Alan Cheung

Professor Venkata Margapuri

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**Question 3a:**

Time.deltaTime allows the developers to know how long it took for each frame to execute when the game is running. In the C script, the update function is called once per frame. That means that if we use the update function to translate our game objects’ position, how fast our object moves in a given time frame is dependent upon the frame rate of the game. Time.deltaTime is meant to solve that dependency; by multiplying the rate of movement by Time.deltaTime, it ensures how fast the object moves is decoupled from the frame rate.

**Question 3b:**

Time.deltaTime may have been used in Forza Horizon in order to determine how fast the player’s car is moving. Time.deltaTime would make sure that the speed of your car is not at all influenced by the frame rate of your game. If Time.deltaTime were not used, that would cause an uneven playing field dependent on your hardware. Computers and monitors that are able to output higher frame rates would be given an advantage, since they would most likely be moving faster than cars operated by players with slower machines. The user experience would be relegated to how good your machine is rather than how skilled you are at the game.

**Question 5:**

Mesh Renderer: Mesh Renderer is a component of objects that allows them to be visible to the camera. It’s used to render the 3D mesh of objects in the scene, and turning it off makes it so that they are no longer visible to the camera.

Box Collider: Box Collider is a component that defines an area around a GameObject through which collisions and interactions with other objects will happen.

Input.getAxis method: Input.getAxis is a predefined method in Unity that allows you to control movement with keys other than the arrow keys (i.e., WASD). The method itself returns the values of a virtual axis (such as Horizontal and Vertical).

Rigid Body: Rigid Body is a component that allows GameObjects to function under Unity’s Physics engine for things such as operating under gravity, detecting collisions, and specifying its mass.