

2. Making Video Games, Getting Started !

420-141-VA - GAME PROGRAMMING 1 - VANIER COLLEGE

Outline

- Jobs in the Game Industry
- Game Development Milestones
- Resources to Get Started

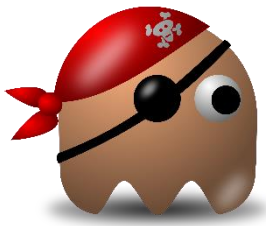
➤ Jobs in the Game Industry

Many [Video Game Studios](#) are established in Montreal!

Making AAA Video Games is not easy, it requires a big team of talented people

Game Developers

- Game Designers
- 2D Artists
- 3D Artists
- Sound Artists
- Programmers



Quality Assurance

- Game Testers
- Localization Specialists

Production

- Producer
- Production Assistants
- Project Managers

Business

- CEO, COO, CFO
- Marketing
- Lawyers
- Accountants
- Human Resources





behaviour_mtl



Guess the Job ...?



Game Designer

Job Description

- Come up with Game Ideas through Brainstorming
- Constantly improve the Game, find weaknesses and solutions
- Write Game Specifications (Game Design Document) and Documentation
- Compromises a lot with Business people (budget), Technical People and mainly other Designers

Skills

- Excellent **knowledge** of Video Games
- Tons of **Creativity**
- Competencies in Computer Programming / **Scripting**
- Competencies in Content Creation
- Excellent Written and **Presentation skills**

Specializations

- Creative Director
- Lead Designer
- System Designer
- Level Designer
- Story / Mission Designer
- Scripter

Level Designer – Grey Boxing



How to become a Game Designer ?

One of the most Competitive Job in the Industry

- Need to know everything about Games
- The more Skills you have, the more useful you are to a team
- Play as many Games as you can (Analyse them while you play)
- Read books about Game Design, watch videos (Extra Credits on Youtube)

Have a Portfolio of the Games / Prototypes you made

- Even Paper / Board Games
- Attend Game Jams if you can
- Get connections in the industry

Being a Game Testers is definitely relevant

- Big studios often hire Testers as a Summer Job
- Learn about the whole Game Development Process
- Often an entry point in the industry





Spaarnestroom

Content Creator

Job Description

- Create Content required to provide the Game Experience described by Game Designers
- Work under pressure and tight schedules
- Content must respect Technical Constraints
- Content must be consistent with the work of other Content Creators

