LOG BOOK **WEEK NO: 5-6**

WEEK NO	DATE	BRIEF DESCRIPTION OF DAILY ACTIVITIES
5	**30th September 2019**	• Add function for touchpad in controller
	1st October 2019	• Fixed error regarding snapping zones
	2nd October 2019	• Unable the Snap Mesh renderer during pickup and snapping
	3rd October 2019	• Add a few components and modified shape of snapping zones
	4th October 2019	• Fixing error regarding the table fly away
6	**7th October 2019**	• Do a research regarding rigidbody and fixed joint in GameObject
	8th October 2019	• Learn how to share a project through GitHub
	9th October 2019	• Fixed coding regarding Parenting and child object for snapping zones
	10th October 2019	• Add UI Instruction when Player enter touchPad • Export Module IKEA Resemble to Front Interface Scene • Synchronize script in all scenes
	11th October 2019	• Photon Rigidbody View

Logbook Weekly Evaluation by HOST COMPANY SUPERVISOR					
I**nstruction to Host Company Supervisor** Please refer to the student's to assess his/her performance. Please award the scores based on the range below:					
Student's Score	**Beginning (<2.0)**	**Developing (2.0 to <3.25)**	**Accomplished (Rare) (3.25 to <4.0)**	**Exemplary (Exceptionally Rare) (4.0 to 5.0)**	**Score**
Initiative & Creativity	Had little observable drive and did not have new ideas	Some observable drive and some new ideas	Mostly self-starter and sometimes sought new challenges and offered new ideas	Always a self-starter and consistently sought new challenge and offered new creative ideas	**/5**
Task Accomplishment & Commitment	Partially accomplished given task despite full supervision	Accomplished given task but with full supervision	Accomplished given task but with some supervision	Accomplished given task with very minimum supervision	**/5**
Attendance & Punctuality	Frequently absent and always late	Sometimes absent and sometimes late	Never absent and almost always on time	Never absent and always on time	**/5**
Attitude & Self Control	Unable to demonstrate positive attitude and hardly maintained self-control under pressure	Occasionally demonstrated positive attitude and occasionally maintained self-control under pressure	Sometimes demonstrated positive attitude and maintained self-control under pressure	Consistently demonstrated positive attitude and consistently maintained self-control under pressure	**/5**
				Total Score	**/20**
Comments:					
Host Company Supervisor's Signature & stamp:					
Name & Designation:					
Date:					

(make copies if necessary)

DETAIL REPORT **WEEK NO: 5**

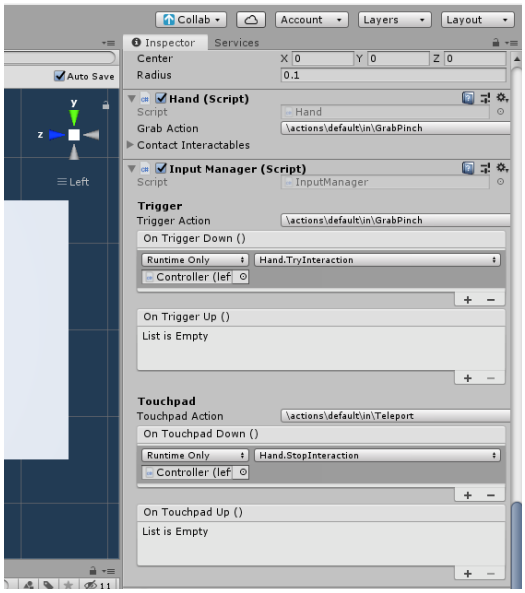
Objective(s) of the activities :

- Add function touchpad in controller

Contents :

I used cube object as an avatar to let the other player see the avatar that indicate the Player. Mr Shri suggested to add some face to it so that we can know which side of face that the playing is facing. Then, I add eye and mouth to the cube using 3D GameObject in Unity.

