

Game Design and Development

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Wednesday, May 24, 2017

Introduction

GAME PLAYING \neq GAME DEV



vs.



vs.



Introduction

MANY ASPECTS OF GAME DEV

DESIGN Creative Director Game Designer Level Designer Technical Designer	QUALITY ASSURANCE QA Director Test Lead Testers
ENGINEERING Development Director Technical Director Lead Programmers Developers/Programmers	PRODUCTION Exec Producer Producer Associate & Assistants
ART Art Director Lead Artist Computer Graphics Artists Technical Artist	AUDIO Sound Design Music/SFX Voice Acting

Course overview

- ▣ Introduction to Game Development
- ▣ Principle of Game Design
- ▣ Business of Game and Entrepreneurship
- ▣ Game Development for Modern Platforms
- ▣ Game Design and Development Capstone

Introduction to Game Development



Brian Winn



Principle of Game Design



From the Game Idea to
the Game Production

Casey O'Donnell

Game Designer's Job

IMAGINE

COMMUNICATE

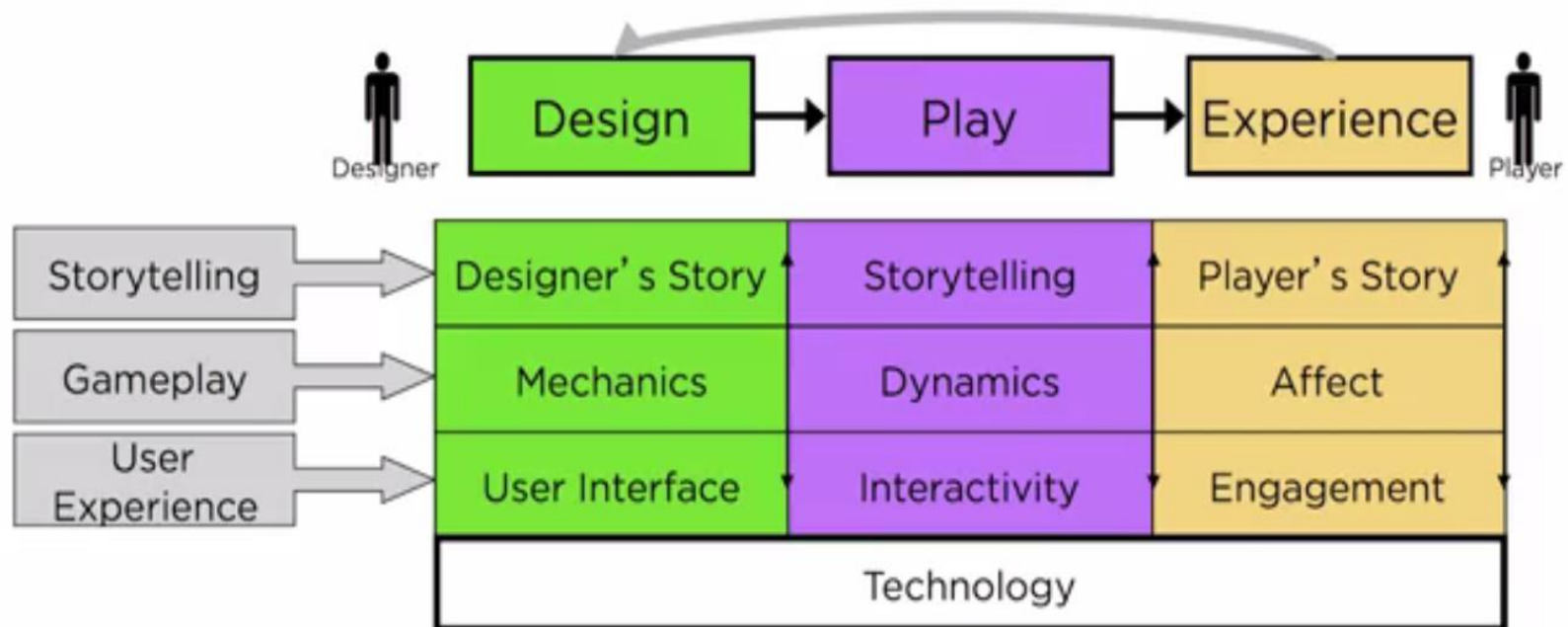
Imagine a game

- ▣ Inspiration from current and old games
- ▣ Evolution and Maturity
- ▣ Taking notes
- ▣ Experience
- ▣ Sharing with people