Skills

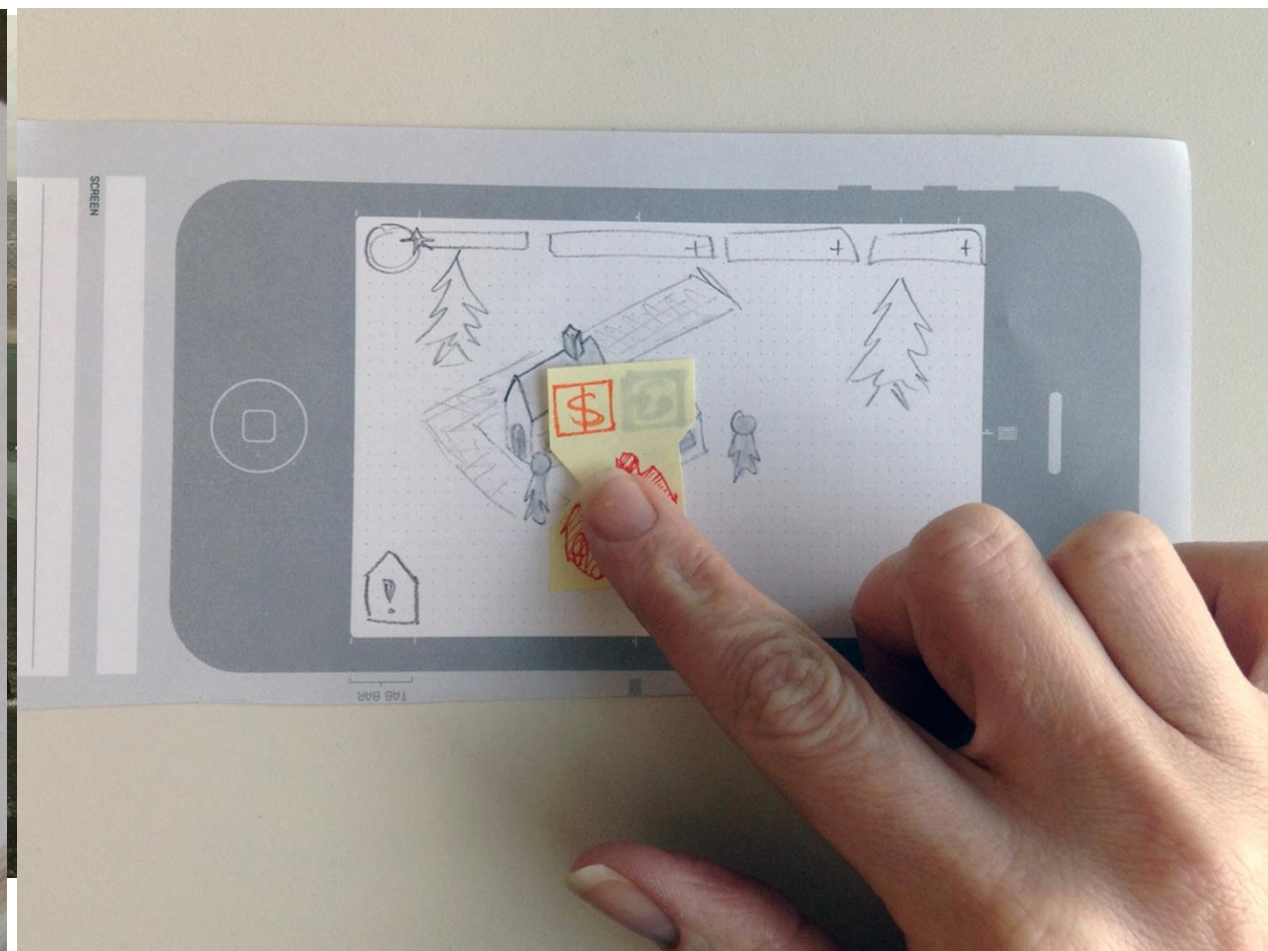
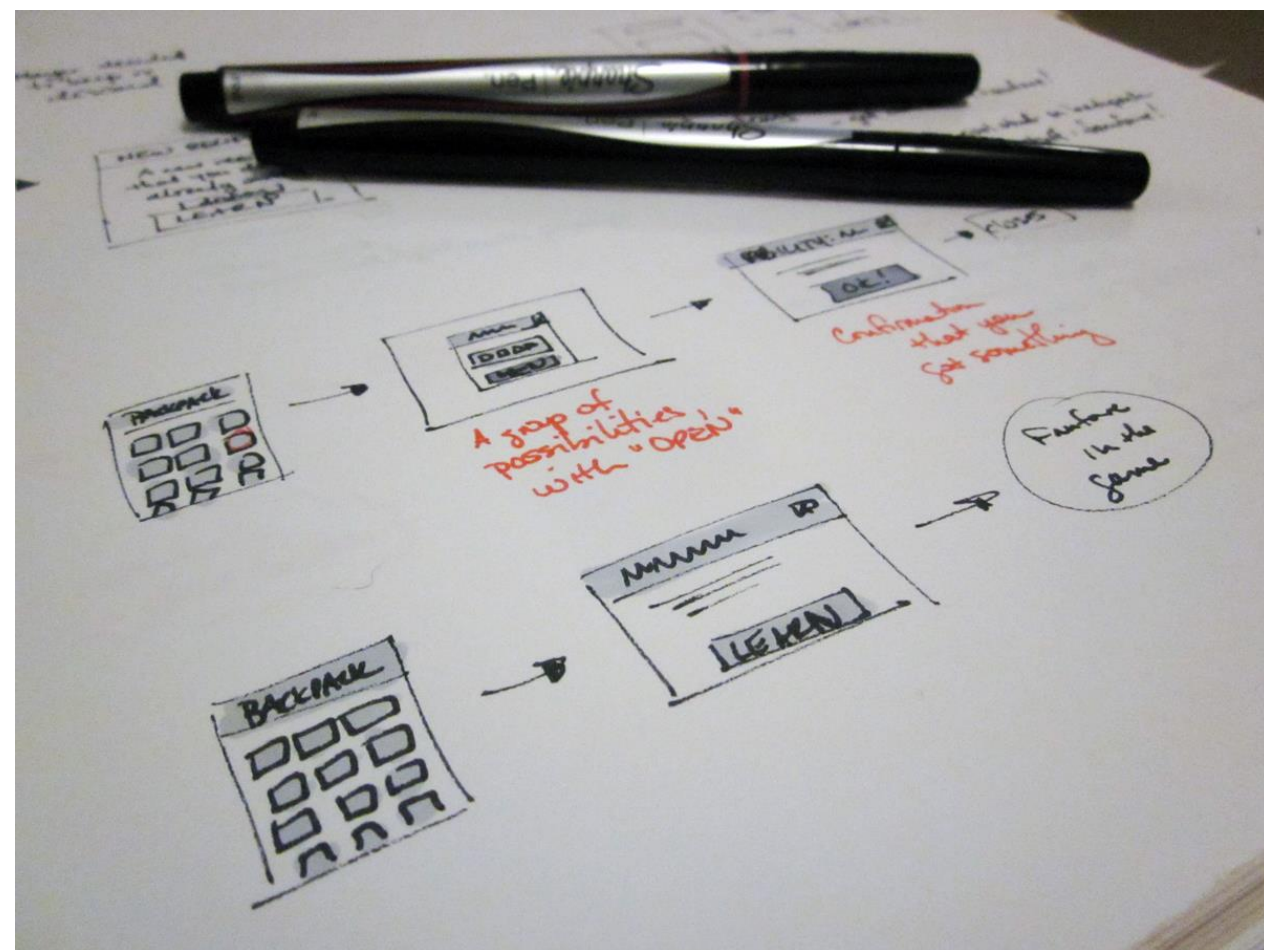
- **Creativity + Technical Skills**
- Master of the Softwares in your Discipline (**Photoshop, Maya, 3DS Max, SoundForge**)
- **Work fast!**

