the **game****design****initiative**
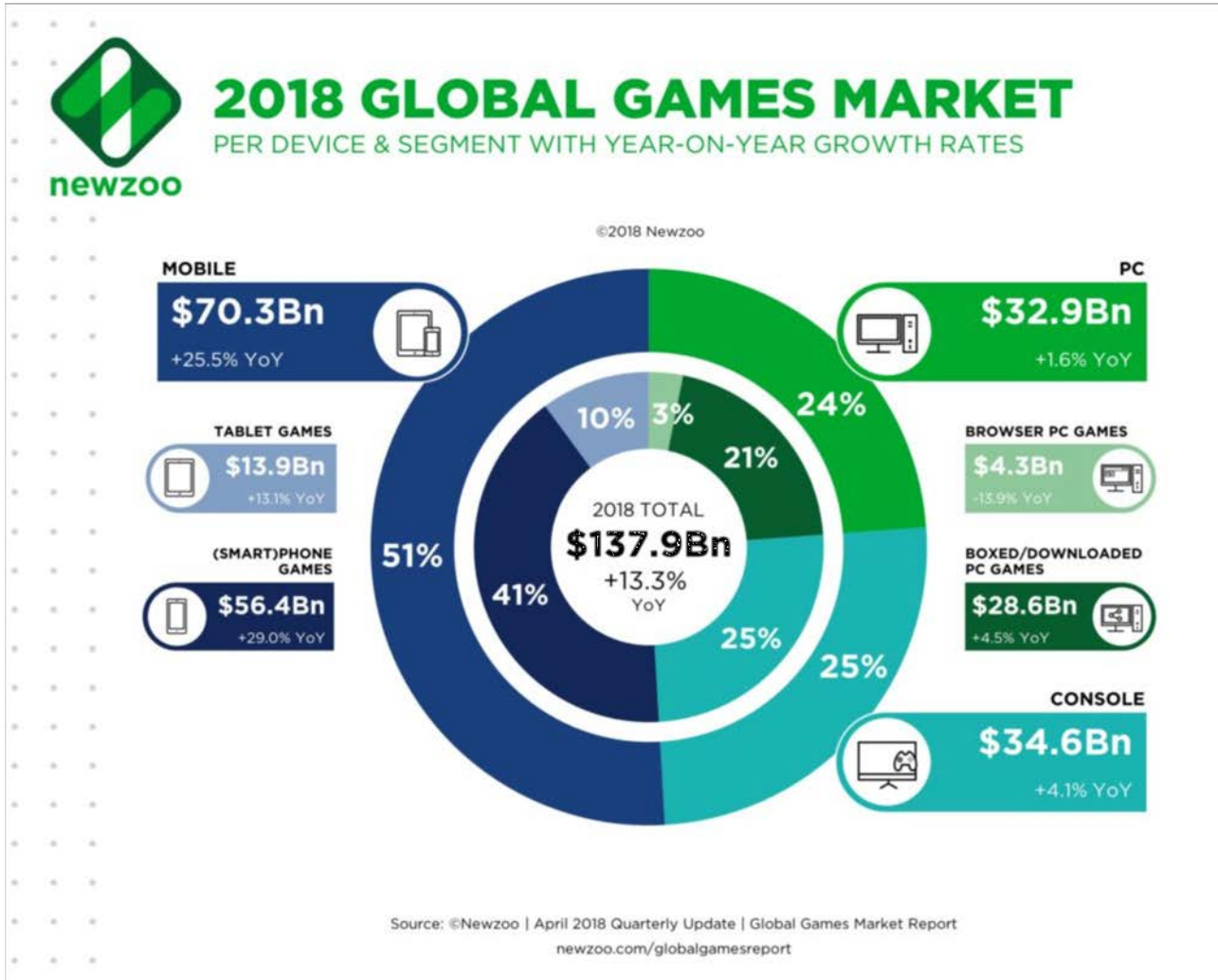at