



UNIVERSITI  
TEKNOLOGI  
PETRONAS

# **STUDENT INDUSTRIAL INTERNSHIP PROGRAMME LOGBOOK WEEK 9 & 10**

**Student Name: Nur Amiera Binti Mohd Noor**

**Matric No: 24651**

**Programme: Bachelor of Technology in Information Technology**

**Place of Training: Universiti Teknologi PETRONAS (UTP) / Murdoch University, Australia**

**Period of Training: 6<sup>th</sup> May 2019 – 6<sup>th</sup> December 2019**

**Project Title: Project Neuromender (A Home Computer-Based Stroke Rehabilitation System).**

**LOG BOOK****WEEK NO: 9-10**

WEEK NO	DATE	BRIEF DESCRIPTION OF DAILY ACTIVITIES
9	28.10.2019	<ul style="list-style-type: none"><li>• Solve the database problem</li></ul>
	29.10.2019	<ul style="list-style-type: none"><li>• Make database scene works with VR</li></ul>
	30.10.2019	<ul style="list-style-type: none"><li>• Redesign log in scene to work with VR</li></ul>
	31.10.2019	<ul style="list-style-type: none"><li>• Research about instantiate the keyboard</li><li>• Adding a show password function</li></ul>
	1.11.2019	<ul style="list-style-type: none"><li>• Finalize the interface</li><li>• Research about how to make Scroll view work with VR for joining room</li></ul>
10	4.11.2019	<ul style="list-style-type: none"><li>• Attend final year presentation by Murdoch Student</li></ul>
	5.11.2019	<ul style="list-style-type: none"><li>• Setup the player name above the player</li></ul>
	6.11.2019	<ul style="list-style-type: none"><li>• Display player name above player</li></ul>
	7.11.2019	<ul style="list-style-type: none"><li>• Display both name above player in multiplayer scene</li></ul>
	8.11.2019	<ul style="list-style-type: none"><li>• Modified register and login scene</li><li>• Adding condition on activate button</li></ul>

Logbook Weekly Evaluation by HOST COMPANY SUPERVISOR

**Instruction to Host Company Supervisor**

Please refer to the student's to assess his/her performance.

Please award the scores based on the range below:

<b>Student's Score</b>	<b>Beginning (&lt;2.0)</b>	<b>Developing (2.0 to &lt;3.25)</b>	<b>Accomplished (Rare) (3.25 to &lt;4.0)</b>	<b>Exemplary (Exceptionally Rare) (4.0 to 5.0)</b>	<b>Score</b>
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					<b>/20</b>
<b>Comments:</b>					
<b>Host Company Supervisor's Signature &amp; stamp:</b>					
<b>Name &amp; Designation:</b>					
<b>Date:</b>					