* Many Online Courses (Check out Lynda.com)

Specializations

- Art Director / Lead Artist
- Technical Artist
- 2D Graphics
 - Concept Artist
 - Texture Artist
 - UI / UX Designer
- 3D Graphics
 - Rigger
 - Modeler (Character / Environment)
 - Animator
- Audio
 - Musician
 - Sound Effect Artist
 - Voice Actors

Content Creator – 2D Graphics





Audio Artist





Production

Job Description

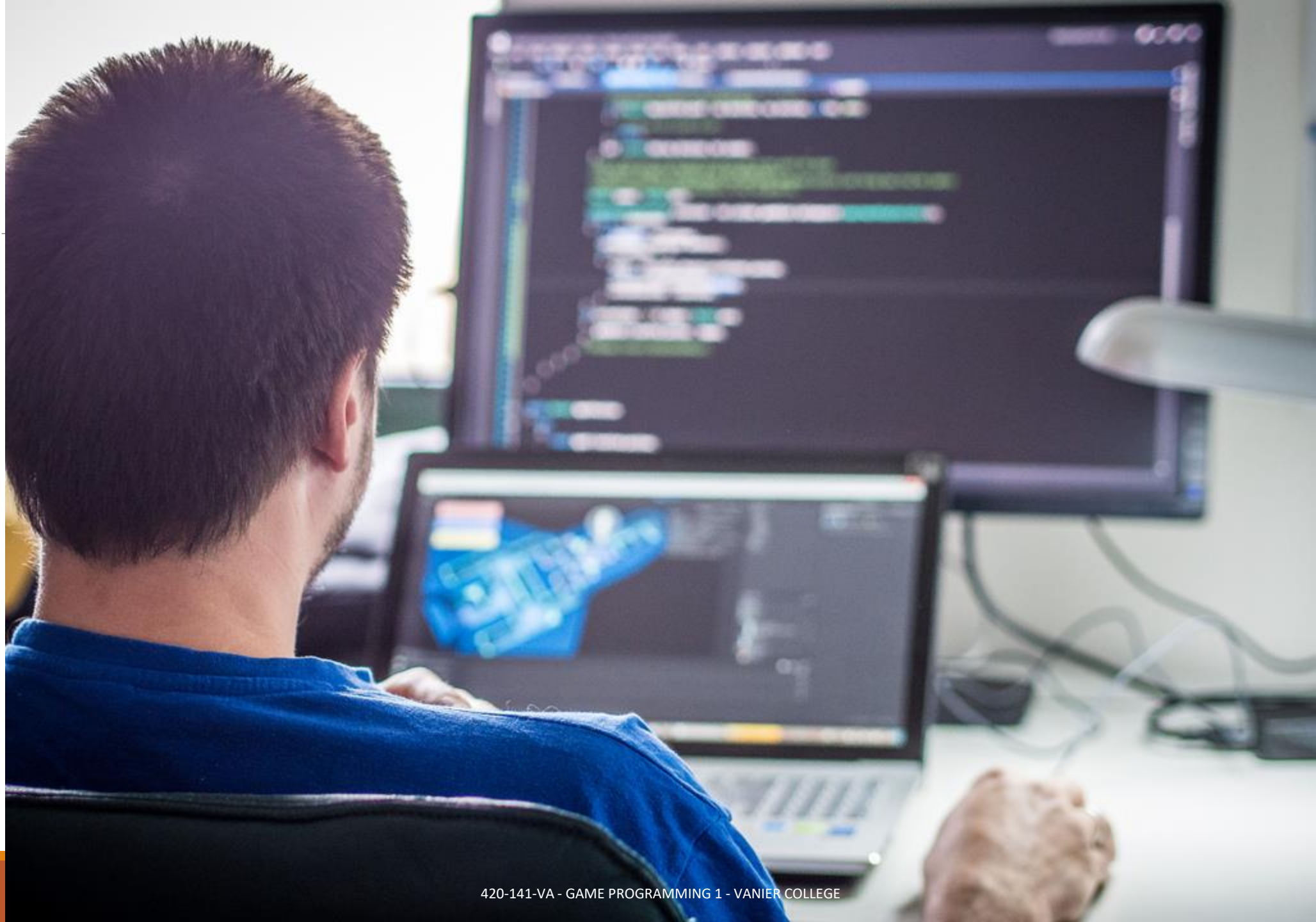
- Make sure the Project Delivers on Time and on Budget
- Organize sprints, standup meetings, maintain project schedules
- Keep team focused, order overtime meals
- Lead the Milestone Review meetings with Company Executives

Skills

- Excellent **Communication** and inter-personnal skills
- Excellent Knowledge of **MS Office**, and **MS Project**
- Familiar with Waterfall and **Agile Methodologies**
- Experience with **Planning** Events and Projects
- Ability to deal with **Criticism**

Specializations

- Executive Producer
- Producer
- Assistant Producer
- Project Manager
- Production Coordinator



Programmer / Engineer

Job Description

- Make sure the **Game Designers** and **Content Creators** workflow is efficient
- Implement Features required by the Game
- Optimize Game Engine so there can be more Content and Gameplay
- Goto people for any problem. Fix anything that breaks!