cornell university
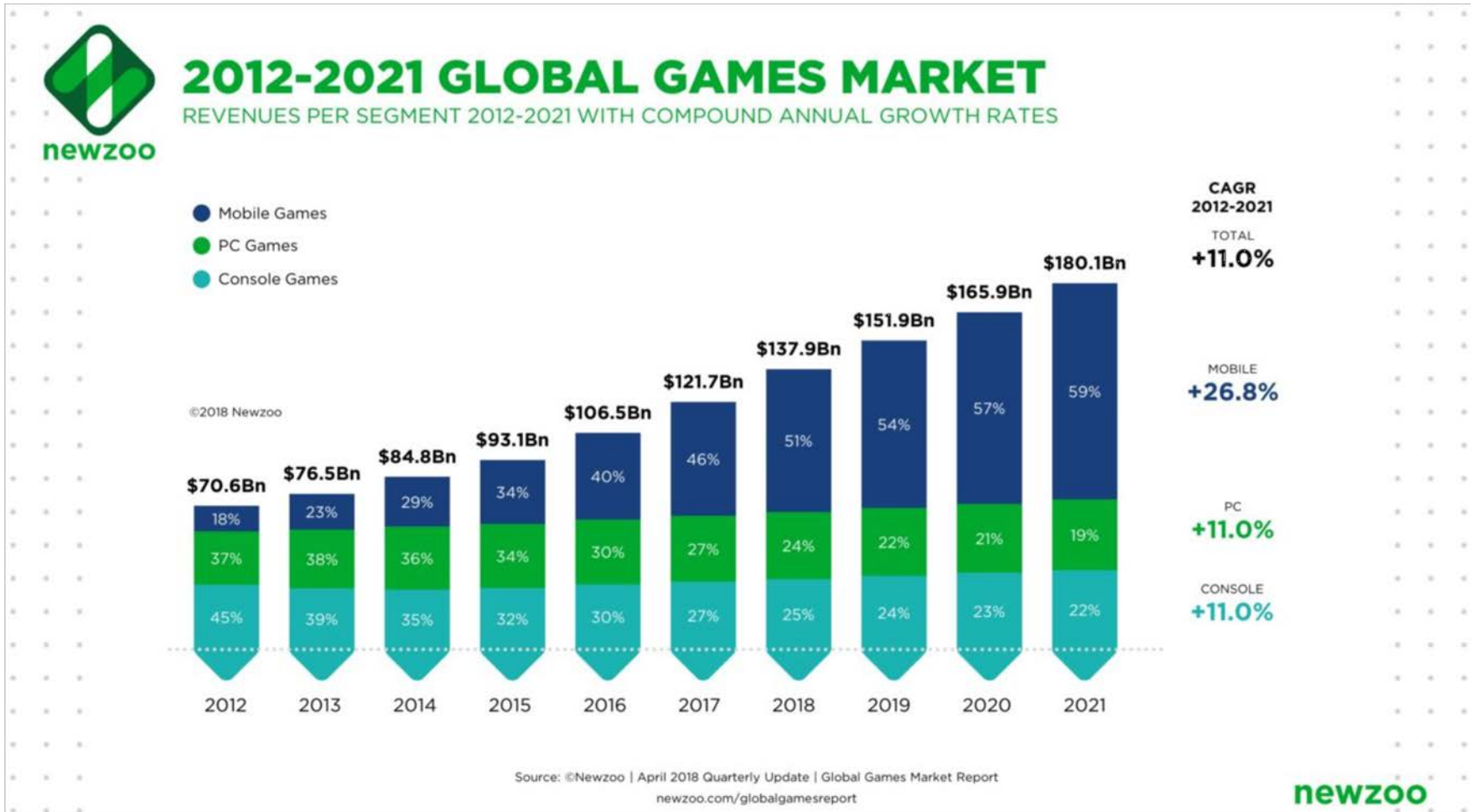
Lecture 27