DPE Framework

MICHIGAN STATE UNIVERSITY

DESIGN/PLAY/EXPERIENCE FRAMEWORK



Created by Brian Winn, inspired by Robin Hunicke & Marc LeBlanc's MDA Framework

Communicate a game

- ▣ Clear idea
- ▣ Clear language and vocabulary
- ▣ Lot of details
- ▣ Explanation of reason and purpose
- ▣ Organization in using templates
- ▣ Prototype

Business of Games and Entrepreneurship



From the Game Idea to
the Game Production

Casey O'Donnell

Game Producer's Job

ORGANIZE

ENSURE

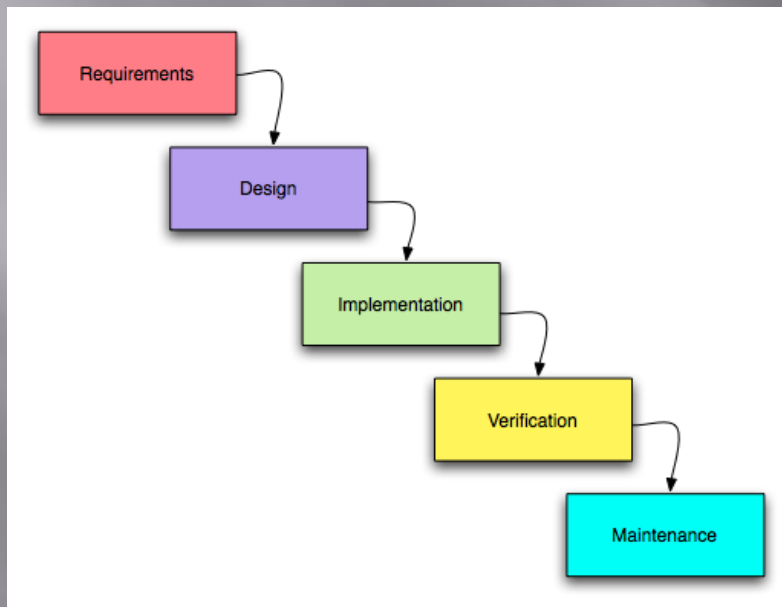
SELL

Organize the production

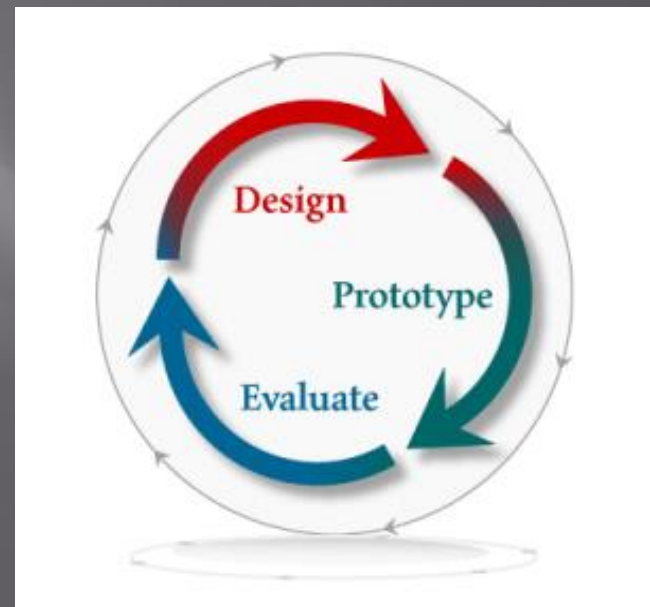
- ▣ Business structure
 - Type, Owners, Employees, Partners
- ▣ Funding model
 - According to the needed and available resources
- ▣ Market
 - Target audience, Opponents, Business model
- ▣ Schedule
 - Priority features, Meeting points, Attributions

