Journal Report 3 9/16/19-9/22/19 Megan Dass Computer Systems Research Lab Period 4, White

Daily Log

Monday September 16

I got the code to move and go forward using code. For example, when the program starts, the cube will move forward x amount. You can tell it moves forward because in the same frame, the cube got smaller. I used ¡GetComponent¿.transform.position to move the waypoints. Next class I will be ready to start configuring the button

Tuesday September 17

I started configuring the buttons today. At first I tried making a cube a button and everytime you would gaze tap it, it would trigger another action, like a button. However, when I used the button the gaze was a little laggy and I felt like there should be another alternative. I researched for the rest of class to find an alternative to using a cube as a button.

I found that there is a built in button object in the HoloToolkit. There is a Canvas gameObject that has Buttons in it. The good thing about this is that it stays in one spot in the reference frame as you move around and it does not lag.

Thursday September 19

I started configuring the Button object and kept in the left-hand corner for now. I also created a script would recognize when the button tap is recognized. However, the script did not work, unfortunately. It would not recognize when the gesture tap is being used. I know the button was being tapped because I made the button change colors when it was tapped in Unity. Therefore, I know that there is a missing connection between the front-end and the back-end. I will have to check the configurations again.

Timeline

Date	Goal	Met
September 15	The "code playground" should be	No, because I am adding the capabili-
	done by this point. The user should	ties to the cube before I start the "code
	be able to drag and drop the code	playground" so I don't have to worry
	blocks to the run area.	about other things first.
September 22	Have a robot object that appears at	No, because I have not found a robot
	the start of the app. The robot should	asset mainly because I want it to work
	be able to move when the user hits	on a cube first. Once I get the button
	"run" in the run portion of the "code	to work, this should be done
	playground" with the code blocks	
	they put in.	
September 29	Create a simple, table-sized map	
	where the robot will rest and will	
	eventually move.	
October 6	Create the other buttons to move the	
	robot/cube right and left	

Reflection

This week I accomplished a good amount for the pace I have been going at. I definitely do need to do more research about why my code is not working. I followed a tutorial for the code, so the first thing I will do next week is try to follow another tutorial. If that does not work, then I will try to look at the configurations again. Making a button for the HoloLens is pretty common, so I'm sure there is plenty online to help me figure out where I went wrong. After I fix the issue my goal is to make the cube move forward every time the button is pressed.

Below is a picture of the code that I have been working on to get the button to work.

```
Ḥusing∙System.Collections;
 using · System . Collections . Generic;
 using · UnityEngine;
 using · System;
 using HoloToolkit.Unity.InputModule;
using · UnityEngine . UI;
□public·class·Tapping·:·MonoBehaviour,·IInputClickHandler·{
 //IInputClickHandler.is.how.the.front.and.back.end.should.be.connected
 ···private·int·index·=·0;
....public.void.OnInputClicked(InputClickedEventData.eventData).//when.the.gesture.tap.is.used
 ....{
 ····Debug.Log(this.gameObject.name); ·//nothing·is·printing·with·this·line·when·I·run·the·program
 ·····if·(this.gameObject.name·==·"move")·//if·the·button·is·named·move
 ····{
  ....index = 0;
 ·······this.gameObject.GetComponent<Image>().color-=·Color.gray; ·//then·change·the·color·of·the·button·to·make·sure·
 ····//it·is·working
```