Game Design Studio

Time Thu 7:00pm - 8:50 PM
Room 2 MetroTech Room 817
Course Code DM-GY 6153/A
Instructor Ramsey Nasser `<ram@nas.sr>` / `<rn47@nyu.edu>`
Class Blog `http://nas.sr/teaching/2017/game-design/`

Outline

- **Week 01** Introduction, How Are Games Unique?
- **Week 02** Design, Game Literacy
- **Week 03** Design, Iterative Process, Collaboration
- **Week 04** Production, The Development Process, Production Planning
- **Week 05** Development, Introduction to Unity
- **Week 06** Development, C# Scripting (types, basic syntax)
- **Week 07** Development, C# Scripting (Unity API)
- **Week 08** Design, Play Testing
- **Week 09** Development, Art Integration
- **Week 11** Development, Linear Algebra
- **Week 11** Development, Flexible code
- **Week 12** Development, Managing State
- **Week 13** Development, Code Over Time
- **Week 14** Final Project
- **Week 15** Final Project

Course Objectives

This class will cover modern approaches to designing and developing digital games. The focus will be on writing code that allows for the rapid iteration games demand. As designers, we will explore brainstorming, play-testing, iteration, and production planning. As developers, we will explore time and state management, decoupling, version control, and performance tuning. By the end of the class students will have a solid understanding of everything that goes into making a modern game, and would have made many games themselves.

Development will be in the Unity 3D engine using the C# programming language.

Teaching Philosophy

In healthy classroom, learning happens in both directions. I will do my utmost to bring all of my knowledge and experience to the class, and I expect you to wring as much of it out of me as you can. Likewise, I hope to learn as much as I can from all of you during our time together. I will be present and undistracted when in class, and I expect you to be the same.

Homework

Your homework each week will typically be an application of whatever was covered in class to be presented the next time we meet. As the focus of this class is on rapid iteration, you will generally be expected to produce a number of prototypes of each assignment. I will usually not collect or explicitly grade your assignments, but I will make my assessments during your in-class presentations. The homework will always be posted to the blog.

Project

Your final project will be a digital game and all the prototypes leading up to it. Starting in the middle of the semester, your weekly prototypes will start to build towards your final. There will not be a midterm in the traditional sense. Your final is an opportunity to apply everything we go over in class on a larger scale.

Grading

You will be graded on your participation in class, your homework, and your projects. Quality of work, both conceptual and technical, are important but I will be looking for honest effort and a willingness to experiment above all.

Help Outside of Class

I am always available for help outside of class. I am reachable by email and will answer any questions I receive as quickly and thoroughly as I can. I am also more than happy to schedule meeting times on campus or in my lab if we need to meet face to face. Don't ever hesitate to email me.

Fun

It is a requirement of the class that you have fun making your projects. If you're not having fun, then you're either making the wrong projects or making them in a way that doesn't suit your natural workflow. Talk to me if any of your work feels like a drag and we will figure something out. I am serious about this.

Academic Honesty

Refer to your student handbooks for the details on the school's policies. I personally have no tolerance for plagiarism or cheating. It is dishonest, an insult to my intelligence, and a waste of the class. We're all adults here. Just don't do it.