*(make copies if necessary)*

**Objective(s) of the activities :**

- **Solve the database problem**

**Contents :****Monday (28.10.2019)**

1. Once database has been download we need to start the apache and mysql to make the database running
2. After that, we need to go tp PHPmyAdmin to create new user and login into the account
3. However, there is a problem where I cannot enter the account that I have created
4. We did the same way as the tutorial said and the result is still the same. I am still in the local host
5. The solution for this problem is we need to edit the config.inc to enter our account



```
config.inc - Notepad
File Edit Format View Help
k?php
/*
 * This is needed for cookie based authentication to encrypt password in
 * cookie
 */
$config['blowfish_secret'] = 'xampp'; /* YOU SHOULD CHANGE THIS FOR A MORE SECURE COOKIE AUTH! */

/*
 * Servers configuration
 */
$i = 0;

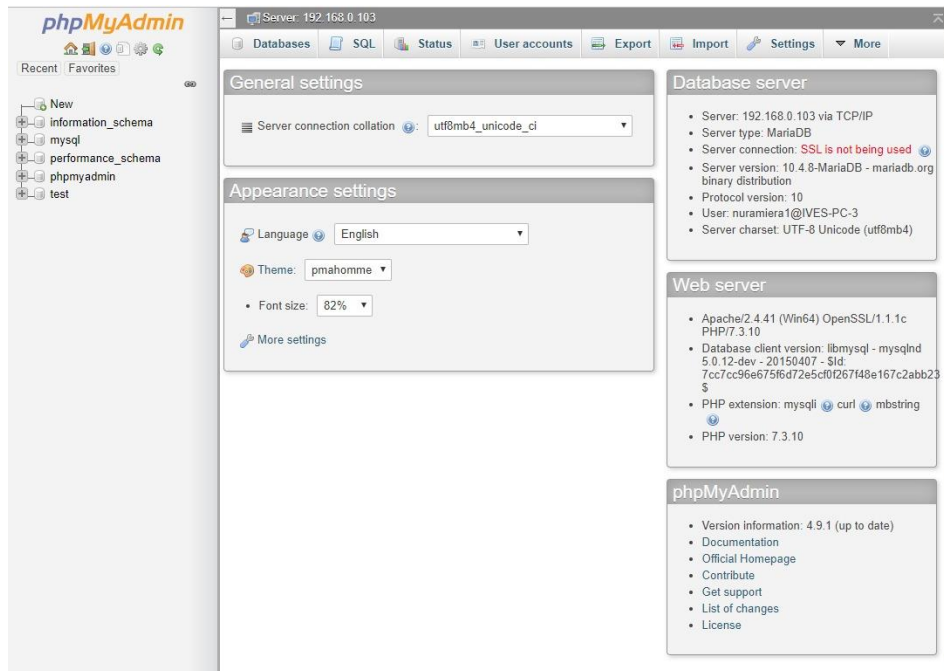
/*
 * First server
 */
$i++;

/* Authentication type and info */
$config['Servers'][$i]['auth_type'] = 'config';
$config['Servers'][$i]['user'] = 'nuramiera1';
$config['Servers'][$i]['password'] = 'password';
$config['Servers'][$i]['extension'] = 'mysql';
$config['Servers'][$i]['AllowNoPassword'] = true;
$config['Lang'] = '';

/* Bind to the localhost ipv4 address and tcp */
$config['Servers'][$i]['host'] = '192.168.0.103';
$config['Servers'][$i]['connect_type'] = 'tcp';

/* User for advanced features */
$config['Servers'][$i]['controluser'] = 'pma';
$config['Servers'][$i]['controlpass'] = '';
```

6. Once we have save the text, we are now successfully in our own account



7. After we have done with the account, we need to make sure that all the Module in Xampp are running
8. To ensure that the unity will access the database which we have created we need to edit the code

```
$con = mysqli_connect('192.168.0.101', 'nuramiera1', '', 'unityaccess');
```

- i. Local Host : 192.168.0.101
- ii. User Account : nuramiera1
- iii. Database Name : unityaccess

9. Then, we need to stop and restart the Module in Xampp. However, the problem here mySQL cannot be running



10. In Stack Overflow, there are many people who are facing the same problem

11. There are some solution that I have tried to solve this problem

- i. Delete the ibdata1 file
- ii. Delete the random data

```
01.Go to mysql/data/ directory  
02. delete the ibdata1 & ib_logfile*(ib_logfile0,ib_logfile1,ib_logfile101) file  
03. restart xampp server
```

