

# Intro to Game Design

---

Benny answers your questions  
(basically rambling on and on for a couple of hours)

# People from Marc's Class

- if you're not in my class... please give your seat up for someone that is (they're usually a couple of minutes late)
- Marc forgot to have you ask questions to me... that's ok though because I ran out of time/steam while making this.

# Bare with me...

- I didn't have a lot of time to put this together... I've been working mad hours.
- I didn't get everyone's questions in
  - If you submitted a bunch, chances are only a few are in
- I tried to discard questions that would take too long to explain
  - Mainly because I'm working mad hours. :)
- I'm sleepy

I think it would be really interesting to hear a lecture about something that nobody outside of the industry could talk about. Something like words of wisdom you have collected, or the general sort of experience to expect. One important challenge is just finding a job in the industry. You have been on both sides of that situation in both acquiring a job and working at a company that hires new employees. Any direction on that could be invaluable to us as future inexperienced game designers looking for a first job.

# Finding a job, direction, etc

- You'll learn later that I got really lucky when I got into the industry... I've stayed in the industry by busting my ass for the last 8 years
- As a senior in the company, I do a lot of interviews... Many of the questions answered in this presentation go over some of the things I look at when interviewing.

To what extent are designers limited by the publishers/other higher-ups?

# How are designers limited?

- Somewhat, and it depends on the project
- Times when limitations are severe:
  - When the project is considered "high profile" at the company or publisher
  - When the developer hasn't built up a reason for the publisher to trust them
  - If the producer thinks they are a designer
  - If you are working on a licensed property
  - Etc...
- Times when limitations are not so severe
  - Basically the reverse of "severe"
- What kind of limitations are there?
  - Features may be cut because they are considered to be too "scope-y"
  - Features will be compared to the licensed property
  - Features may be cut in favor of other features
  - You may be told what "must be included/added" in the game's mechanics

# How are designers limited?

continued...

- These lists are far from being exhaustive, but should give you a good idea
- Take aways:
  - Be open to suggestions (NUMBER 1 TAKE AWAY - You can be wrong!)
  - Be ready to argue your stance (So long as you're not just being stubborn)
  - The license holder has final say

Is it true that being part of a major development company means less room for personal creativity

or...

Could you cover the topic of why  
someone might want to consider  
becoming an indie game developer?

# Indie vs Publisher Owned...

---

- Does this mean:
  - "Will I be able to come up with my own design for an original IP and get it published?"
  - Or "will I be able to be creative?"

# Indie vs Publisher Owned...

## continued...

- If it means "Come up with my own design..."
  - Not necessarily
  - You should always be thinking of interesting designs for games. Those you are particularly fond of, you should make a prototype (as small as possible) to show off
  - All game companies welcome this type of work, the problem is that it's difficult to get past this point because you really need to sell your game and for every 90ish designs, you probably only have 1 good one.
  - If you're a designer at an indie developer (as VV once was), things are pretty much the same
  - If you're filthy rich, you can make your own company and make whatever you please
    - Chances are you'll lose all your money.
    - Or you'll end up turning over most of your IP rights to a publisher
      - At that point the publisher will be calling the shots.
  - Eventually you'll be noticed as an amazing designer, the company you work for will have proved themselves to their publisher, and you'll get the chance to work on something truly unique.

I think you should teach about the different specialists within the gaming industry cuz I don't really understand if game designer is the job title or if it's just the generic title for say a level designer, environment designer, balance designer... and stuff like that... What does the game designer really do that isn't covered by the other specialists?

# Different Specialists

- I can talk about those at VV, as I have been there for 8 years and haven't been anywhere else:
- Titles
  - Design is broken up into:
    - Design Co-op / Intern
    - Junior Designer
    - Designer / Junior Tech Designer
    - Senior Designer / Tech Designer
    - Senior Technical Designer
    - Management

# Different Specialists

continued...

