

CS 4730: Computer Game Design

Design Team: Character Programming

Overview

For this assignment, you will be implementing your working character.

Step 1: Work with your engine team

Your engine team is working on adding collision detection and resolution to your engine and your level team is working on creating the first two areas of your game in the development tool. You should work to get the following things from these two sub-teams:

- A working, even if simplified, collision detection system. Discuss with your engine team what the current limitations of the collision system are so you can manage those while testing. By the end of the week, you should be able to substitute in a fully working collision system.
- At least one working room from your game. Your level team is using the development tool to make these, so discuss getting one built room from them asap.

Step 2: Create your main character

With a working (if basic) collision system and a working room, start to build out your character. Remember the following while developing:

- We are providing a working character that platforms side to side and jumps (nothing else). Use this if you'd like as a foundation for your character.
 - o Remember that our code is not going to compile if you simply plug it in. It is NOT intended to be used in this way, because the API of the rest of the code likely differs from your significantly by now. Do not send us messages saying "the provided character doesn't compile". Look at the files, and use code snippets that are useful as you go.
- Your character should interact with the one room in simple ways. E.g., colliding with platforms so you can jump around, etc.
- EVERY power-up / feature of your character should be implemented
 - o For example, if your character can acquire three power-ups (double jump, fast movement, etc.), then all of these need to be demo-able. Consult your character design document if necessary.
- If your character interacts with other objects in the environment, this does not need to work for this demo, but there should be a provided method that would be invoked when this event occurs.
 - o Example: If the character loses health when stepping on lava, they do NOT need to lose health when they collide with lava. But, they do need a method for decreasing health so that the level team can hook this up easily later on.
 - o Example 2: If your character can fire a fireball, they need to be able to shoot the fireball and send it across the screen. But, the fireball does NOT need to explode on impact, destroy enemies, etc.
- If it makes sense for your game, make the features of your character toggle so the graders can quickly test different combinations of power-ups being enabled.
- Your character MUST be controllable with BOTH a game controller and keyboard controls.

Turn In

Submit a single pdf of the design of your game on Collab. Include a readme.txt file that describes the control scheme for your character, including what type of game controller you used for controller support.