- iii. Change the port from 3306 to 8111 and run the Xampp as Adminisrator

12. However, all the solution that I have tried did not solve the problem

13. Lastly, I just uninstall and install the Xampp back and re-do all the setting that I have done before

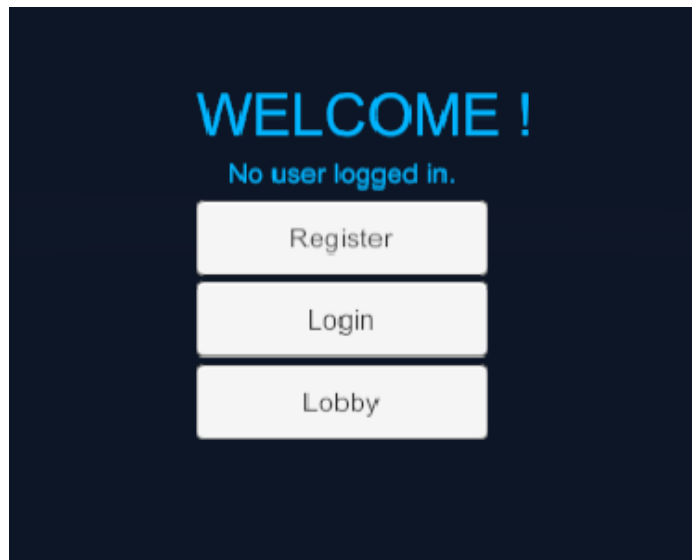
14. By using this solution, all the Module in Xampp can running successfully and when we test it on the unity project, user can register and login to their account

**Objective(s) of the activities :**

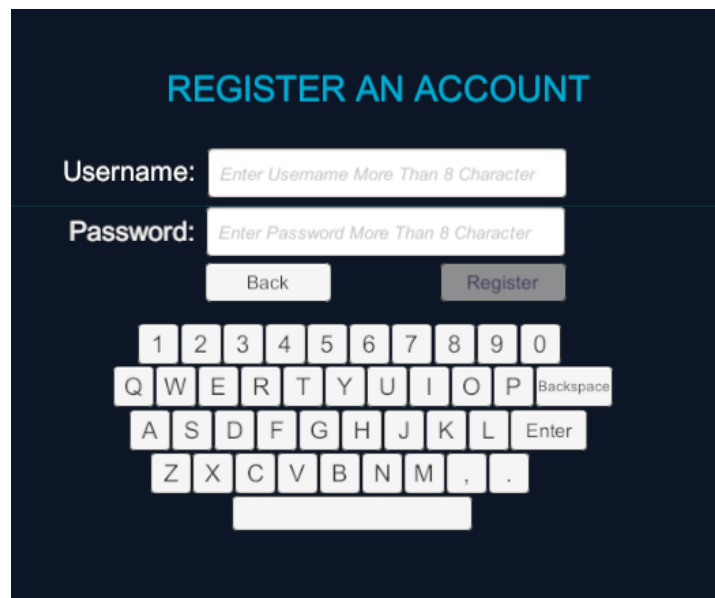
- **Make database scene works with VR**

**Contents :****Tuesday (29.10.2019)**

1. Redesign the scene for “MainMenu” to make it works with VR
2. Once the “MainMenu” can be work with VR, the next scene is the “Register” scene
3. In this scene, we need to add keyboard sine the user need to add their username and set the password for their account
4. The problem that I have faced is the VR action manifest cannot be found and the controller cannot be seen in the scene
5. I have faced this problem before where I did not found the solution that time
6. The solution that I have tried based on the research that I have made is,
  - i. Delete the SteamVR\_Input
  - ii. Re-generate the SteamVR\_Action
  - iii. Refresh the path for action manifest
  - iv. Clone the action.json folder
7. However, all the solution that I have tried did not solve the problem. Lastly, to solve the problem, I need to delete, restart the pc and clone the folder again.
8. By deleting, restart the pc and clone the project back, the problem has been solve
9. For the “MainMenu” scene, the keyboard has been added and it can work well
10. The player choose whether they want to register or login to their account