Ensure the production

- ▣ Project management
 - Progress and objectives clearly defined



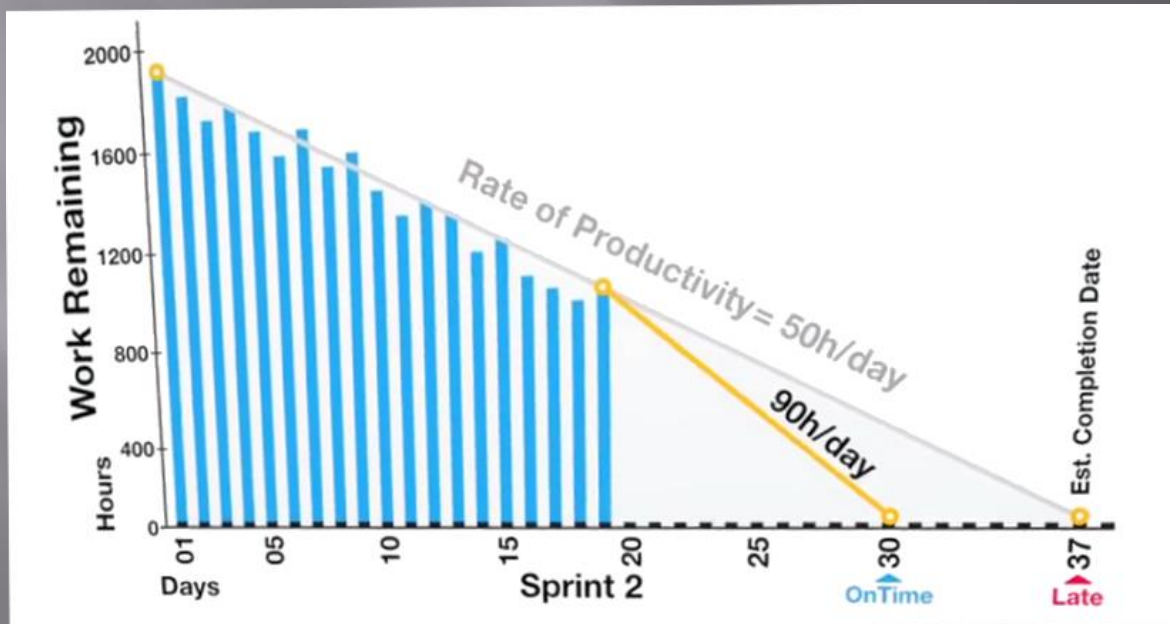
Waterfall Model



Iterative Design

Ensure the production

- ▣ SCRUM
 - Quality and progress of the project
 - Teamwork



Burndown chart

Ensure the production

- ▣ Legal protection
 - Intellectual protection :
 - ▣ Patents
 - ▣ Copyright
 - ▣ Trademark
 - ▣ Trade secret
 - Legal issues :
 - ▣ Licenses
 - ▣ Censure and Age recommendation
 - ▣ Illegal downloads

Sell the production

- ▣ Communicate with the target audience
 - Trailers, Demo, Conference
- ▣ Some advices to demo :
 - Be prepared
 - Know your audience
 - Build effective selling point
 - Avoid talking to screen
 - Avoid script reading
 - Prepare a backup plan
 - Check the material
 - Use clear and effective visuals

USING GRAPHICS

Charts	Comparisons of data
Organization Charts	Show hierarchy and relationships
Diagrams	Show an order, structure, or flow
Symbols	Represent concepts without words
Cartoon	Add humor and interest, memorable
Photos	Add realism and recognition

Development Team's Job

COMMUNICATE

PROGRAM

Communicate in team

- ▣ Teamwork fundamentals
 - 5 Main reasons of bad moments in team :
 - ▣ Absence of trust
 - ▣ Fear of conflict
 - ▣ Lack of commitment
 - ▣ Avoidance of accountability
 - ▣ Inattention of result

Communicate in team

▣ Teamwork fundamentals

- Reduce the consequences :
 - ▣ Show more the work done
 - ▣ Build trust, give a second chance
 - ▣ Don't sweat small things
 - ▣ Share the vision
 - ▣ Make progress
 - ▣ Offer solutions not excuses
 - ▣ Love the project
 - ▣ Take pride of the work done

Communicate in team

- ▣ Game design problem solving basics (*Guest talk*)
 - 5 advices to solve a problem
 - ▣ Identify the problem before finding a solution
 - ▣ Be rational about recommendations
 - ▣ Keep design notes
 - ▣ Listen to others
 - ▣ Play your game, know your game