Skills

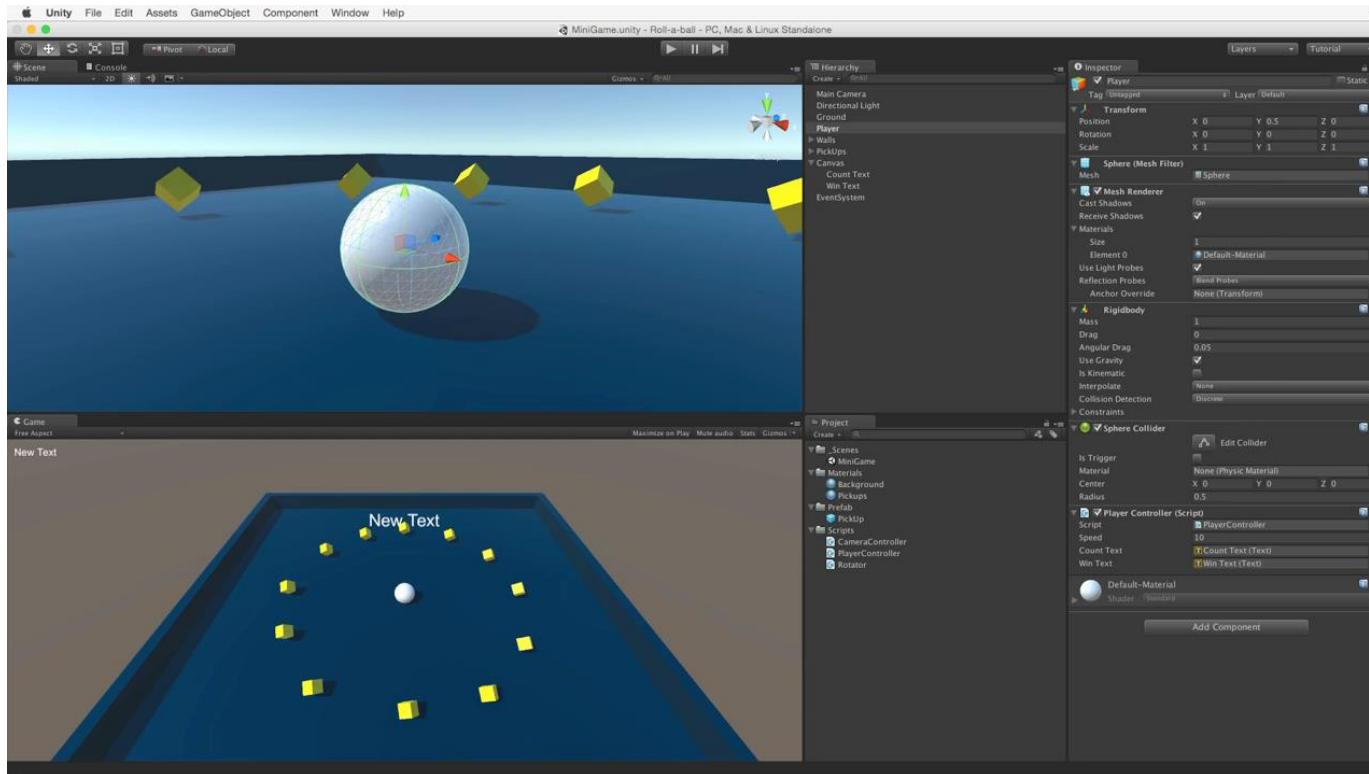
- Excellent Analytical and **Problem Solving Skills**
- Excellent Computer **Programming Skills**
- Knowledge of **Software Architecture** and **Optimization**
- Ability to Work with **Source Control** (**Git**, Perforce)
- Ability to **Learn fast** about any Technical Topic

Specializations

- Technical Director / Lead Programmer
- Gameplay Programmer
- Tools Programmer
- AI Programmer
- Graphics Programmer
- Network Programmer