*Figure 1: Main Menu Interface*



*Figure 2: Register Account Interface*

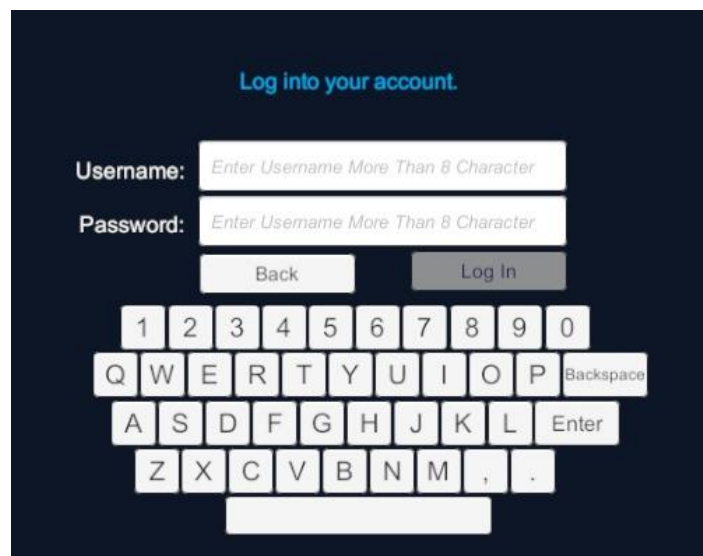


**Objective(s) of the activities :**

- **Redesign log in scene to work with VR**

**Contents :****Wednesday (30.10.2019)**

1. To ensure any scene to work with vr, we need to set the canvas into camera space and drag the camera in camera rig into the components
2. Next, when we want to design the interface, make sure to make it in the proper area so that it will not make users eye hurt
3. Designing step maybe take sometimes as we need to edit and see it through the hmd
4. Once the design has been fixed, we need to add the keyboard for player to input their username and password
5. To make sure that keyboard is visible in vr environment, we need to attach the keyboard as a child of any component inside the scene. I have attached the keyboard as the child of log in button
6. Once the keyboard can be seen with vr, we need to position and scale it to make to press by the user
7. Other than that, since we have 2 input field, we need to activate only one in a time so that when we press the keyboard, it will input in the input field that we want
8. Next, we want to make the button to work in vr. To do so, we need to make sure it can be detected by the laser pointer



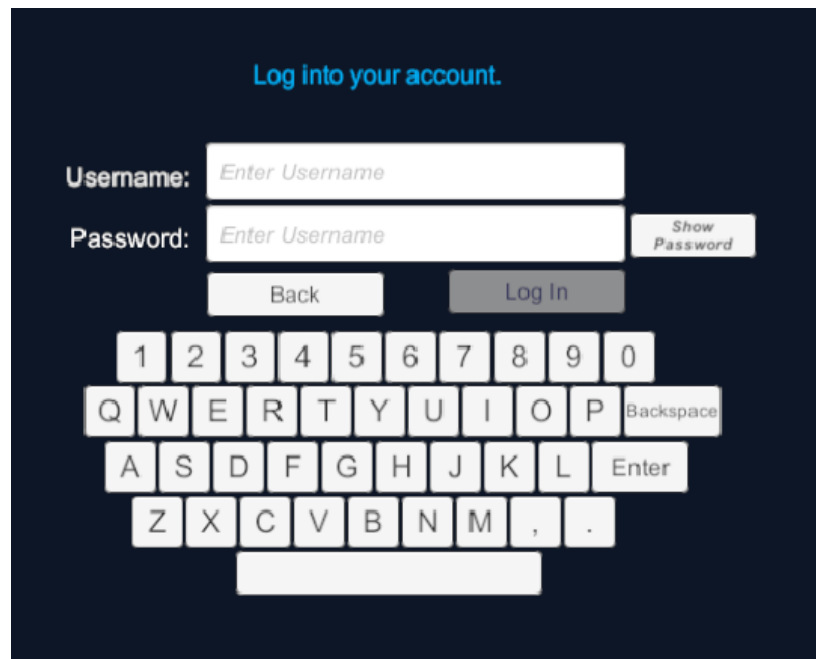
9. Button need to have a box collider with the same size as the button to ensure that laser can be detected
10. In the code, we need to make sure that when the player presses the button, it will call the certain functions
11. To make it more user friendly, I have an idea which when the player activates the input field only then the keyboard will show
12. My idea is to instantiate the keyboard when the input field are activated

