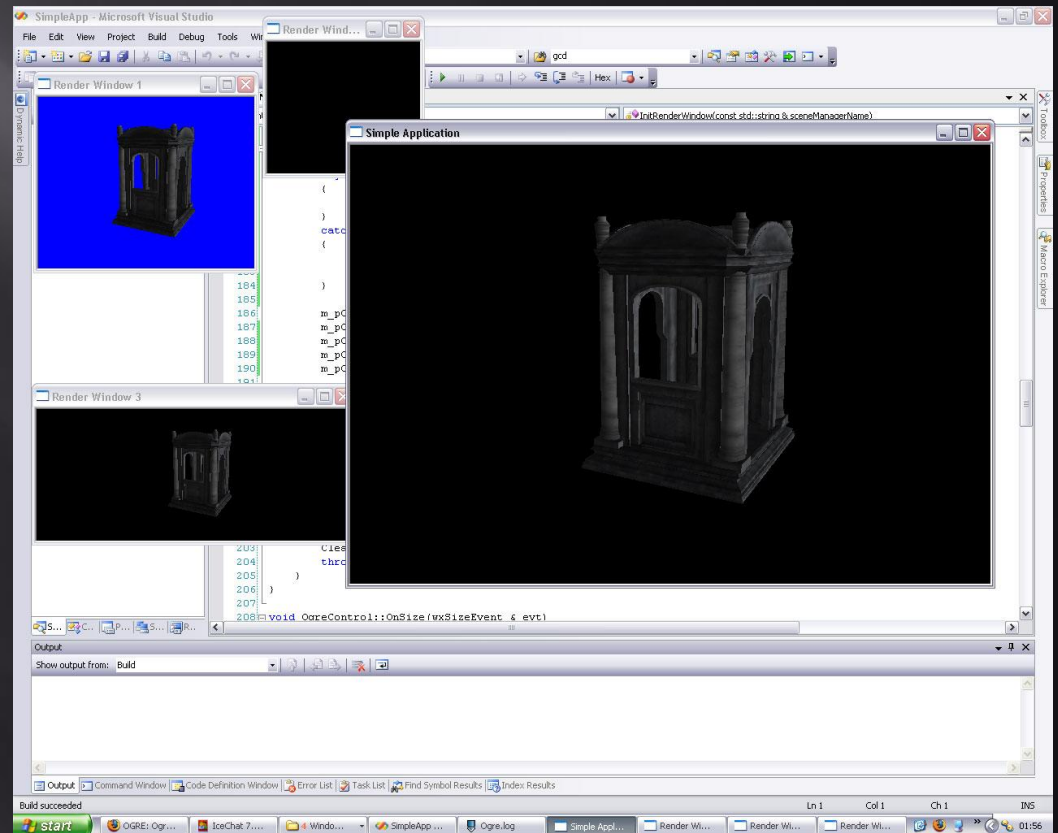
Helpful Tools

- Server(s) – Hosting for Website, Files, Source Code, etc.
- Source Control – CVS, SVN, SourceForge, Perforce, etc.
- Wiki – Living documentation, versioning, collaborative
  - Mediawiki (Wikipedia), DokuWiki, DekiWiki
  - Trac – Integrates with SVN, does bug tracking and tasks
- Communication – IRC, MSN, Ventrilo
  - IRC is better for keeping record, but is slower than real-time voice
- Website – Acts as your interface with potential recruits
  - Using a CMS will let you spend time on actual work
  - Public and Private areas are essential
  - Great place for interviews across time-zones
  - Will build a community around your game (via updates, blogs, news, releases)
- File Repository – accessible to all, reliable (backed up)
- Bug Tracking - Bugzilla
- Task Management – Agile Track, Trackit, XPWeb

Management

- Definitely not trivial
  - Shouldn't be an afterthought
- Should be there whenever needed
- Should be knowledgeable in every process
- Dual/Multiple Roles is possible
  - BUT – Managing can become the unwanted burden

Remember

- Every Game/Project is different
- Comparisons should be used to help/improve, but never to bash
- Keep your eye on the prize, stay motivated

Advice

- You <u>will</u> make mistakes, accept it
  - Mistakes only need become regrets if repeated.
- Grow a thick skin
  - If you can't take the heat, get out of the kitchen
- Grow used to things being hard
  - It's much easier if you enjoy being challenged
  - This part is no different working in the industry or at home

Don't Forget to have a life