Then, I proceed with adding function to touchpad so user can pick up the object. This function differentiate with trigger button. Trigger button is used to snap the object and touchpad is used to pick up the object. I modified "Interactable" script by removing a few code in Update function and add PickUp function for touchpad. After that, I drag the pickup function in the "Input Manager Touchpad" function in Controller.



DETAIL REPORT **WEEK NO: 5**

Objective(s) of the activities :

- Fixed error regarding snapping zones

Contents :

We had a meeting with Dr Fairuz, Mr Shri and their students. We take a look and tested their project. We also ask a few things regarding snapping function to them.

They gave a few suggestions to enhance the snapping function in our project. They suggested to add a follow script in the snap zones. This can help the snap zones to always follow the table top locally and over network.

Then, I coded the Follow script and drag to all snap zones.

1. In the Follow script, I used transform to add the table top as the parent object that need to be followed.
2. Then, I use float and let the speed to be 1.0f.
3. I also used "const float EPSILON" in the code since I don't want it to be shaking when they joint together.

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DETAIL REPORT **WEEK NO: 5**

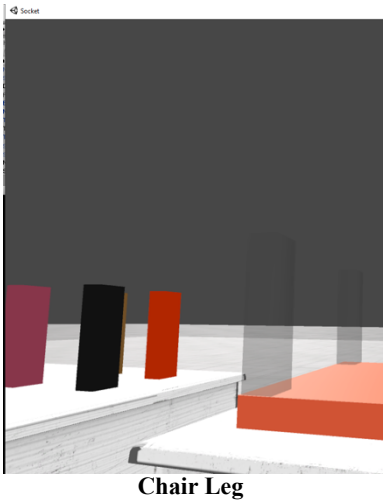
Objective(s) of the activities :

- Add a few components and modified shape of snapping zones
- Unable the Snap Mesh renderer during pickup and snapping

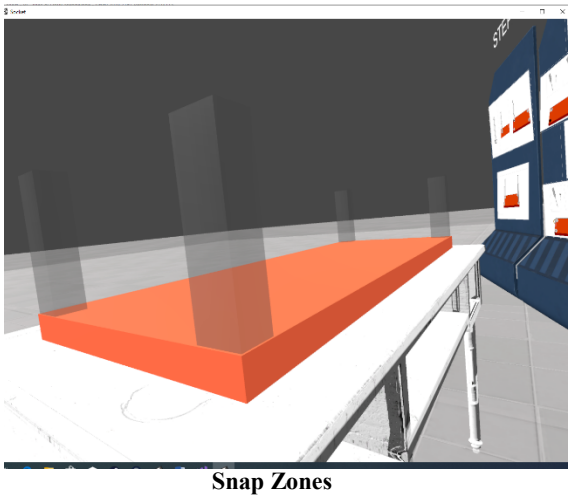
Contents :

I modified the scene. I tried to do like Dr Fairuz`s students where the assemble the chair leg with table top. Here are the few things that I modified:

1. I changed the snap zone size according to the chair leg
2. I created 4 cubes to represent the chair leg
3. In each cube, I add Rigidbody, box collider, Photon View, Photon Transform View, Moveable script and Transfer Ownership Script.
4. Change layer of every cube to Interactable.



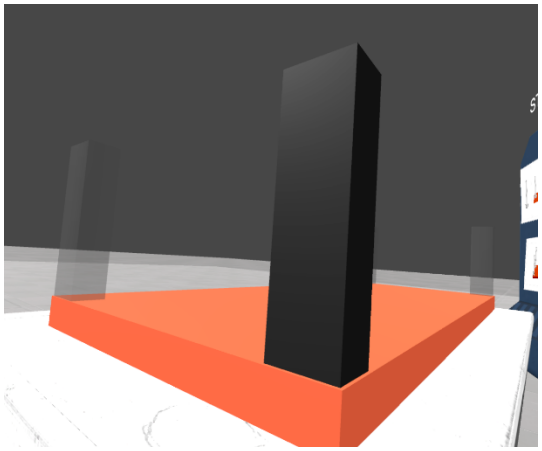
Chair Leg



Snap Zones

Then, I add a few lines of code in "slot" script to let the snap zone gone after the snapping happened.

```
GameObject Cube = GameObject.FindGameObjectWithTag("Cube");
gameObject.GetComponentInChildren<Renderer>().enabled = false;
```



Once the player snap the object in the snap zone, the snap zone mesh renderer will be unable and the layer will only see the object that already snapped at the position.