The Industry

A Changing Industry

- The game industry is rapidly changing
  - AAA studios are contracting/cutting back
  - MOBA and mobile studios have plateaued
  - Battle Royale is still seeing some growth

- It is harder for Indie Games to break out
  - Indie sales peaked around 2014 or so
  - Now supply has far out-stripped demand
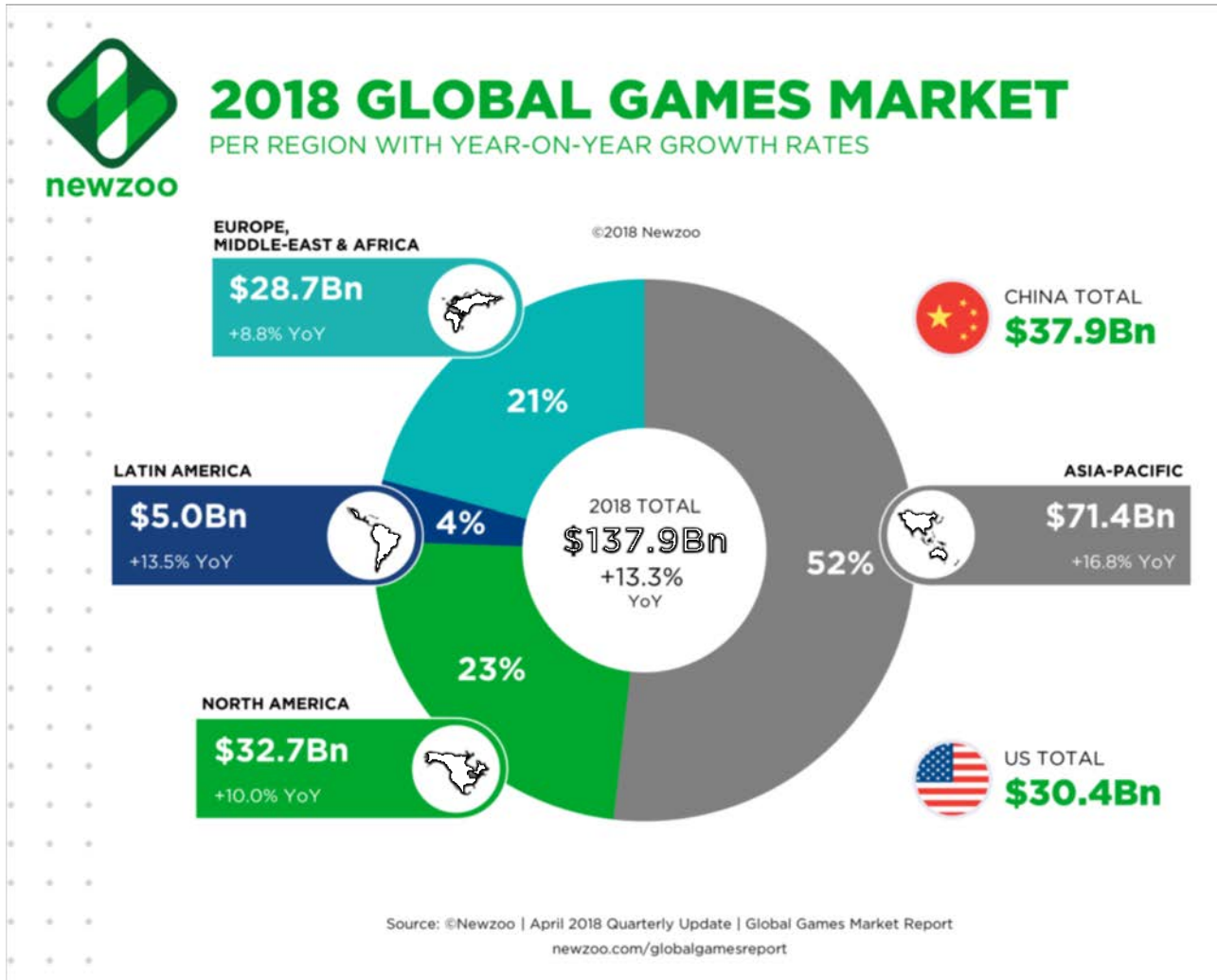
- **Focus**: Understanding the trade-offs here

Industry

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Market by Platform

Industry

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Market by Platform

2012-2021 GLOBAL GAMES MARKET
REVENUES PER SEGMENT 2012-2021 WITH COMPOUND ANNUAL GROWTH RATES

newzoo

- Mobile Games
- PC Games
- Console Games

©2018 Newzoo

CAGR 2012-2021

TOTAL
+11.0%

MOBILE
+26.8%

PC
+11.0%

CONSOLE
+11.0%

Year	Total	Mobile	PC	Console
2012	$70.6Bn	18%	37%	45%
2013	$76.5Bn	23%	38%	39%
2014	$84.8Bn	29%	36%	35%
2015	$93.1Bn	34%	34%	32%
2016	$106.5Bn	40%	30%	30%
2017	$121.7Bn	46%	27%	27%
2018	$137.9Bn	51%	24%	25%
2019	$151.9Bn	54%	22%	24%
2020	$165.9Bn	57%	21%	23%
2021	$180.1Bn	59%	19%	22%

Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report
newzoo.com/globalgamesreport

newzoo

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Market by Region

Industry

Classic Industry Roles

- **Developers** make the games
  - Core studio of salaried people
  - Hire freelancers as deadlines approach

- **Publishers** distribute the games
  - Get the games into the retail chain
  - Advertise the game to customers
  - **Give developers advances to pay salaries**