**Objective(s) of the activities :**

- **Research about instantiate the keyboard**
- **Adding a show password function**

**Contents :****Thursday (31.10.2019)**

1. On the “Register an account” scene, I did try to instantiate the keyboard when player activate the input field
2. To instantiate an object, there are several way that we can do
  - i. Public static Object Instantiate (Object original)
  - ii. Public static Object Instantiate (Object original, Transform parent)
  - iii. Public static Object Instantiate (Object original, Transform parent, bool instantiateInWorldSpace)
  - iv. Public static Object Instantiate(Object original, Vector3 position, Quaternion rotation, Transform parent);
3. I did try several of the code to instantiate the keyboard
4. Problem
  - i. When the keyboard been instantiate, the keyboard is not invisible in the scene
  - ii. The position of the keyboard also not at the spawn point which we has decided
  - iii. This problem may happened because the keyboard need to be set as a child of the canvas
  - iv. Once, it is the child as the canvas, it can be visible in the hmd
5. Other than that, when we has a discussion on the interface, we did notice that it is a bit disturbing as the user cannot see the password that they have enter
6. To solve the problem, I add a button which when the player clicked on it will change the content of the input field
7. The concept is, we can change the content of the input field during the runtime. When the password input field is not null, it will change the input field from password to standard
8. Once input field has change the content, the user can see the password which they has enter



9. Other than that, there are a sudden black out in this building for a while. This has effect our project as the host IP for the database has change

```
*Login - Notepad
File Edit Format View Help
<?php
$con = mysqli_connect('192.168.0.101', 'nuramiera1', '', 'unityaccess');
```

*Figure 1 Old IP Address*

```
Login - Notepad
File Edit Format View Help
<?php
$con = mysqli_connect('192.168.0.102', 'nuramiera1', '', 'unityaccess');
```

*Figure 2 New IP Address*

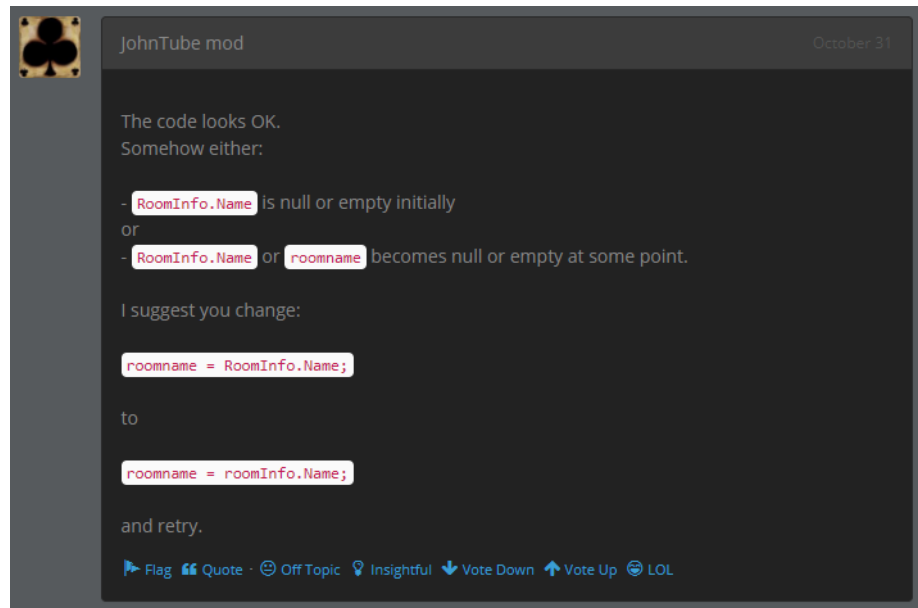
**Objective(s) of the activities :**

- **Finalize the interface**
- **Research about how to make Scroll view work with VR for joining room**

