



UNIVERSITI  
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PETRONAS

# **STUDENT INDUSTRIAL INTERNSHIP PROGRAMME LOGBOOK WEEK 7 & 8**

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**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: 7-8**

WEEK NO	DATE	BRIEF DESCRIPTION OF DAILY ACTIVITIES
7	14.10.2019	<ul style="list-style-type: none"><li>• Fixed interface size</li><li>• Make player name appear in player list</li><li>• Study teleport concept</li></ul>
	15.10.2019	<ul style="list-style-type: none"><li>• Add leave button inside Module 1</li><li>• Implement teleport concept</li></ul>
	16.10.2019	<ul style="list-style-type: none"><li>• Research about teleport concept</li><li>• Implement teleport concept</li></ul>
	17.10.2019	<ul style="list-style-type: none"><li>• Solve the teleport issue</li></ul>
	18.10.2019	<ul style="list-style-type: none"><li>• Change the teleport point to arrow</li><li>• Discussion on teleport on Module 2 (IKEA)</li><li>• Search other hands animation</li></ul>
8	21.10.2019	<ul style="list-style-type: none"><li>• Transfer hands animation in both module</li><li>• Search for other animation</li></ul>
	22.10.2019	<ul style="list-style-type: none"><li>• Weekly presentation</li><li>• Search the solution about jittering in the scene</li></ul>
	23.10.2019	<ul style="list-style-type: none"><li>• Make the scroll view interactable</li></ul>
	24.10.2019	<ul style="list-style-type: none"><li>• Make sure the room list can be clicked</li><li>• Joining the room by clicking the list</li></ul>
	25.10.2019	<ul style="list-style-type: none"><li>• Configuring the error in joining room</li><li>• Install Xampp in pc</li><li>• Read about database in unity</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 :**

- **Fixed interface size**
- **Make player name appear in player list**
- **Study teleport concept**

**Contents :****Monday (14.10.2019)**

1. As requested by Dr. Fairuz, we need to make the interface size more smaller as it will hurt the player eye
2. The size of the room and module selected has been resize to the size that the interface just in front of the eye
3. For the interface for listing the player name, it still just list the player name which the player id made by photon instead of the name entered by player
4. What we want is to make the name list as the name entered by player so they know who are in the room
5. As for teleport, I still in search of the right concept on how to make it able to play in multiplayer

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

- **Add leave button inside Module 1**
- **Implement teleport concept**

**Contents :****Tuesday (15.10.2019)**

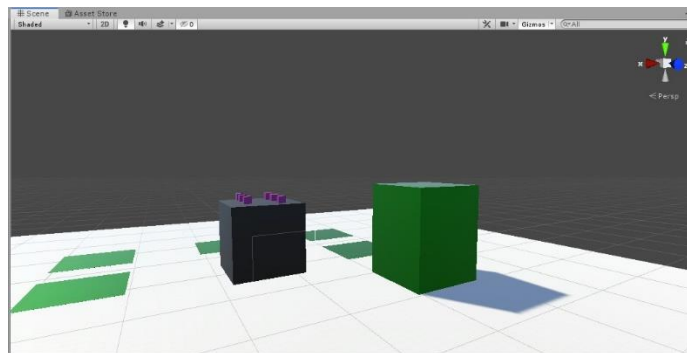
1. Today morning, we attend the meeting together with Murdoch student. What I see is, every week there will different person who came in and test the student project
2. From my conversation with one of the student, this is one of the way on how we can always improve our product so that every level of people are able to use to product
3. In Module 1(Grabbing Scene), I have add the leave button so when the player wish to change room or change module they can just leave the room
4. For teleport, the concept that I have found today is to teleport while standing in a trigger and press the appropriate button to teleport
5. For this concept, we will add a cube inside the scene, make sure to on is trigger in box collider so that when it collides with the player it can be detected
6. Problem
  - i. The example that I watch, they used 3D games instead of VR. So we need to change the concept of 3D to VR
  - ii. The box need to be sure it can collide with the player as the player are only represent by a cube which is the head
  - iii. Need to make sure that the controller work when the player are inside the teleport port
  - iv. Make sure to have a several position for the player to teleport as the testing