I run and tested, the snapping zone and the object snapping is fine but once the player try to lift the table, the table will fly away and land on the floor backwards.

DETAIL REPORT **WEEK NO: 5**

Objective(s) of the activities :

- Fixing error regarding the table fly away

Contents :

I did a research regarding the error which is after player snap object, and try to rotate the table, the table will fly away.

I found a few same errors in Unity Forum and the cause of the error is related to Rigidbody.
These are a few suggestions to fix the error:

1. For the Fly away part, make the Rigidbody mass higher. This makes sure that there need to be more force to push the object from fly away.

2. Using the transform.Translate() method moves the Game Object without checking for collisions on the next position before actually moving, and then if the Table moves inside another object and it detects a collision, it's going to be pushed away. Try using the velocity attribute of the RigidBody to move the table, something like this:

```
var rb : RigidBody;
function Awake()
{
   rb = GetComponent.<RigidBody>();
}
function Update()
{
     rb.velocity = new Vector3(0f, 0f, speed * Time.deltaTime);
```

I tried both solutions but the error is still there.

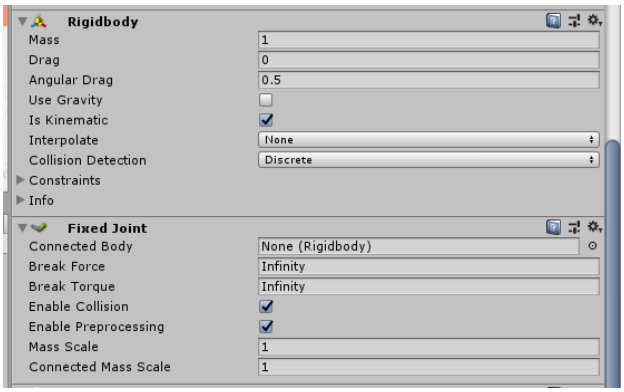
DETAIL REPORT **WEEK NO: 6**

Objective(s) of the activities :

- Do a research regarding rigidbody and fixedjoint in GameObject

Contents :

Then, I continued with the research regarding Rigidbody and FixedJoint. In the scene, I used them both as picture below:



I checked isKinematic for Rigidbody in Snap Zones object since I want them to stick and follow the Table Top.

If isKinematic is enabled, Forces, collisions or joints will not affect the rigidbody anymore. The rigidbody will be under full control of animation or script control by changing transform.position. Kinematic bodies also affect the motion of other rigidbodies through collisions or joints.

As for Fixed Joints is somewhat similar to Parenting but is implemented through physics rather than Transform hierarchy. I used Fixed Joints to let the snap zones fixed to exact position on the Table Top.

Fixed Joints require a Rigidbody. Enable Collision - When checked, this enables collisions between bodies connected with a joint.

DETAIL REPORT **WEEK NO: 6**

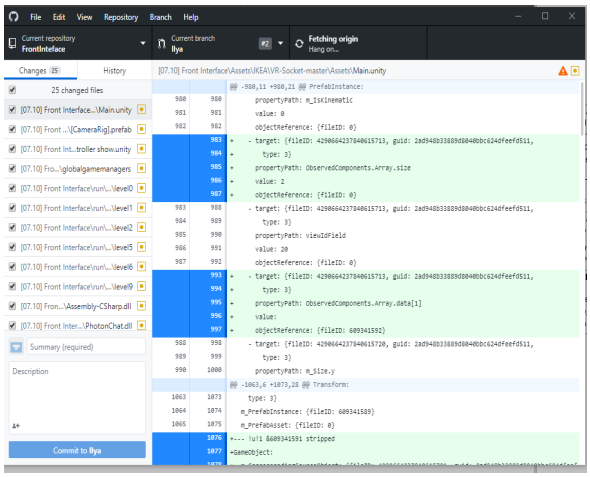
Objective(s) of the activities :