- Art is broken up just like design
  - Except: no Co-ops
- Engineering is broken up into:
  - Engineering Co-op / Intern
  - Junior Engineer
  - Engineer
  - Senior Engineer

# Different Specialists

continued...

- Within a project, different roles exist
  - Design:
    - Creative Design Lead (larger projects)
    - Design Lead
    - Design Support (not all projects - this is a tech designer)
    - Designer (on smaller projects)
    - Level Designer (missions, etc)
    - Scripter (usually level designer does this, unless your level designers are artists)
    - Data Designer (enemies, avatars, misc tuning, etc)

# Different Specialists

continued...

- Art:
  - Art Director (larger projects)
  - Lead Artist
  - Level Artist
  - Animator
  - Character Artist

# Different Specialists

continued...

- Engineering:
  - Lead Engineer
  - All the other engineers usually get bumped around
  - sometimes you'll have engineers settling into specific roles:
    - Graphics Engineer
    - UI Engineer
    - Boss Engineer
    - Etc...

# Different Specialists

continued...

- You are best off as a designer if you get your hands dirty in a variety of areas... Designers that are good at anything you throw at them are much better than those who can only do a specific job.
- Make sure you are awesome at least one role, but also make sure you can do anything you're given.

I'd like to know more about how teams work together (particularly the valve cabals if you know anything other people wouldn't)

# How teams work...

- I don't know anything about the valve cabals
- Much of the industry is turning towards the Scrum process
  - It's complicated; you should get a book on scrum... It'll be boring!

I'd like to hear about the interactions between the various members of a team making a game. How often do the programmers, artists, designers, etc. meet up, and how exactly do they decide what to do next

# Team Interactions

- They meet up A LOT
  - In the scrum process, you might meet up at least once a day
  - Even when you're not in the scrum process you might meet up at least once a day
- In my current project, I meet with:
  - my team once a day (currently: mission polish - previously different missions or mission support)
  - mission teams at least once a week
  - AI team at least once a week
  - Misc conversations with engineers or artists - several times a day
  - Entire team - once every 3 weeks

# Team Interactions

## continued...

- How do they decide what to do next?
  - The team leads, producers and other higher-ups decide the course of the project and do the initial planning
  - Out of this comes
    - Milestones
    - Schedules
    - Tasks
    - Sometimes features are cut here
  - The content developers (designers, artists, engineers) give their time estimates for specific tasks and then work on them in priorities usually given by the leads
    - Schedules and Tasks change depending on this
    - Sometimes features are cut here

In your experience in the industry, how important is it to be multidisciplinary? What are good multidiscipline skills to have? For example, does a designer with art skills fare better than designer with programming skills, or vice-versa?

# Important Designer Skills

- Design skills (obviously)
- Coding skills
  - Scripting
  - C++
  - Even C#
- Level Editors
  - 3D Studio Max
  - Unreal Ed
  - Aurora
- Read Chapter 1 (2 and 3)

How much control does the lead designer have over the direction of a game

Or...

In your work, at a smaller company like Vicarious, how much artistic license are you given, namely over new projects? For example, if you were to present a prototype for a new game of your design, might the studio be receptive, or do your higher goals always come down from the publisher?

# Design control

- Quite a bit, but it always depends on the project, title, etc
- For example, as lead designer on Tony Hawk 4 PSX, I kicked the other designers off the team and did everything myself...
  - Artists and the Engineer on the team gave feedback and suggestions
  - Activision gave feedback and suggestions
  - I had final say
- Sometimes the Publisher has certain key goals they want for the game
  - They usually get their way
  - Don't be afraid to push back though
  - Always remember, they sign your check (even if you're an indie developer!)

I want to know what the details about "game testing" are. If I'm a designer would I be able to easily get outside people to test a working demo of the game. If I want to be one of the test dummies is it possible to get paid enough to make a living? Or in the real world is it completely different?

