Spring '23 CIS 410/510 Assignment 2 – 100/100 points – Due Wednesday, 4/19, 11:59 PM

This is optionally a group assignment – it can be completed by a team of 1, 2, 3, or 4 members. Each submission will be expected to complete the tutorial and implement the items below, so more team members equals less total work per person!  Also, we'll be working on a team project (team size 4 for undergraduates, team size 2 for graduates) for the remainder of the term, so I highly encourage you all to use this as an opportunity to begin forming teams!

Please find a team by posting on Piazza or otherwise connecting with your classmates.  Also please email me before end of day on Wednesday, April 12th if you'd like help finding a team – I will randomly group people together upon request.

1. [60] Do all of this:

https://learn.unity.com/project/john-lemon-s-haunted-jaunt-3d-beginner

One suggestion for splitting this up between 3 team members:

Build the basic project and environment together (Setting up 3D Beginner, The Environment). Then split up the remaining tasks – something like:

- The Player Character Parts 1 and 2
- The Camera, Ending the Game, Audio
- Enemies Parts 1 and 2

These tasks will require coordination; we'll be using Kanban boards later in the term, so you might try using Trello to manage your milestones and dependencies for the project – available here:

https://trello.com/en-US

2. [10] Add at least one gameplay element that uses a dot product in some way (e.g., calculate length, distance, angle, facing direction).

3. [10] Add at least one gameplay element that uses linear interpolation in some way (e.g., calculate intermediate position, orientation, color).

4. [10] Add at least one particle effect.

5. [10] Create a GitHub repo for your project.  In the repo readme, describe the use of the dot product, linear interpolation, and particle effect and how to trigger these in game.  Also include the names of your team members and the contributions from each team member.

Feel free to customize the look and feel of your project by adjusting colors, lighting, assets, etc. Be creative!

Submit a link to your repo for Assignment 2 on Canvas.  Please ensure that GitHub users bradjbailey (Brad), misccpu (Donny), and ericdwills (me) all have access to the repo if it's private!