# Kyle Ho

Personal Project Proposal

Learning Goal

I want to learn the application of algebra and physics in modeling games and the balance between art and science in game developments.

Product Goal

I am going to write code scripts and design art works for a video game. The script must include randomized events with adjustable probability. The display of elements must include 2D motion, 3D motion, and collision.
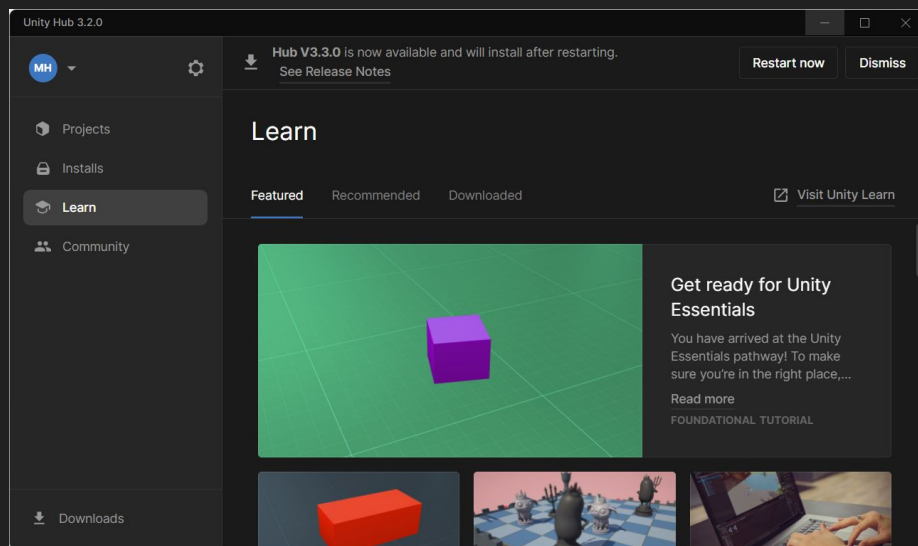
Personal Interest

I always love logics and numbers flipping around my head, and that's why I have great interests in mathematics. When I first met video games, I found fun in not only making achievements but also constantly calculating as a player. At a certain point, I began wanting to manipulate the numbers behind the screen instead of what is shown to me. By now, I have gained sufficient knowledge and tools, and there is now an opportunity for me to spend time and resources to build out the milestone on my way mastering digits.

Possible Sources

1) Unity Documentation

2) Microsoft Docs - C#

3) Probability Distribution | Formula, Types, & Examples

4) UI Design

5) Physics library | Science - Khan Academy

6) other non-academic / pop science sources

MLA Citations

Morales, Justin, et al. "User Interface (UI) Design: Insights & Inspiration: Adobe XD Ideas." *Ideas*,
    xd.adobe.com/ideas/process/ui-design/.

"Physics Library | Science." *Khan Academy*, Khan Academy, www.khanacademy.org/science/physics.

Talwalker, Presh. "The Circular Motion Illusion Explained Mathematically. Sunday Puzzle." *Mind Your Decisions*, 7 May
    2017,
    mindyourdecisions.com/blog/2017/05/07/the-circular-motion-illusion-explained-mathematically-sunday-puzzle/.

Turney, Shaun. "Probability Distribution: Formula, Types, & Examples." *Scribbr*, 13 June 2022,
    www.scribbr.com/statistics/probability-distributions/.

"Unity User Manual 2020.3 (LTS)." Unity Technologies ApS, 11 Mar. 2021.

Wagner, Bill. "*C# Docs - Get Started, Tutorials, Reference.*" *C# Docs - Get Started, Tutorials, Reference. |
    Microsoft Learn*, learn.microsoft.com/en-us/dotnet/csharp/.