HNRS 2200
COGITATIONS ON COMPUTATION
Honors Nature of Science, Technology, & Mathematics
Spring 2019

Assignments 0307 and 0328

After listening to your feedback so far and giving it some thought, I've decided to split a single overall project across two technical assignment due dates. Read on for details…

Background Reading/Viewing

It's a "water water everywhere" situation when it comes to programming at this level: a wealth of possible resources on the web, but of varying levels of quality and fit for different types of learners.

My inclination would be for you to initially learn by example from what we cover in class, then fill in the gaps with reference works online. For that approach, some more reliable sources emerge.

For web programming, I've come to rely on the Mozilla Developer Network for details, sample code, and the occasional tutorial:

https://developer.mozilla.org

For Python, tutorials abound but many of them are ad-infested with some thin content…in the end I tend to go straight to the authoritative source:

https://docs.python.org

What to Do

"Global Thermonuclear War"

No, not really. ^^^^^ It's more of a pop culture reference, where the reference visually resembles what we are likely to produce for this assignment.

The actual instructions are…write a simple computer game, within reach of what you've learned so far and what you will learn in the next few weeks. Specifically for this course, this might also be a two-way street: while writing this game, we may encounter things you need to know, at which point I will do my best to oblige.

Based on my sense of how far we might be able to go, I anticipate that the following types of games are within reach (although this is not meant to be exhaustive nor prescriptive). *For all of these games, plan on a plain text look and feel.* They might not draw your eye, but the hope is they are still recognizable as games (like the title's pop culture reference).

- Simple games of chance: dice, cards, etc.
- Role-playing game "encounters" (i.e., more sophisticated uses of dice)
- Simple command-based adventure games or "interactive fiction"

The notion of doing these games in plain text is primarily a hedge against the time we have available. If you are able to pick up on how to do more sophisticated visuals within an appropriate amount of time, then more power to you!

As with the previous assignment, you have the option to implement this game either in Python via *repl.it* or JavaScript via CodePen.

Due 0307—Incomplete but Functional/ Working Prototype

Everyone will work at different paces, but to "sync up" on the 0307 due date, the expectation is to have code that, while not necessarily complete, at least runs error-free and demonstrates various portions of the intended game. The notion of "incomplete but functional/working" will depend on the game involved, so I will work with you to determine the specifics for this deliverable.

Due 0328—The Completed Game

We hope to then work our way toward a finished product by 0328. As stated earlier, we don't expect sophisticated visuals; we are after core interaction and game mechanics. To some, your results may have a decidedly retro or old-school feel…again, this is a nod to the pop culture reference of this assignment's title.

What to Submit

Work on your programs in their respective environments (*repl.it* or CodePen) and submit the link to Brightspace. No harm in submitting the link early: I'll just see what's there as of the due date.