**Programming Assignment 2: Crab Soup, Anyone?**
Part B: Animation

Due: Tuesday, April ~~14~~th 16th at midnight   **Worth:** 30 points total

Project 2 overview: Your main character is a treasure hunter who starts on one island and sees in the distance a second island with a chest full of treasure. You know that the key to the chest is somewhere underwater around this island and you must dive underwater and swim to find it. Unfortunately, the local crab population has mutated and is very hostile. Avoid the crabs, find the key, open the chest, get back safely and receive your reward.
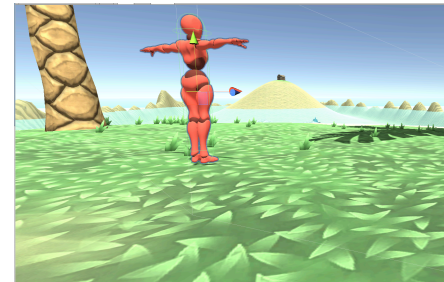
Purpose: The purpose for 2b is as for 2a, to ask you to explore new elements of Unity. Specifically:

Part B: Character animation. The focus of this part is to animate the player and NPC agents.
  1. Mixamo – You'll find and import existing character models and animations for your agents.
  2. Animation blending – You'll blend idle, walking and running (or swimming) animations for the player.

Requirements: In more detail, for Part B you should:

   a. Find and download an animation model, Mixamo recommended. A Miximo tutorial prepared by TA Jordon Woo, and a Youtube video, are linked below.
   b. Attach the animation model to your main player.
   c. Add a standing idle animation.
   d. Add a walking animation.
   e. Add a swimming animation for when the player is in the water. You may use a different animation if you want, say if you've made a desert scene, but have it be based on where you are.
   f. Add a swimming idle animation.
   g. Blend between the animations. There are different ways to do this – we recommend one in the tutorial, you may use another as you can.
   h. Extra credit for animating the crabs, or extra animations *with new* movement on the player, such as sideways.

A demo is linked to on the web site – the mouse directs the player's view and move direction, 'w'/'s' keys move. In Part 2 EC, the full WASD keys work.

Resources: An overall introduction that might help to Project 2, Parts A and B, is the Brackeys/Lague RPG Tutorial (Videos E01, E02, E03, and E10 particularly), although you don't need to create your figures from scratch in Blender. https://www.youtube.com/watch?v=nu5nyrB9U_o

  • Animation
      • https://www.youtube.com/watch?v=UfC2UBWikz0
      • https://www.cs.umd.edu/class/spring2019/cmsc425/handouts/CMSC425Mixamo.pdf

Submission: Submission will be by uploading a file through ELMS.

Group project: To make this feasible as it overlaps work on your final project, this will be a group project which we recommend you do in final project groups.

Late policy: Up to 6 hours late: 5% of the total; up to 24 hours late: 10%, and then 20% for each additional 24 hours. Submission instructions will be given later.