**Contents :****Friday (1.11.2019)**

1. I have add the “Show Password” function on the “Login” interface
2. Once all of the scene has been finalized, I had make a last checking to make all the functionality work well in the scene
3. This is because, when we are doing our testing yesterday, there are some problem with the keyboard function which it cannot take the backspace function
4. By doing the testing, I has found some problem
  - i. In “Login” scene the text in input field need to be set on best fit to make it fix the input field
  - ii. Other than that, I noticed that when user want to deleted their typo on the password input field, it deleted the words on username instead of password
  - iii. The backspace button cannot be clicked
5. By doing this testing, I can easily fixed the error before it being test by the other member
6. Other than that, to solve the join room problem, I have make some research on how to take the parameter to other function
7. Some of the solution that I have tried is
  - i. StartCouroutine()
  - ii. Button.onClicked.AddListener()
  - iii. Creating new function and tried it on the other function

8. Besides, I also have tried the solution that I have discuss with people on the forum. However, the result are still the same



## **DETAIL REPORT**

**WEEK NO: 10**

### **Objective(s) of the activities :**

- **Attend final year presentation by Murdoch Student**

### **Contents :**

#### **Monday (4.11.2019)**

1. Attending final year presentation by Murdoch University at Robertson Theater
2. There are 12 group who are presenting on that day
3. Each of the group will have at least 4 person per group
4. Outcome from attending the presentation
  - i. I can see the different for final year presentation between UTP and Murdoch University. At UTP, each student need to come out the project individually compared to Murdoch University by group
  - ii. All the project done by Murdoch University are the project which is needed or requested by other department in Murdoch University
  - iii. This means, they have a real client who are waiting for their project. once their project has been developed and prototype has been release, the client can used the project
  - iv. During the presentation, other people are allow to join which will bring the benefit to who are listening
  - v. The project will be evaluated by several panel
  - vi. Presentation will be done in group and for whoever who can attend the presentation, they need to provide a video for their part
  - vii. For myself, by attending this presentation, I can know that there are different type of programming language that exist which has not been explore

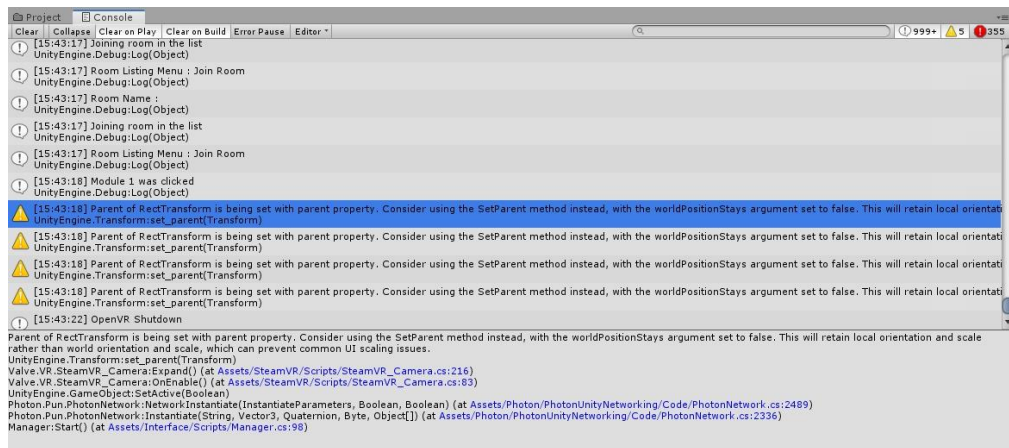
**Objective(s) of the activities :**

- **Setup the player name above the player**

**Contents :****Tuesday (5.11.2019)**

1. I want to add the player name above the player so that we know who are in the scene
2. To do that, I have tried to add text to input the player name inside it
3. However, I have a problem where the text did not appear when we instantiate the player
4. To solve the problem, I have replaced the text with button and I would like to change the button text real time
5. When I try to instantiate the player we can see the button above the player but not the name
6. I try to enter the player name manually and the result we can see their name
7. However, if we want to used "PhotonNetwork.LocalPlayer.Nickname", it cannot pass the value to the button
8. Besides, there are also other problem about the UI interface. Since we are adding the UI element into not UI based the error about the parent has been produce





