ART 486: Project 1

Playable Character: Unity Project

(Due March 2nd)

Prompt:
Characters, our entry point to almost every form of narrative storytelling. These vicarious vessels carry us through the highs and lows of a story, delivering cathartic experiences and developing empathy in viewers, fans, and fanatics. Video games are no different in their need for and reliance on well developed characters through which gameplay loops, story, and entertainment are delivered to the user. As animators, it is your job to bring these characters to life by creating compelling and believable animations that not only allow these characters to move in a realistic way but also reinforces the character traits and individuality of each character.

Description:
Develop and design a new 2D character to be animated interactively in Unity. Using your character puppet, create a series of 3 animations (idle, walk cycle, and one of your choice) controllable by different user inputs. Focus on choreographing compelling movement utilizing animation principles, you must create all animation inside of Unity.

You will present your project for critique. Deliver a short screen capture documentation of your character in action. Name this file FirstInitialLastName_Unity_SC.MP4 and upload it to this Google Drive folder by **9 am on 3/2**.

Additionally, **zip** your project and turn it in for the **Blackboard Assignment** use the naming convention: FirstInialLastname_Unity (i.e. ETedlock_Unity) with instructions on how to use your character.

***If you want to download Unity on your personal computer, be sure to Download this version of Unity, 2020.2.1 (it is very important that we all use the same version so that when I open up your project, everything will work as intended)

https://unity3d.com/get-unity/download/archive?_ga=2.197015593.443881691.1572963808-2011198151.1539960236

Evaluation Criteria:
This project is worth 20% of your grade in this course

Assignment 1 is worth a total of 100 points

10 points for the character design exercise
15 points for Idle animation (4 for consistency, 4 for weight, 3 for believability, 4 for quality)
20 points walk cycle animation (5 for consistency, 5 for weight, 5 for believability, 5 for quality)
20 points for additional animation (5 for consistency, 5 for weight, 5 for believability, 5 for quality)
15 points for proper Unity integration (working controller, no crashing)
5 points for screen capture footage

5 points for correct naming convention and turning the project in on time to the correct folder
10 points for Achievement above expectations

(1/26) Homework 1: The Principles (DUE 2/2)

Read **Game Anim** Chapter 3: The 12 Principles of Animation and be ready to discuss it in class.

(1/28) Homework 2: Character Design (DUE 2/2)

Complete a character design based on the development exercise we did in class. Save at least one fully rendered drawing of your character and all of your written development material as a single PDF and upload it to this Google Drive folder **before** the beginning of class 2/2 with the naming convention FirstInitialLastName_CharacterDesign.pdf (i.e. ETedlock_CharacterDesign.pdf)

Pro Tip: Design your character in a 3/4 view facing to the **right**, for clear presentation, animation, and easier integration into Unity. (Critique)

(2/2) Homework 3: Character Puppet Tutorial (DUE 2/4)

Go through parts 1 & 2 of this 4-part tutorial, using your character design to create a digital puppet to be animated in Unity. (One on One)

Read **Game Anim** Chapter 4: The Five Fundamentals of Game Animation

(2/4) Homework 4: Character Animation Intro (DUE 2/9)

Go through part 3 of this 4-part tutorial, set up your character for animation in Unity

Animate an idle for your character. It should convey their personality as well as their weight. A standard idle is between 1 and 4 seconds long and should loop seamlessly. (One on One reviews)

(2/9) Homework 5: Character Animation Walk Cycle (DUE 2/16)

Animate a walk cycle for your character. Again, focusing on describing the individuality of your character and how they uniquely move throughout the world. (Peer Review)

(2/16) Homework 6: Unity Animator, Blending Tree (DUE 3/2)

Create additional animation(s) for your character.

Go through part 4 of this 4-part tutorial, add blending logic and conditions to your character in Unity.

(2/18) Homework 7: Coding (DUE 3/2)

Develop and apply a script to control your character's blend tree

(2/23) Homework 8: Documentation (DUE 3/2)

Record Documentation using Unity Recorder. Finalize all other project requirements. (Critique)

Course Goals Utilized:

- Expand understanding of animation to include interactive installations, art gallery exhibitions, projection mapping, media art, concert visuals, and video games.
- Develop skills in animation mechanics, project organization, and conceptual ideation
- Introduce students to industry standard development software and best practices.

Learning Outcomes Approached:

- Take initiative to solve technical problems through self-learning
- Manage your time in an effective way on a project
- Give, receive, and apply feedback from peers and the professor
- Create and integrate animated characters into the development engine Unity and develop an animation blending tree

Optional Readings

Articles

- Appeal
- Character Design for Games
- Splosion Man and the Lost Art of the Idle-Animation
- Game Anim Chapter 3
- Game Anim Chapter 4

Character Design Inspiration

- Pablo Hernandez
- Character Design Inspiration
- Ricardo Zema
- Angela Ho
- Amelia Giller

Books

- D&D Player Handbook
- Character and Viewpoint by Orson Scott Card
- The Animation Bible by Maureen Furniss (Ch. 2)
- The Tools of Screenwriting by David Howard and Edward Mabley
- The Illusion of Life by Frank Thomas and Ollie Johnston Ch. 15
- Impro - Improvisation and the Theater