Working with a Game Engine

www.unity3d.com/learn

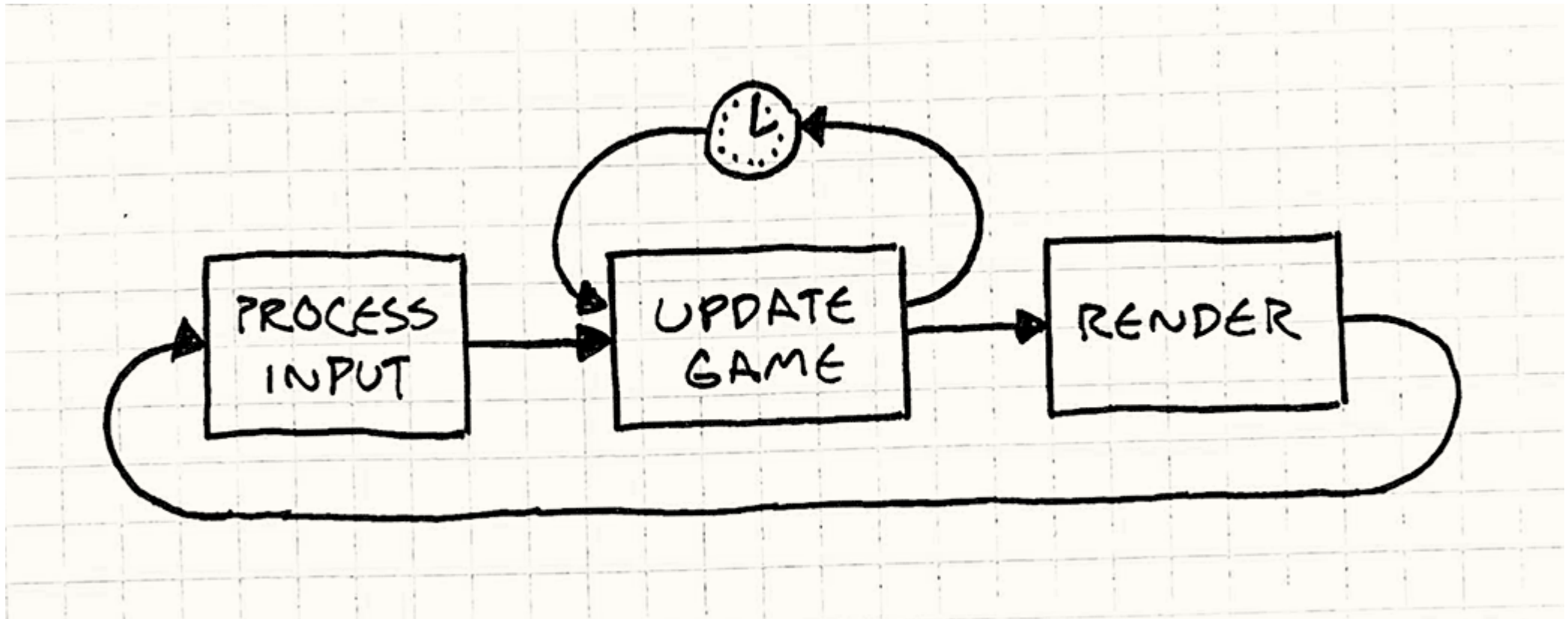


Beginner Tutorial : Roller Ball

- the Unity User Interface
- Setting up a Scene
- Adding Game Objects
- Setting up a Camera
- Collectable Objects
- Displaying text
- Implementing Score
- 75 minutes of video tutorial

<https://www.youtube.com/watch?v=RFlh8pTf4DU>

The Main Loop



➤ Game Development Milestones

Game Development Milestones

Pre-Production



Production

Final Stages

Making your first Game



➤ Getting Started Resources

The Indy Game Community

Many Game Developers / Hobbyists work on Low Budget Games

The Community is tight and people help each other a lot!

Developers Meet at GDC (Game Developer Conference)

<http://www.gdcvault.com> (Lectures and Classes Videos Online)

Meet Game Developers in Montreal

<http://indie-games.meetup.com/cities/ca/qc/montr%C3%A9al/>

<http://www.igdamontreal.ca>

<http://mtlgamejam.org/>



Resources to Get Started

Free Game Engines

- Unity (<http://unity3d.com>)
- Unreal Engine (<https://www.unrealengine.com>)
- CryEngine (<https://www.cryengine.com>)

Free Softwares

- **Gimp** (Free 2D Graphics Software)
- Blender (Free 3D Modeling and Animation Package)
- **Audacity** (Free Audio Editing Tool)

Tutorials

- Lynda.com (Content Creation Tutorials)
- Extra Credits Videos on Youtube (Game Design Knowledge)

Game Design Knowledge

- Extra Credits – Hundreds of Videos to Perfect your Game Knowledge



Publishing your Games

iOS Devices (iPhone / iPad / Apple TV / Apple Watch)

- Need iOS Developer Account (<http://developer.apple.com>) ~125\$ / year
- Publish Apps on the Apple App Store, Games must be approved by Apple
- Apple keeps 30% Royalty



Android Devices

- Need Google Play Developer Account (<https://developer.android.com>). ~25\$ / lifetime
- Publish Apps on Google Play, Games must be approved by Google
- Google keeps 30% Royalty

Publishing PC / Mac Titles on Steam

- Must use the Steamwork SDK (<https://partner.steamgames.com>)
- To publish on Steam, your game must go through the Greenlit process (Get Ratings from Users)
- Steam Revenue Split (Undisclosed)

Marketing Your Games



Questions

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