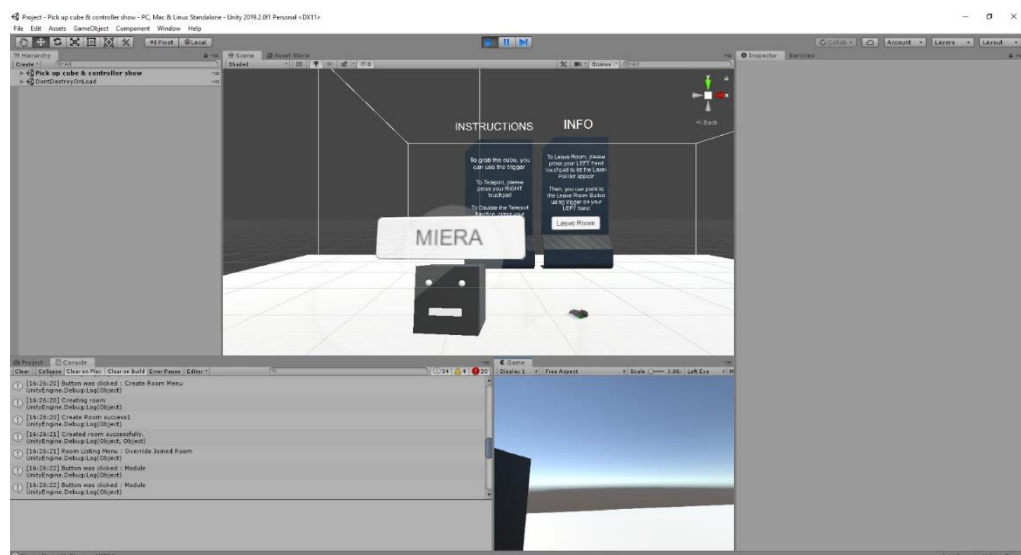
9. To solve this problem, I would need to know how to add an UI element into camera rig
10. Other than that, I would like to try to display the player id instead of name for testing

**Objective(s) of the activities :**

- **Display player name above player**

**Contents :****Wednesday (6.11.2019)**

1. Button has been positioned above the player to display their name
2. To ensure that text inside the button will change during real time, we need to use “GameObject.GetComponentInChildren” to make sure the player name will be display during instantiation
3. Editing the UI element in VR environment need to have a few step
  - i. Set the canvas into World Space
  - ii. Edit and reposition the size of the canvas to make it smaller
  - iii. Once, the canvas has been resize, we need to resize the scale, width and height of the button
  - iv. Once the size has fixed, position the button inside the camera
4. In code, we need to utilize the code provided by photon
5. To get the player name, we can use “PhotonNetwork.Nickname” and assign it to the text
6. When the project run with single user, all the function are working perfectly compared to multi player
7. When we test it with the other player, button did get instantiate, but both player cannot see each other name