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

- **Research about teleport concept**
- **Implement teleport concept**

**Contents :****Wednesday (16.10.2019)**

1. What I have found based on my research is there are 2 concept for teleport that I can used
2. First concept is as mention before which is teleport when standing in a trigger and press the appropriate button to teleport
  - i. For this concept, I need to have an object which player can collide with it
  - ii. We need to add collide both in trigger and player
  - iii. Once the collision has been detected, player need to press the trigger and it will move to the next position
3. The second concept that I have found is, teleport the player using local code
  - i. For this concept, I need to track the transform position of the player in the scene
  - ii. Once the position has been track, player can have a point which where they want to teleport
  - iii. We also need to find out how to change the location of the player as they teleport
  - iv. Lastly, we need to transfer the location of the player to server so that other player can see it



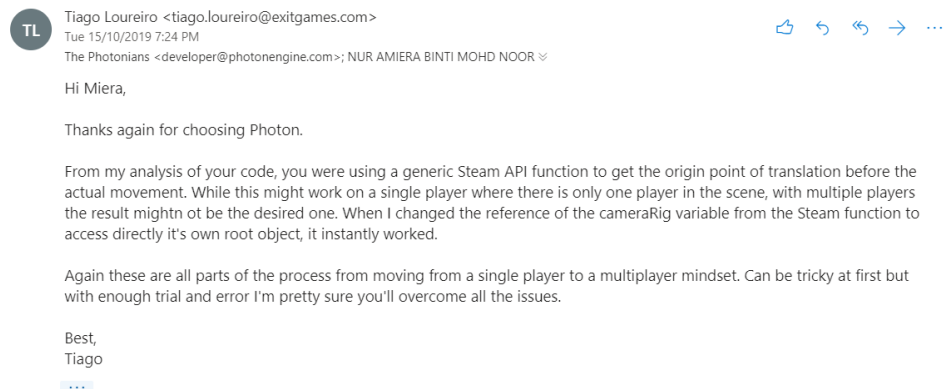
4. The figure shows that the collider trigger for the player has been added.

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

- **Solve the teleport issue**

**Contents :****Thursday (17.10.2019)**

1. I have been contacting a person from Photon and have a discussion with him about the teleport issue



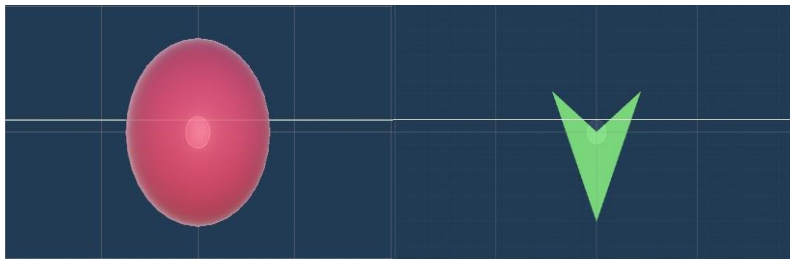
2. This is what we have discuss about the problem. The conclusion that I have got from the discussion is ,
  - i. To make the teleport are able to run in multiplayer we cannot use any generic function from SteamVR
  - ii. Since the code that we have made before are using SteamVR\_Render.Top().origin, this might be the reason why teleport cannot work
3. The solution that we have discuss is,
  - i. Make sure to track the position of the player without using any function from SteamVR
  - ii. public variable and drag the reference there on the prefab
  - iii. using transform.root on the player
4. My solution regarding the teleport issue is,
  - i. I have replace the code which using SteamVR with "gameobject.findwithtag" to find the position of the camera rig and the camera
  - ii. Once we have found the position of both of it, we need to have a calculation on how the player can teleport in the world space
  - iii. By adding these two new codes, teleport in multiplayer are running perfectly