- Learn how to share a project through GitHub

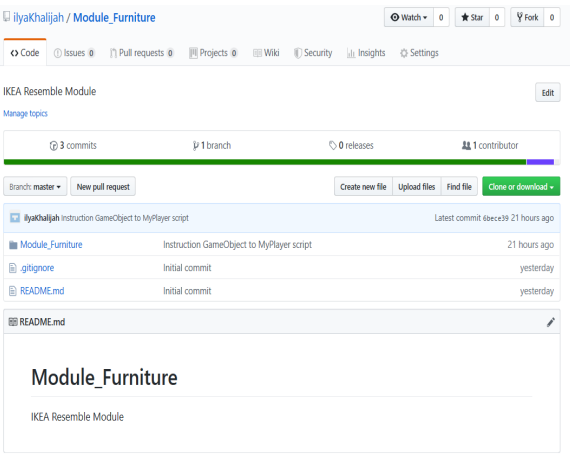
Contents :

Dr Fairuz suggested that we use GitHub to share our project. I learnt how to use create repository, commit to master and etc.

1. Add repository in GitHub website
2. Install GitHub Desktop
3. Create new Unity project and import package to the project
4. Save project in GitHub folder in computer
5. Open GitHub Desktop and clone the repository using the link in GitHub website
6. Ensure Version Control Mode in Visible Meta Files and Asset Serialization in Force Text
7. If anything in the scene that need to amend, then just commit to Master in GitHub Desktop then fetch
8. Add collaborators in GitHub Website, collaborators can do any amend to the project and commit to their own branch.



GitHub Desktop



GitHub Website

DETAIL REPORT **WEEK NO: 6**

Objective(s) of the activities :

- Fixed coding regarding Parenting and child object for snapping zones

Contents :

Before this, I drag the Snap Zones inside the Table Top in Hierarchy. This let the Snap Zones depends towards Table Top. I want the Snap Zones to be dependant so that any changes in code regarding both object will not give effect to each other.

I fixed my parent child object since it gives inaccurate movement for the snap zone. I used transform.position to set the Snap Zones as the child of the Table Top.

This let me drag out the Snap Zones Object from Table Top object in Hierarchy but the position and transform of Snap Zones will still following the Table Top`s position and movement.

DETAIL REPORT **WEEK NO: 6**

Objective(s) of the activities :

- Add UI Instruction when Player enter Touch Pad
- Export Module IKEA Resemble to Front Interface Scene
- Synchronize script in all scenes

Contents :

I added the UI instruction following Dr Fairuz`s suggestion. Once the player enter the Touch Pad of the controller, the UI instruction will appear and player also can exit the instruction using trigger button of controller. This function let Player read the UI instruction repeatedly. Here are the things I did to add this function:

1. Create UI instruction using Canvas Object > Panel > Text
2. Drag the UI instruction to Hand
3. Add function Menu Appear() and Menu Disappear() in Hand Script

Then, I export my project and import them in Front Interface Script. I synchronize all scripts by compare and eliminate the unnecessary function that is in the script.

DETAIL REPORT **WEEK NO: 6**

Objective(s) of the activities :

- Photon Rigidbody View

Contents :

I added the Photon Rigidbody View inside all the objects that can be interacted with the player.

This help the player to see the accurate position and movement of object that other player interacted with.

Dr Fairuz gave us a few feedback regarding our project :

1. Fix the size of the interface
2. Fix the Hand Animation for both of the controllers
3. List of player nickname
4. Snapping zones movement
5. Teleport