- **Console Developers** make game platforms
  - Publishers license to publish games for platform
  - In AAA space, limits profit on a $60 game to $30

Industry

Talk Outline

- **Types of Developers**
  - How they publish; how they are funded
  - Limited to North America

- **Breaking in to the Industry**
  - Some sobering facts
  - How to prepare yourself

- **Going it Alone**
  - The modern start-up culture
  - Important indie resources

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First Party Developers

- Make **hardware platforms**
  - In-house studio for platform
  - Help drive the platform

- Often make "launch" titles

Industry

First Party Developers

- **Nintendo**: Mario

- **Sony**: God of War

- **Microsoft**: Halo
  - Microsoft strategy changes

Industry

3rd Party Developer-Publishers

- Large public corporations
  - Many development studios
  - Multiplatform development
  - Many concurrent projects

- **Advantage**: deep pockets
  - Constantly shipping titles
  - Current titles bring revenue
  - Use to fund new projects
  - Can support *large* teams

Industry

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3rd Party Developer-Publishers

- **Activision-Blizzard**
  - Modern Warfare, WoW

- **EA**
  - Madden, Battlefield

- **Ubisoft**
  - Assassin's Creed

- **Take-Two**
  - Grand Theft Auto

Industry

Independent Developers

- **Mainly work on other IP**
  - Lots of ports/some licenses
  - "Developers-for-Hire"
  - Building cash for own IP

- **Often work in parallel**
  - X days/week on contract
  - Y days/week on own IP
  - But keep finances *separate*!

- **Some financed startups**
  - But not really anymore

Independent Developers

- **Moon Studios**
  - Ori and the Blind Forest

- **Playdead**
  - Limbo, Inside

- **Capybara Games**
  - Below, Super Brothers

- **Finji**
  - Night in the Woods

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Established Independent Developers

- Work with major publishers
  - Both first and third party
  - Often get acquired by them

- Or publish non-traditionally
  - Digital Distribution (Steam)
  - Or served online (MOBAs)

- Few concurrent projects
  - Publishers control money
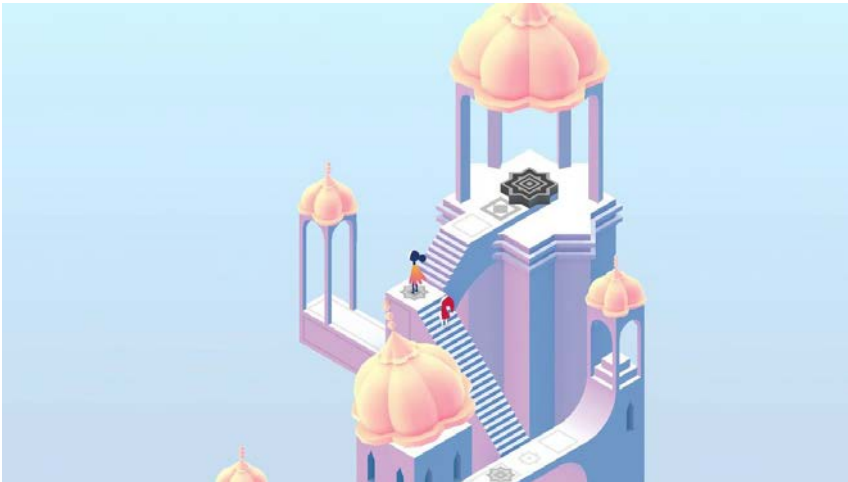 - A game away from closing

- Hardcore credibility

Industry

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Established Independent Developers

- **Bethesda**
  - Fallout 3, Skyrim

- **Bungie**
  - Halo, Destiny

- **Respawn**
  - Titanfall

- **Riot**
  - League of Legends

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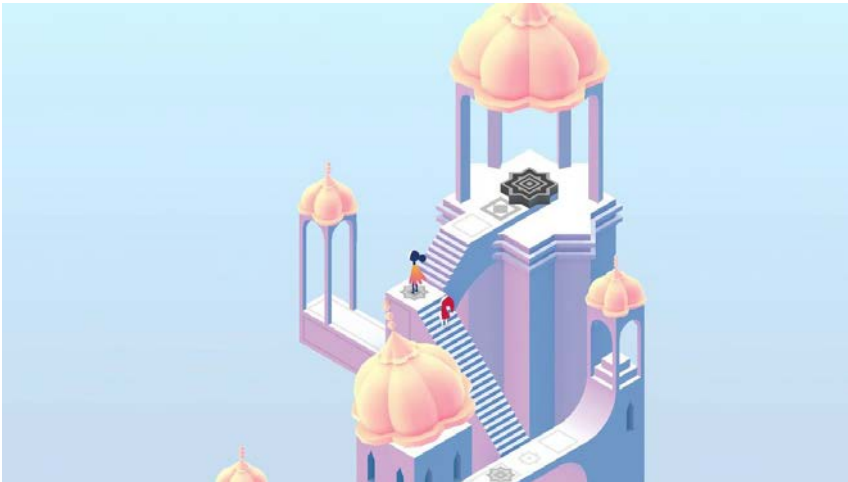at cornell university