# Game Testers

- There are two different types of testers
- QA testers
  - I have no clue how much they make... I think it's slightly above minimum wage, but it might be more/less
  - They work many hours (up to 40 or more depending on the project, or period within the project)
  - Sometimes teams run in shifts (day, evening, red-eye)
  - Overtime sometimes!
  - QA testers have 1 main goal - bug test
    - Find bugs in the game
    - find them again and again and again
    - write up a bug report
      - give specific steps on how to reproduce the bug
    - Sometimes this means sitting there for 8 hours opening a level over and over and over again.
    - Like I've said before... This is not like "Grandma's Boy"

# Game Testers

## Continued...

- Play testers
  - Play testers are not paid
  - You can have your friends sign up to be in the queue for play testing... They'll be called if you're looking for people in their demographic
  - They play for an hour or two and are watched during play and are interviewed before/after (sometimes the interview is basically just filling out a survey)

I was wondering if you could talk about what kinds of things would be best to work on to get into the field. I'm a programmer myself, and I was wondering what kinds of projects I should be working on now to build up like a portfolio for when I try to get a co-op or internship. Like for example I've made my own scripting language in C# based on C#. I just wanted to know what kinds of things I should use to occupy my time.

Or...

What kinds of things are most important to have in your portfolio while applying for a design job?

Or...

How does a designer go about selling himself? If you were looking for a new job at a different company, how would you represent your work from Vicarious? Does a designer have something similar to an artists' demo reel? What would you say is the importance of a professional website for a designer (and do you have one)?

# Getting ready for hire

- For engineers
  - Learn C++ (C# is great for tools.. but games aren't usually made in C#)
  - Show you have an interest in games
  - Play games and dissect them
  - Take a course in AI
    - Then you can talk about an AI project
  - Demos - AI, Graphics, HL/etc... Mods...
  - Better Demo: Small game in your spare time
  - then people can see you've done all aspects -- rendering, ai, player handling, etc

# Getting ready for hire

## continued...

- Design
  - Learn some editors:
    - 3d Studio Max
    - UnrealEd
      - Have examples
    - Never Winter Nights aurora toolset
      - Have examples
    - Flash
      - Have examples
  - These three tools will give you a broad knowledge base, some companies have their own editors so having a knowledge base that covers this wide range is very important... most editors will fit somewhere in here

# Getting ready for hire

## continued...

- Design (continued...)
  - Play games
    - You'll probably be asked "What games do you play"
    - You'll probably be asked to discuss key aspects of those games
  - Pay attention to this class
  - Read the book
  - Read the books I've suggested
  - Read Gamesutra
  - Learn some scripting languages
    - Lua is a good one (make some addons for wow maybe)
  - A fancy website is helpful
    - I don't have one... but I'm not looking for a job

# Getting ready for hire

continued...

- Art
  - Character and Environment Models
  - Animations
  - Textures
  - 2d Paintings/drawings/etc
  - A fancy website to show your stuff off

I'd like to know how new intellectual properties are started. I'd also like to know how one can actually convince a company to approve of a new IP. Basically, what documents are needed, what connections do you go to, and what the overall process is in order to initialize the new IP.

Or...

For the class where you'll talk about anything, I'd really like to know about working with your own Intellectual Property. How hard or easy it is to do, how to go about pitching these things, etc.

# Working on an IP

- You need a pitch document
- You're best to have a prototype
  - paper/pencil
  - flash
  - game maker
  - unreal
  - whatever you can use to show the game off
- Your final project will be a pitch document
  - I'll include a pitch doc from VV that we never published... It's the only one I'm allowed to show
- IT IS VERY DIFFICULT TO START AN IP

I know we were talking about this a little bit after class last Friday, but could you talk a little bit about easter eggs and other fun stuff that you do when making games? How much liberty do you have with this kind of stuff?

Or...

Have you created any Easter Eggs for these games?  
Which of these Easter Eggs were your ideas?

Or...

What Easter Eggs have you included in games?