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

- **Change the teleport point to arrow**
- **Discussion on teleport on Module 2 (IKEA)**
- **Search other hands animation**

**Contents :****Friday (18.10.2019)**

1. The previous pointer that we are use are sphere which is 3D object. However, during the testing, the user thought that it was an object to grab instead of pointer
2. To solve the problem, I have replaced the sphere with a pointer



3. Transfer the teleport function and test it either it is suitable as in Module 2 controller, there a few of the function has been used
4. Make some more new research about hands animation as we still did not fully solve the hands animation



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

- **Transfer hands animation in both module**
- **Search for other animation**

**Contents :****Monday (21.10.2019)**

1. As the hands animation has successfully implemented on the testing scene, I have implement the hands animation inside both Module 1(grabbing scene) and Module 2(IKEA)
2. The hands can make a fist animation by using trigger, as it grabs the object
3. However, the problem is that the animation is not that good as the grabbing will look like it is entering the object
4. Other than that, in Module 2, to take the object user just need to press the trigger just once which made a new problem. Once the player has taken the object, the hands will go back to idle animation
5. Suggested solution,
  - i. Made a condition for the trigger or hand animation
  - ii. Make the action to keep press the trigger or not the object will fall
6. Change the pointer to arrow to navigate the user where to teleport
7. Once we add the other hands which has been implemented with animation, the position of the hands seems far form the controller
8. I have tried to edit the position of the hands, however when the user want to grab the object, the grabbing position seems far. It can grab the object even when the hand are not touching the object
9. Solution
  - i. Edit the position of the root of the hands and the child
  - ii. Edit the collider of the hands

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

- **Weekly presentation**
- **Search the solution about jittering in the scene**

**Contents :****Tuesday (22.10.2019)**

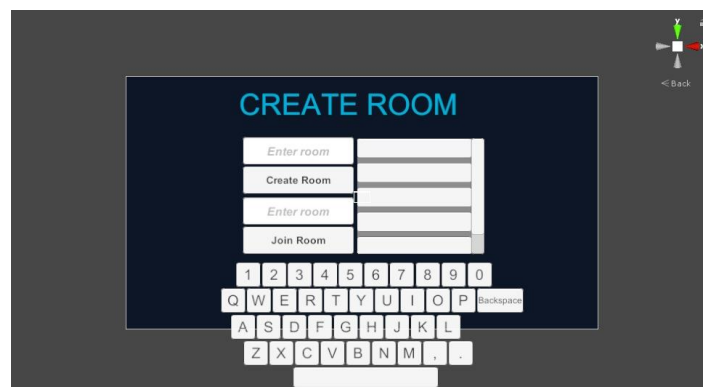
1. We had attended the presentation together with Murdoch University student
2. The outcome for this week, I can see that their supervisor will check the student project very detailed
3. Different tester also every week to make sure that the project are suitable with all type of people
4. I can see that different tester with different background are important in developing certain project. We need to make sure that their opinion matters as it will illustrate what our client go through
5. After the meeting with the student, we need to present our work from the last week to both of our supervisor
6. For this week, we had presented the compilation of our work
  - i. Login scene
  - ii. Create and Join room
  - iii. Show player listing
  - iv. Selection of module
  - v. Module 1(Grabbing scene)
  - vi. Module 2 (IKEA)
7. The comment that we had received are,
  - i. The scene for enter player name, create and join room need to be smaller
  - ii. In the create and join room, we have the list of room and the total number of player show. Instead of player need to enter the name of the room that they want to join, make it can be clicked by using controller
  - iii. In module 1, when player stack the cube together, it will be jittering, and it fall. Make sure to check either the collider of the cube
8. For the next presentation, we need to fix
  - i. The jittering for the object
  - ii. Resize the login scene
  - iii. Change the scroll view into label
  - iv. Add the database in the project
9. For the jittering problem, we have asked Manu what his proposed solution for this problem. He is using "PhotonView,transferOwnership" which we had used in our code