# Mobile Developer/Publishers

- Make games very rapidly
  - Smaller games
  - Smaller teams (<10)
  - Short development cycles

- But sometimes take longer
  - Identify IP as a major hit
  - Use other titles to fund it
  - **Example**: EA/Popcap

- Much consolidation in recent years

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Mobile Developer/Publishers

- **Supercell**
  - Clash of Clans

- **Pocket Gems**
  - War Dragons, Episode

- **Niantic Labs**
  - Pokemon GO

- **Fireproof Games**
  - The Room Series

- Also **EA**, **Ubisoft**

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"Indie" Developers & Guys at Computers
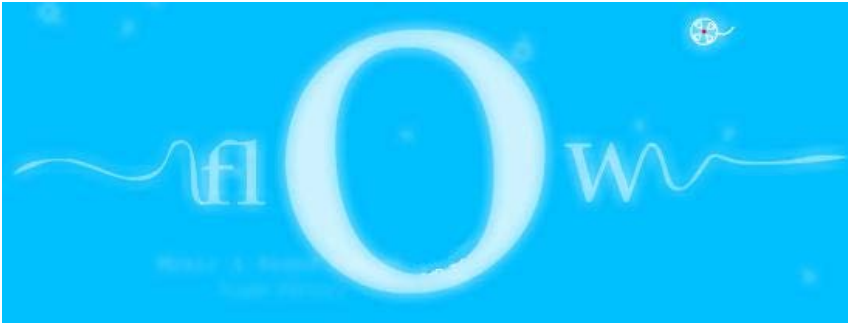
- **Original Properties**
  - Everything is your own IP
  - Often unusual gameplay
  - Similar to this course

- **Very informal cultures**
  - Entirely digital distribution
  - Get credibility at festivals

- **Paycheck not guaranteed**
  - Don't quit your day job
  - **Kickstarter?**

Industry

"Indie" Developers & Guys at Computers

- **Jonathon Blow**
  - Braid, Witness

- **ThatGameCompany**
  - Fl0w, Flower

- **Team Meat**
  - Super Meat Boy

- **Spiderweb Software**
  - Avernum, Avadon

- Many iOS Developers

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"Indie" Developers & Guys at Computers

- **Jonathon Blow**
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- Many iOS Developers

Essentially "Start-Ups"

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Hybrid Game Developers

- Mixes traditional and digital
  - Digital board game
  - Digital add-ons
  - Sometimes AR features

- Extension of mobile market
  - Typically mobile/tablet
  - Needs to be in obtrusive

- Overlooked but growing!
  - Often not part of job search
  - Need mobile experience

Industry

Hybrid Game Developers

- **Fantasy Flight Games**
  - Mansions of Madness
  - XCOM: The Board Game
  - KeyForged

- **Wizards of the Coast**
  - D&D Beyond
  - Magic Arena

- **JackBox Games**
  - Quiplash
  - Fibbage

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Some Reality Checks

- Do you *really* want to get into the industry?
  - Salaries are **MUCH** lower than industrial average
  - Crunch time = lots of unpaid overtime
  - AAA space is still shrinking (because of costs)

- Average "life span" of developer is 5 years
  - After that, promoted up or out
  - Says something about stress in industry

- Might be happier at Google, Facebook, etc.

Industry

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Some Reality Checks

- Do you *really* want to get into the industry?
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- Average ... developer is 5 years
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- Might be happier at Google, Facebook, etc.