# Easter Eggs

- There are many I can't really talk about
- I haven't put them in every game
- It's not a good idea to put easter eggs into game content when your game is incomplete
  - Only instances when you have extra time on your hands is it ok
  - Or when you need a freaking break
- Your publisher **NEEDS TO KNOW ABOUT ALL EASTER EGGS**
  - this stuff needs to go through legal
  - Horrible things can happen, you could be fired (hot coffee)
- Some easter eggs from VV
  - Some audio fun
    - Howard Dean Scream
    - Wilhelm Scream

# Easter Eggs

## continued...

- Some of my examples from Spider-Man 2: Enter Electro (ps1)
  - 2nd map
    - Web Yank a bobber in the river - Fish cam with a fish popping out of the water
    - Drop down after you climb half way up the final wall - All street signs change to "benny st"
    - Throw the basket ball into the hoop several times - Hoop explodes (you're on fire!) and a secret costume spawns elsewhere in the map
  - Hammer Head Fight
    - Pick up the closed sign - turns into an open sign
    - Pick up the open sign - turns into a "benny" sign
    - Pick up the benny sign - throw it at hammer head to do A LOT of damage
  - Funny and off-the-hook
    - Quips when climbing over a certain sign multiple times
    - Spidey does a disco dance (with lights) if you webball a specific console enough times

# Easter Eggs

## continued...

- Some of my examples from Spider-Man 2: Enter Electro (continued...)
  - Instant Action
    - Several hidden walkways that do different things on the borders of the city
  - "What If" mode
    - Floating banana takes you to the end of one of the maps (scenic route)
    - Newspapers replaced with banana peels
    - Defeat on difficult - I pop up in the sky and say "thanks for playing"
  - There were many MANY others (at least one per map), but I forget... this was a long time ago
  - The producer wasn't very happy with the number of easter eggs

How game designers usually input easter eggs into their games.

# How to make Easter Eggs

- Have some extra time on your hands?
  - Implement it
    - Script it into your mission
    - Get an artist excited about making an asset for you
    - Get an engineer excited about adding something for you
- Make sure you let a producer know about it

What games have you  
worked on?

# My Games

- “Soon to be” Published Projects as Scenario Team Lead/Mission Support:
  - Marvel Ultimate Alliance 2; XBox360, PS3
- Published Products as Lead Designer:
  - Marvel Ultimate Alliance; PSP, Wii
  - X-Men Legends 2; PSP
  - Spider-Man The Movie 2; PSP
  - Tony Hawk’s Underground; GBA
  - Tony Hawk’s Pro Skater 4; PS1
- Published Products as Design Team Member:
  - Spider-Man: The Movie 3; PSP, PS2, Wii
  - Crash Nitro Kart; XBox, PS2, GC
  - Tony Hawk’s Pro Skater 3; GBA
  - Star Wars Jedi Knight: Jedi Academy; XBox
  - Crash Bandicoot: The Huge Adventure; GBA
  - Frogger: The Great Quest; GBA
  - Spider-Man 2: Enter Electro; PS1

# My Games

continued...

- Publish Projects as Design Contributor:
  - SpongeBob Square Pants: Revenge of the Flying Dutchman; GBA
  - Tony Hawk's Pro Skater 4; GBA
  - Tony Hawk's American SK8Land; NDS
  - Disney Extreme Skate Adventure; GBA
- Unpublished Projects as Design Team Member:
  - Unannounced comic book related sequel; PSP, PS2, Wii

How did you get into the  
industry?

Or...

The main thing I want to learn is how do you get started in the industry? I know there are hundreds of different jobs in the game industry, and I want to know how you found the one that you wanted to work at. Was it purely coincidence or were you out job hunting for that exact job?

Or...

What advice do you have for getting into the industry?  
What was your “big break?” Was *Vicarious* your first gig  
in the industry, or did you work your way through some  
others first?