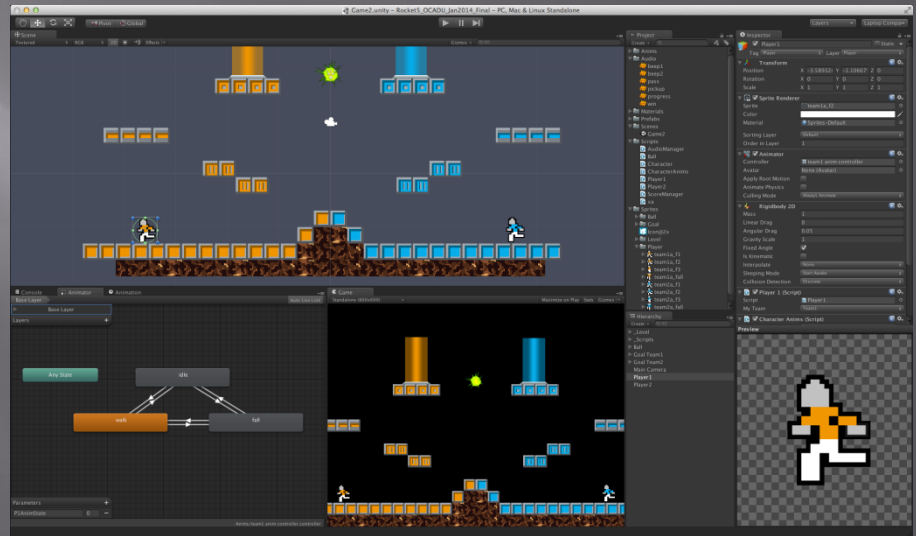
Program in team

- ▣ Programming best practices (*Guest talk*)
 - Pick a coding style and stick with it
 - In group, pick it EARLY in a project
 - Coding style definition :
 - ▣ Use of modifiers
 - ▣ Names, locations and declarations
 - ▣ Comments
 - ▣ Debug
 - ▣ Inspector (in Unity)

