**2/27/2019**

**3D Rotations**

**Method 1:** Break into 2 2D rotations

(shooter, most every other game)

*ArcTan = ATan2 (y/x) = Angle*

**Method 2:** Single Interpolated Rotation

(flight)

(slightly more efficient)

Vector Dot Product

*v dot w = ratio of angle between the two vectors*

*Acos(dot(v,w)) gives us the angle between them on the axis formed by the two vectors instead of on a global xy or xz axis (objects forward z axis)*

Cross Product

v cross w = perpendicular to the two vectors.

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*--* ***Work on new enemies***

*--* ***Work on particle systems***

*--* ***~~Double check fur material / make new noise texture~~*** *-- ~~new more adaptive tutorial prompt system~~*

*-- set up credits during first 5 levels*

*-- level 6 should begin the start of the story and introduce the overall goal of the game.*

*-- more puzzles, styles of platforms, hazards*

**3/11/2019**

**Work**

Unreal Audio Summary

Create Dynamic Material Instance = Set values from that = Easy-Peezy

**Story**

**Characters:**

**Good: Aaron**

**Bad: Zombies**

**Worlds:**

**Lucky Land**