# How did I get in?

- I got extremely lucky
  - Some art background
  - Took AP art classes in High school
  - My brother-in-law got into the game industry after art school
  - He came to visit and showed me 3dsmax and lightwave
- Some programming background
  - I started playing with 3d art and animation
  - I started programming in Perl, Visual Basic, and mIRC scripting language
- Got accepted into Art Institute of Pittsburgh
  - Parents didn't want me to be a "starving artist", wouldn't co-sign my loan
  - Promised if I went to community college and got straight A's first year, they'd sign
    - I went to community college and got straight A's
      - They still wouldn't sign...
  - Around that same time, my girlfriend broke up with me... I was sad and angry

# How did I get in?

## continued...

- Brother-in-law was now working at VV, they were in need of a scripter
  - He knew I was sad and angry...
  - They needed a scripter on Spider-Man 2: Enter Electro
  - He said "I have a 'FRIEND' that is an awesome scripter"... a little white lie
  - I interviewed for about 30 seconds over the phone, the questions asked didn't make any sense, turned out I knew as much about 3dsmax as the guy interviewing me
  - I got hired on as a co-op, getting school credit
    - Told my parents I'd be back in 6 months
    - Worked as hard as I could to make sure they'd hire me
- Proved myself
  - At the end of SM2:
    - I had developed over half of the level content of the game
    - I had written several tools to help in the development of SM2
    - I made sure my producer knew that I wanted to stay once SM2 was finished

# How did I get in?

## continued...

- They hired me.
  - They then learned that I was somewhat related to my Brother-in-law ;)
- Important: It never happens this way
  - VV was VERY small 8 years ago
  - My brother-in-law was one of the top artists at the company
  - Not having a degree stunted my title growth for several years
  - Like I said... I got very lucky

Could you tell us what your  
typical day at work consists of?

Or...

I think you should go through typical weeks or typical days that you experience, if there is a typical day/week.

# Typical Day

- Wake up around 7
- Get to work between 8 and 9
- Sync and build
- Morning Scrum meeting
- Go to RPI (Tuesdays and Fridays)
  - or Lunch
  - or Lunch Mission Review meetings
- Start working on my tasks
  - Scripting encounters
  - Writing tools
    - Fixing tools
  - Fix scripts
  - Lay out maps
  - Clean up/Polishing maps
  - Implement new scripting language features
  - Implement new object features
  - Boss implementation (script/data/code)

# Typical Day

## continued...

- Sometimes I work on company related things
  - As the senior most Technical Designer, I am in charge of the design team's equipment
  - I own and update the resource tracking system we use at VV (this is my hook... no one else understands how it works... MWAHAHA! Of course I'm good at what I do with other things as well...)
  - Leave work sometime between 6 and 11... Sometimes much later (5am+?)

Is there anyone you need to talk to before you start working on your next project?

# Who gives projects?

- Upper management
  - They tell us what we're working on next
- As a mission support person:
  - I normally come up with things I think need to get done on the current project
  - Sometimes I'm scheduled to do specific things

Are there any decisions left solely up to you?  
Or is everything designated and you just work  
on it? Or do you make decisions as a team?

# Who calls the shots?

- Went over this a little earlier
- Decisions left solely up to me mainly deal with tools and the like
- I normally meet with people for everything else that I come up with
- Sometimes things are designated

# Salaries

Or...

What's the starting salary like? (a.k.a. how long am I going to be paying off those loans?)

# Money

- See the April '08 version of Game Developer Magazine (I couldn't find mine)
  - Average was around \$76k
  - Remember, LOTS of companies in California, New York, Boston, and other expensive areas to live
  - This average number is average across all disciplines, experience, etc
- Starting salaries around here average between 30k and 50k depending on discipline (40k average?)
  - This was a few years ago though...
- Bah... I really don't know
- I started at 27k... Not the best... But I had no degree, and that makes a HUGE difference (probably near impossible these days)

What mistakes have you made? What effect did it have? (i.e. delayed the project?)