Game Development for Modern Platforms



Brian Winn



Game Design and Development Capstone

▣ Guests



Matthew Vorce



Marie Lazar



Ziba Scott



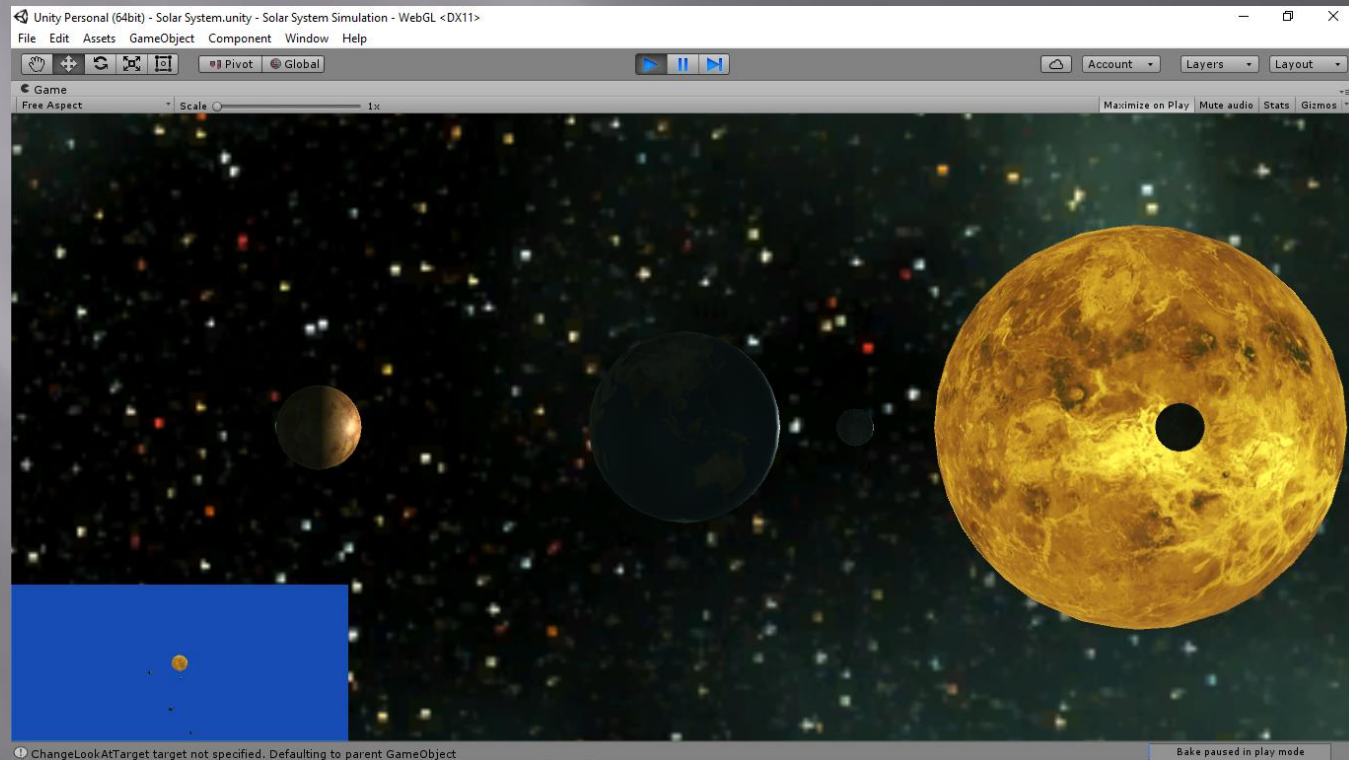
Greg Donovan

Projects

- ▣ Introduction to Game Development
- ▣ Principle of Game Design
- ▣ Business of Game and Entrepreneurship
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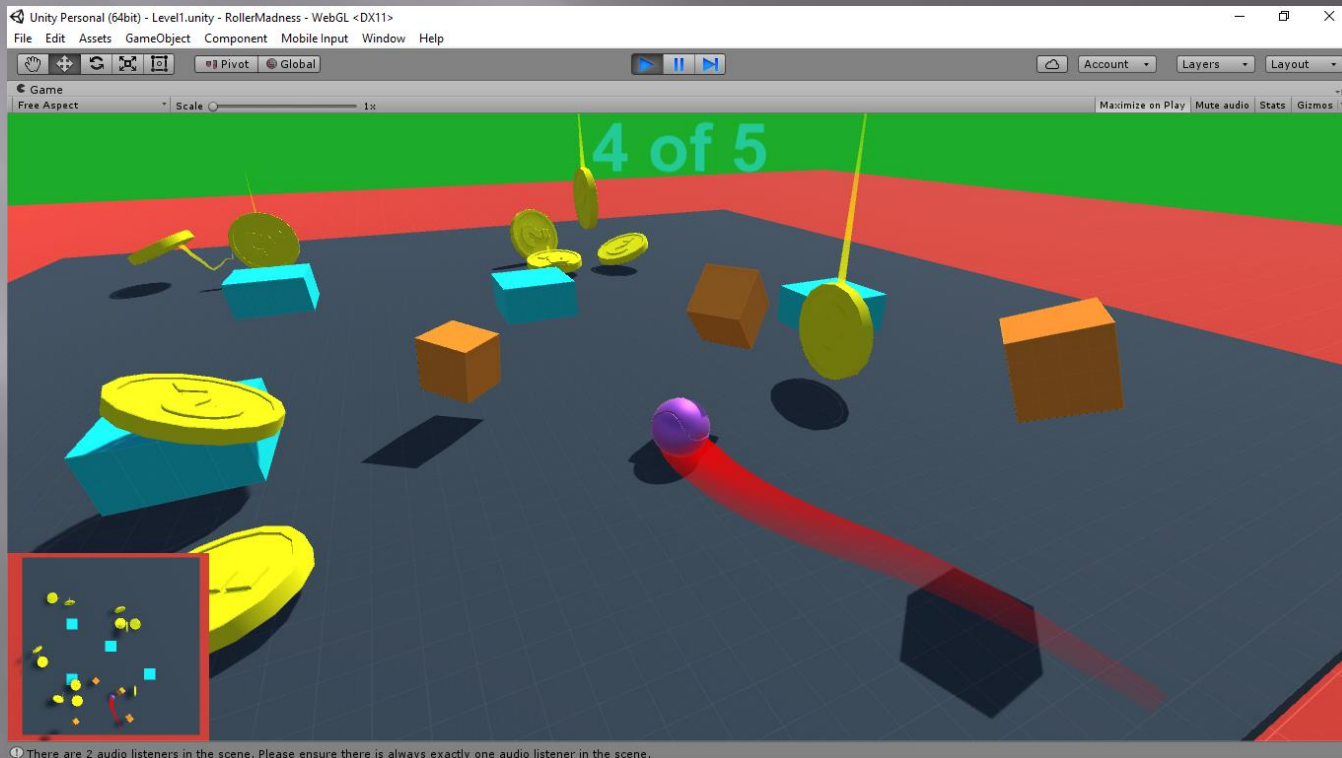
Projects