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

- **Make the scroll view interactable**

**Contents :****Wednesday (23.10.2019)**

1. We have player listing in our creating room scene. However, the scroll view which show all the room listed cannot interact with the controller
2. To solve this problem, I do have some approach that I would like to try
  - i. Create a button to display the room so that controller can interact with it
  - ii. Make the scroll view interact with controller
3. For the first approach, I have created the button to display the created room in it
4. If the room is created, it will activate the button. Then, it will display the room name inside the button. Once player clicked on the button, they can joined the room
5. Problem
  - i. Once other player created the room, it will not display inside the button
  - ii. By the concept, when the player creates the room by using the same server, it will be updated
  - iii. In this case, it will only appear when the local player created the room
6. For the second approach, I need to create some button inside the scroll view



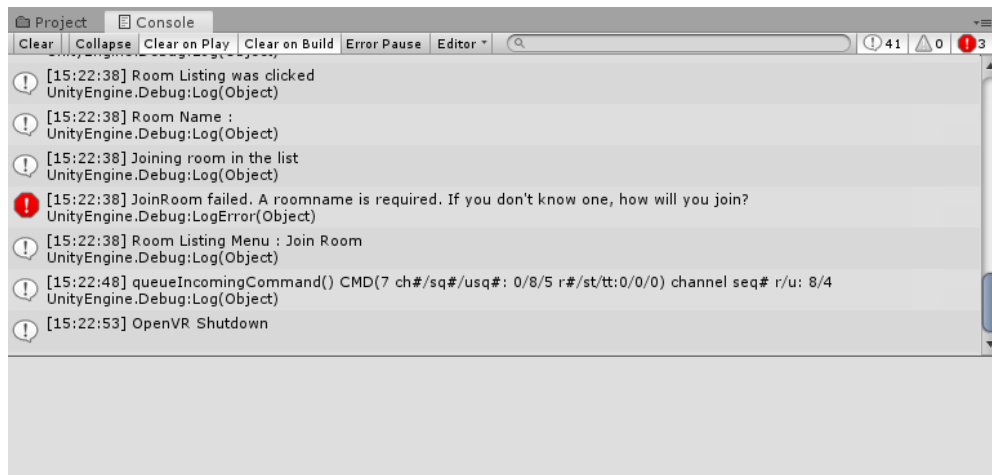
7. Once the player create room, the room name and number of players show display in the button inside the scroll view
8. However, when other player creates a room the room name did not display there. There is a problem with the code which I need to fix
9. Once this error is fix, the room name are display inside the scroll view but not inside the button.

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

- **Make sure the room list can be clicked**
- **Joining the room by clicking the list**