# Career Mistakes?

- My personality works against me
  - I'm brutally honest... Sometimes you have to kiss some ass, I'm not very good at this
  - Sometimes this helps the project, but I've made enemies because of this

Have you noticed any mistakes accidentally left in the game after it's been released?

# Shipped Bugs?

---

- This happens all the time
- In every game
- I can't think of any specifics

What are the hours like right before a game is coming out? (In other words, how crunch time does it get?)

# Crunch!

- It depends on the project
  - I've been on projects that had little to no crunch time
  - I've been on projects with mandatory:
    - 12 hour days
    - 7 days a week
    - lasted 3+ months
    - This is the worst case scenario
  - There's normally some amount of crunch time
  - I was at work 16 hours yesterday... I hadn't finished these slides yet either :(

What are the most important coding languages to know for a design job?

# Designer Languages

---

- Scripting Languages (lua, python)
- C#
- C++

What type of games do you typically start out working with?(I.E. platform and genre)

What type of games do you typically start out working with?(I.E. platform and genre)

---

- I don't understand this question

I'd like to hear about careers with this major. Maybe some job descriptions, salaries, job opportunity, location

# Careers

- I already talked about jobs, salaries...
- It's difficult to get into the industry, but RPI will help you get in... Make sure you do good in school and have some stuff to show afterwards
- There are dev studios all over the country/world
- Apply all over the place and get in the door (even if it's some crappy dev studio... you need industry experience!!!!)

I would like to know more about how stuff is advertised and how much influence the developers have in the process

# Advertising

- Not much at all...
- This is normally run by the advertising department at the publisher
  - They'll sometimes make requests that'll keep you at work late at night trying to fulfill

Also, what's the industry's feeling towards DLC games?

# Downloadable Content

- This is very popular... It helps you make money after the product ships...
- Of course you need to focus on making a game that is going to sell a lot of copies so there'll be people to buy that DLC
- And you need to spend time during the development cycle to support it.

I would really like to know a bit more about the artistic field in game design. I was wondering if the artists were just digital artists or if they were really into game designing as well and kind of floated in that direction. Are the graphical/artistic designs a big part of most games and would it also be necessary for the artist side to know a good amount of programming? Usually I look at a lot of the concept art behind games, especially those from Blizzard, but are those actually relevant to the game play or are they more for stories that players might like or get more into?

# Designers as Artists

- It really depends on the dev house... Many dev houses have designers that make level art
- Concept artists mainly only do concept art - they're exceptional at drawing/painting

what was the hardest thing in the games industry for you to get through?

what was the hardest thing in the games industry for you to get through?

---

- I don't really understand this question

Where do all the unused ideas for games go?

# Unused Ideas

- They get archived
  - There's a room of boxes of paper at VV... we don't normally have time to propose new games, so most of those boxes are filled with current games... But there's a few pitches in there
- Ideas for current games that get cut or are not used will sometimes get used will sometimes make it into future titles

How often do people leave studios to go work on their own independent projects? How long before they are back? Independent games is pretty much what I'm asking about

# Leaving the Studio?

- Leaving a company to work on your own project
  - This doesn't happen a whole lot
  - You need to have a lot of money to do this (sort of went over this earlier)
- Leaving in general?
  - Activision has a very good employee retention rating
  - I don't think I can say exactly what it is... but it's small

How do you think that the current economic situation in the country will be affecting the games industry?

# Economy effects

- Historically, economic downturns don't affect the entertainment industry as bad as it affects other industries
  - Hooray!
- But it'll affect my wallet regardless
  - Boooo!

A really long question about my thoughts on intricate game art... Do I think fancy graphics are coming to a close?

# Graphics Quality

- I hope so
  - I'm often angry about art dictating design... which happens when you're spending all of your cpu/gpu on fancy graphics
  - If most of the dev time is spent on pretty graphics, you'll be missing A LOT of gameplay
- I hope not
  - I love pretty things, and when used right, it's quite helpful
  - Other people love pretty things... That means more money.

# Thanks

(this is where i fell asleep... Sorry!)