- ▣ Introduction to Game Development
 - Solar System



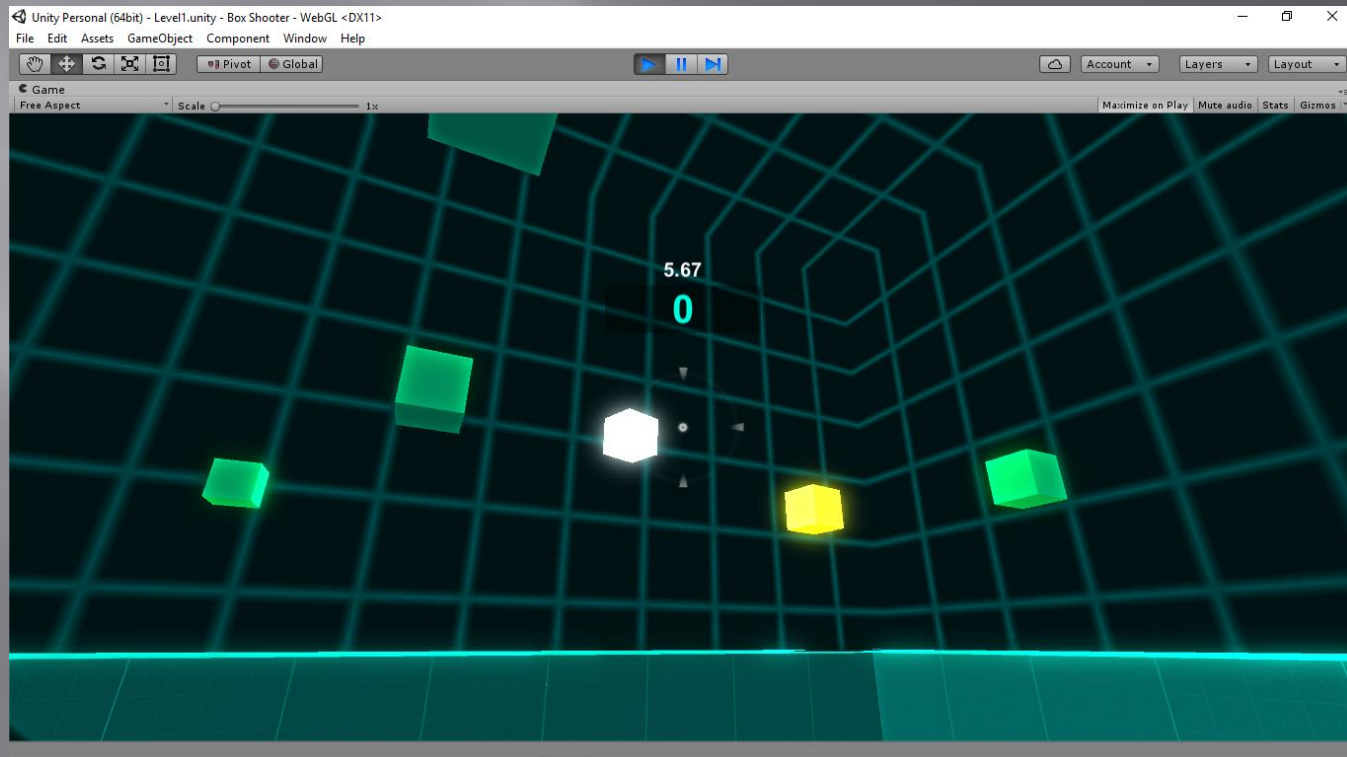
Projects

- ▣ Introduction to Game Development
 - Roller Madness



Projects

- ▣ Introduction to Game Development
 - ShooterBox

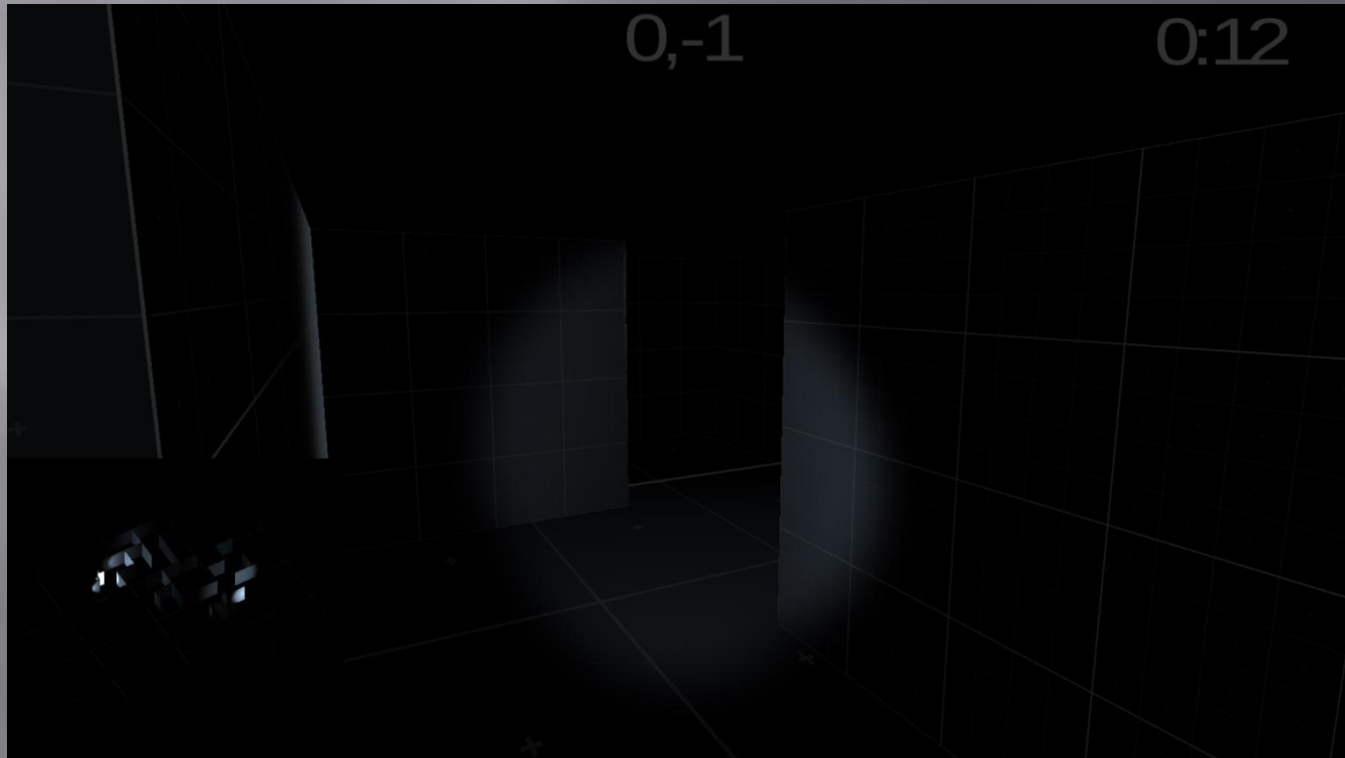


Projects

- ▣ Principle of Game Design
 - FightGoal HighConcept
 - FightGoal StoryBible
 - FightGoal GameDesign

Projects

- ▣ Principle of Game Design
 - HorrorLight Prototype



Projects

- ▣ Business of Game Entrepreneurship
 - Flatout SWOT
 - HorrorLight Production Schedule
 - Rushtomp Competitive Analysis