More likely a *job* than a *career*

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On the Other Hand

- Some people love all this
  - Creative process > money
  - Would work hard anyway

- Top developers do well
  - Build up lots of experience
  - Leave to found own studio
  - **High profile kickstarters**

- But you must have **passion**
  - Too much competition now

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On the Other Hand

- Some people love all this

Until you get middle aged

- Top developers do well
  - Build up lots of experience
  - Leave to found own studio
  - **High profile kickstarters**
- But you must have **passion**
  - Too much competition now

Industry

More Reality Checks

- As with many jobs, intern experience is key
    - Work on a title between junior & senior year

- But internships are cutting back
    - EA used to be great at training ... and collapsed in 2008
    - Zynga hired their recruiting staff … and then collapsed
    - Riot picked up the internship slack … and then over-hired

- It is an incredibly **competitive landscape**
    - Lots of game programs with cheap talent
    - Application has to have a hook to get noticed

Industry

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More Reality Checks

- As with many jobs, intern experience is key
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    - EA used to be great
    - ~~...~~ then collapsed
    - ~~... internship slack~~ … and then over-hired

Epic is the current company dujour

- It is an incredibly **competitive landscape**
    - Lots of game programs with cheap talent
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Industry

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Internships: Established Studios

- Search early in year with recruiting team
  - Application process is usually very competitive
  - Check the company website regularly
  - Starts **online** with later **site interview**

- The goal is to teach and train students
  - Structured learning environment to ease you in
  - Hopes you come on for full-time after graduation
  - In the past, would offer job at end of internship

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Internships: Indep. AAA Studios

- Searches later in year with one, two recruiters
  - Positions are not advertised outside their site
  - Application process is usually much easier

- Goal is to get cheap labor to push a title to ship
  - You will get thrown into the mix immediately
  - Will be treated exactly like a full-time
  - Hands-on experience and credit for a shipped title
  - Future job and other factors depends on the studio

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gamedevmap.com

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Preparing Yourself

- Build **professional skills**
  - **Programmers**: C++, Objective C, Unity 3D
  - **Designers**: Maya, 3D Studio Max, Unity 3D

- Build a **portfolio**
  - Make lots of games (even outside of class)
  - Distribute them or take them to festivals

- Become an **expert** in related area
  - **Programmers**: graphics, AI, networking
  - **Designers**: UI design, animation, concept art

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Becoming an Indie Developer

- You need a (somewhat) finished **game**
  - CS 4152 project (or an independent study)
  - Much more polished than just one semester

- You need a **publishing platform**
  - **App Store**: Acceptance is easy; marketing is hard
  - **Steam**: No longer different from App Store

- You need to **market** your game
  - Showcase your game at festivals
  - Reach out to the gaming press

Becoming an Indie Developer

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  You cannot ignore this!

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Game Festivals

- Similar to a film festival
  - Submit game for judging
  - A jury plays your game
  - Selects games for event
- **Goal**: Pre-launch hype
  - Get press to see your game
  - Release early builds to press
- Critical to success
  - You are only "new" once
  - Initial sales are key
  - Hard to rescue a bad launch

Examples

- Independent Game Festival
  - Extremely competitive
  - But has a student track
- Boston Indie Game Festival
  - Easier for east coast schools
  - Accepts more games
- IndieCade
  - Focuses on "arty" games
- Other lesser festivals

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What About Kickstarter?

- Not for new developers!
  - Team with established record
  - Media with existing platform (e.g. webcomics)
  - Everyone else usually fails

- Failure has consequences
  - Known as the "Failed Kickstarter"
  - Kickstarter does not remove pages
  - Can recover, but need new project

- New developers need a "day job"

funded with

KICK STARTER

1,949 backers

$275,478 pledged of $700,000 goal

0 seconds to go

Funding Unsuccessful
This project reached the deadline without achieving its funding goal 2 days ago.

Industry

Alternative: Kessler Fellows

- Internal Cornell award to help entreprenuership
  - Funds your work at a start-up company
  - So you are a (legal) unpaid intern for company
  - But they have to agree to take you on

- The fellowship is very competitive
  - Have to prove that you are an entrepreneur
  - Start with indie route; leverage for fellowship

- **Example**: John Austin from Apsis

Industry

Support Beyond CS/INFO 3152

- **CS/INFO 4152**

  - Capstone course: take more advanced courses
  - Requires game to be more advanced in some way

- **CS 4999**

  - Often sponsor two projects a semester
  - Take competitive proposals at semester start

- **Digital Gaming Alliance**

  - Student club to support game designers

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Useful CS and Info Courses

- For programmers
  - CS 4620: Introduction to Computer Graphics
  - CS 5625: Interactive Computer Graphics
  - CS 4700: Foundations of Artificial Intelligence
  - CS 4758: Robot Learning
  - CS 5414: Distributed Computing

- For designers
  - Info 3450: Human Computer Interaction Design
  - Info 4400: Advanced HCI Design
  - And many more

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