**Objective(s) of the activities :**

- **Display both name above player in multiplayer scene**

**Contents :****Thursday (7.11.2019)**

1. The name of the player has been displayed above the player perfectly when the player are alone in the scene
2. The solved the problem for instantiating name for both player, I have made some research. Some of the solution that I have tried,
  - i. Using "PhotonNetwork.LocalPlayer.Nickname"
  - ii. Using "PhotonView.IsMine"
    - When the view is local player, it will display the name of the player. However, this solution also did not work
  - iii. Instantiating the canvas together with camera rig
  - iv. Add photon view to canvas, button and text
  - v. `GameObject go = PhotonNetwork.Instantiate(this.canvas.name, spawnPoint.position, Quaternion.identity, 0);`  
`go.transform.parent = GameObject.Find("Player").transform;`
  - iv. Sending the player name using RPC

```
38
39 [PunRPC]
40 public void PlayerName(string name)
41 {
42     if (photonView.IsMine)
43     {
44         //GameObject go = PhotonNetwork.Instantiate(this.canvas.name, spawnPoint.position, Quaternion.identity,
45         //go.transform.parent = GameObject.Find("Player").transform;
46
47         //PhotonNetwork.Instantiate(this.canvas.name, spawnPoint.position, Quaternion.identity, 0);
48         //name = PhotonNetwork.LocalPlayer.Nickname;
49         //Debug.Log("Player Name MyPlayer : " + name);
50         //Debug.Log("Player Name Photon View : " + photonView.Owner.Nickname);
51         Debug.Log("Player Name Photon View : " + PhotonNetwork.Nickname);
52
53         //GameObject.Find("Button").GetComponentInChildren<Text>().text = photonView.Owner.Nickname;
54         GameObject.Find("Button").GetComponentInChildren<Text>().text = PhotonNetwork.Nickname;
55
56         //gameObject.transform.SetParent(GameObject.Find("Button").transform, false);
57         //gameObject.GetComponentInChildren<Text>().text = name ;
58     }
59 }
```

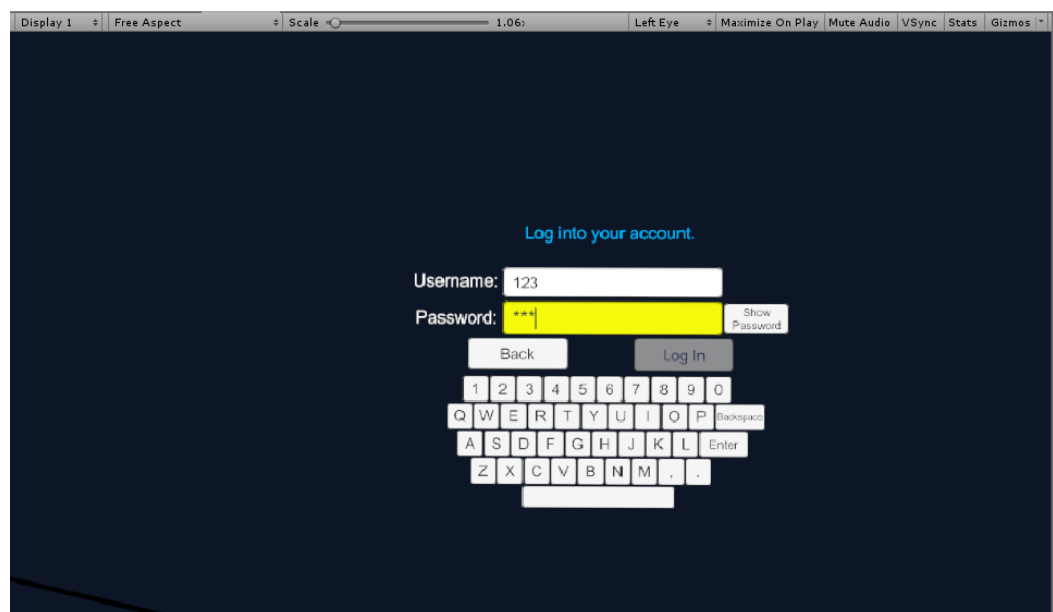
3. However, I still did not solve the problem yet

**Objective(s) of the activities :**

- **Modified register and login scene**
- **Adding condition on activate button**

**Contents :****Friday (8.11.2019)**

1. Register and login input field required 8 character from user to create their account
2. By doing the testing, we think that 8 character are too much and we decide to shorten it to 4
3. In register and login script, we change the code from 8 to 4 character
4. Other than that, I also modified button activation in register and login scene where the button only active and able to work when it fulfill all the condition of the input field
5. When user entering less than 4 character, the button log in or register cannot be clicked and activate
6. Compared to before this, the button does change the highlighted, but the user are still able to interact with the button



7. When user only enter 3 alphabet the “Log In” button do not active and cannot be intractable