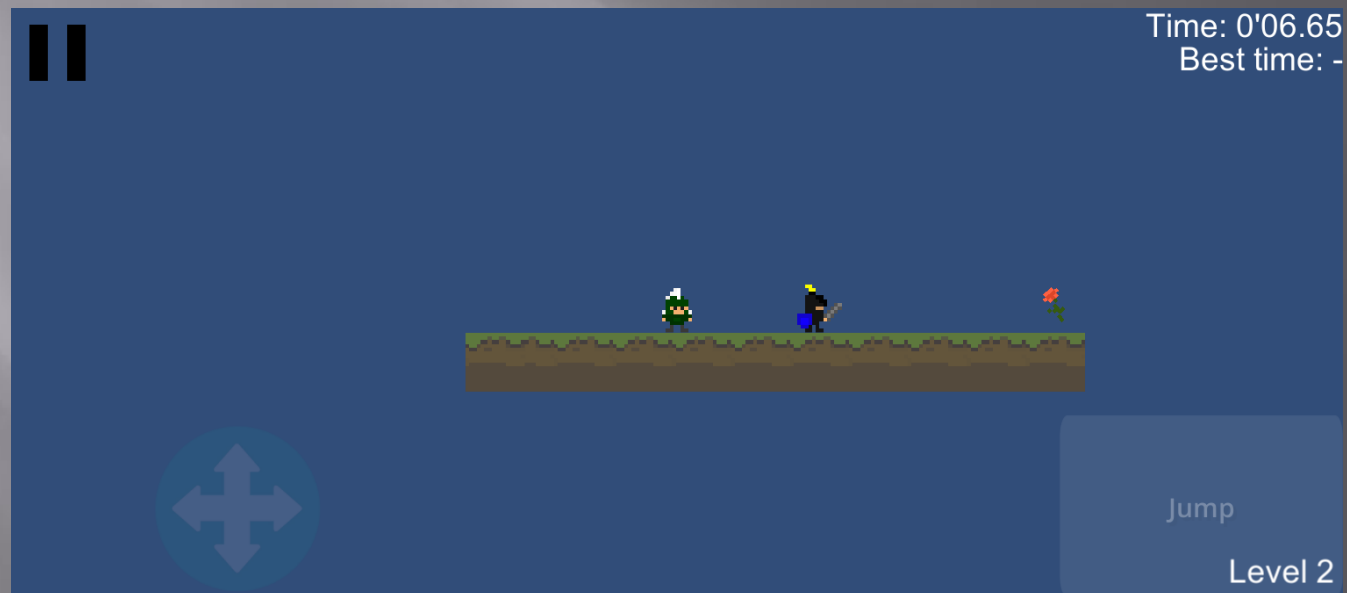
Projects

- ▣ Business of Game Entrepreneurship
 - HorrorLight trailer



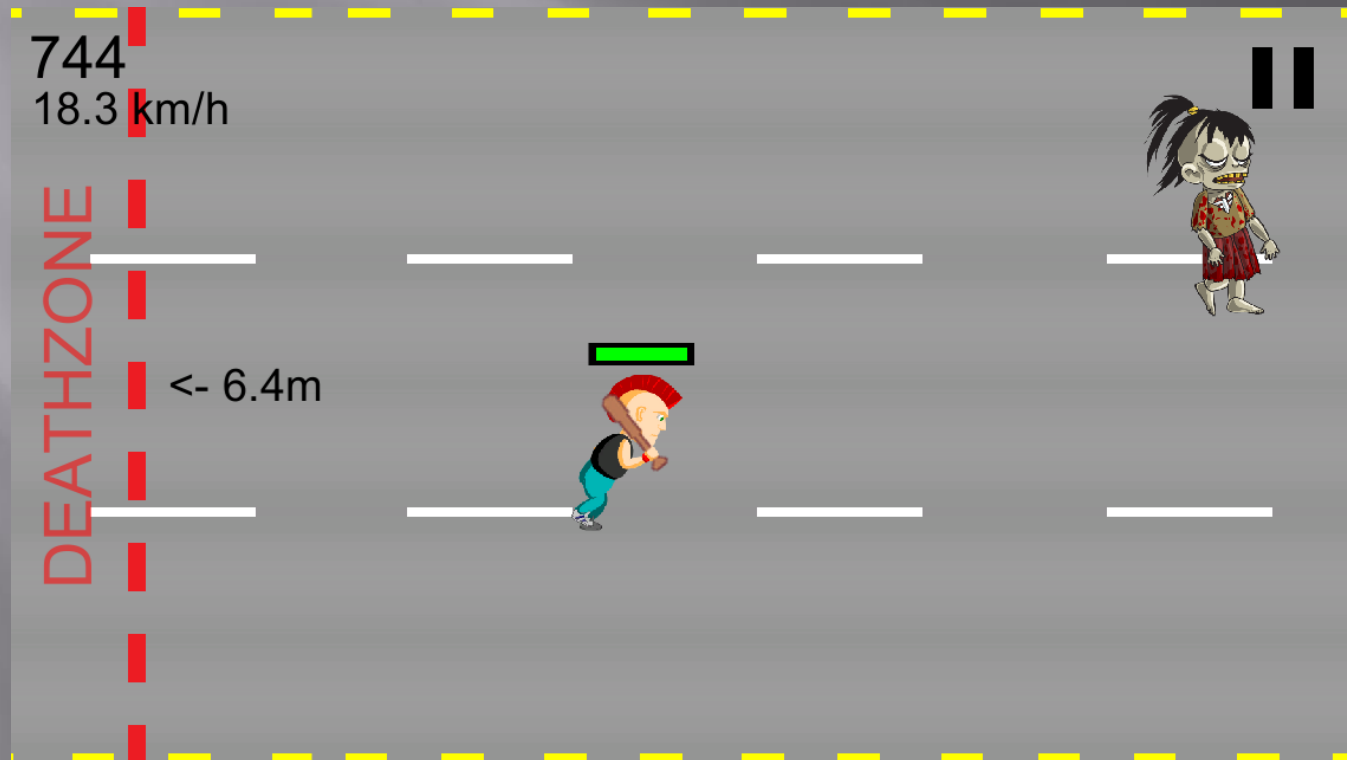
Projects

- ▣ Game Development for Moderns Platforms
 - Spartry'n'Die



Projects

- ▣ Game Design and Development Capstone
 - Run Zombie Homerun



Conclusion

- ▣ Game design not only as a hobby
- ▣ Dark side of the Game Production
- ▣ Importance of Teamwork
- ▣ Progress in a huge evolving world