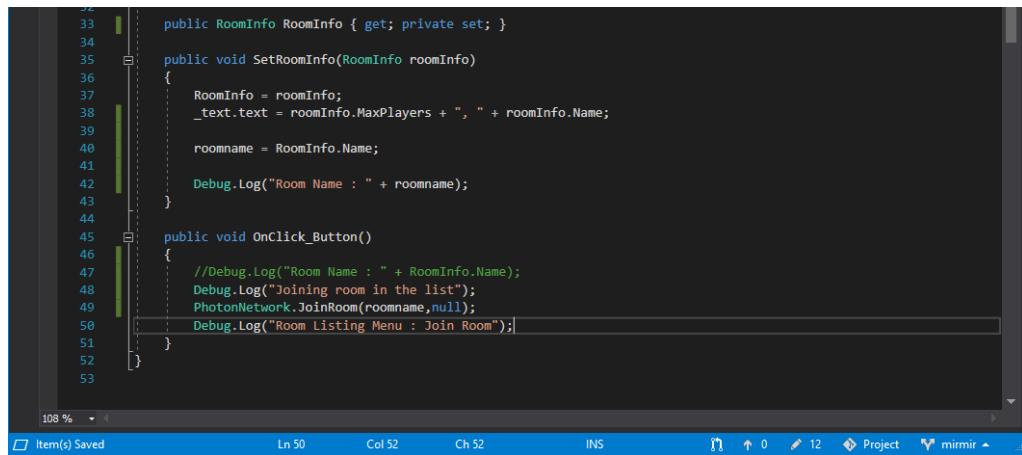
**Contents :****Thursday (24.10.2019)**

1. Today, I continue with my second approach which make the list interact with the controller
2. As the button has been added inside the scroll view, I must make it interact with the controller by adding box collide inside it
3. The text inside the scroll view which display the room list now can be clicked by using the controller
4. Problem
  - i. Once, the controller clicked the room list, player supposedly can join the room
  - ii. However, the problem is the code seems cannot detect the room name



5. To detect the problem, what I have done is, I make a debug.log statement to see either it detected the room name or not

6. The result is the code did not take the room name which is display inside the scroll view



```
33 public RoomInfo RoomInfo { get; private set; }
34
35 public void SetRoomInfo(RoomInfo roomInfo)
36 {
37     RoomInfo = roomInfo;
38     _text.text = roomInfo.MaxPlayers + ", " + roomInfo.Name;
39
40     roomname = RoomInfo.Name;
41
42     Debug.Log("Room Name : " + roomname);
43 }
44
45 public void OnClick_Button()
46 {
47     //Debug.Log("Room Name : " + RoomInfo.Name);
48     Debug.Log("Joining room in the list");
49     PhotonNetwork.JoinRoom(roomname,null);
50     Debug.Log("Room Listing Menu : Join Room");
51 }
52
53
```

108 %

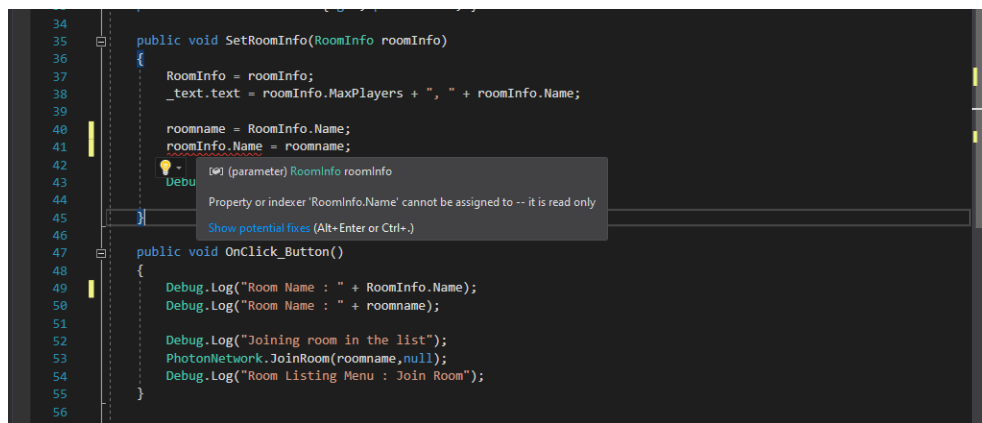
Item(s) Saved Ln 50 Col 52 Ch 52 INS 0 12 Project mimir

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

- **Configuring the error in joining room**
- **Install Xampp in pc**
- **Read about database in unity**

**Contents :****Friday (25.10.2019)**

1. The problem for joining room has been detected. The problem was the RoomInfo.Name is a read only property which make it cannot be assigned to any variable



2. The approach solution
  - i. Tried to do a get set method but the result is the same
3. Did some research on how to solve this problem about the read only attribute and how to solve this problem with other solution
4. Installing the Xampp to try the project with the database. However, there are some problem when starting the database

Problem detected!

Port 443 in use by ""C:\Program Files (x86)\VMware\VMware Workstation\vmware-hostd.exe" -u

"C:\ProgramData\VMware\hostd\config.xml" with PID 4688!

Apache WILL NOT start without the configured ports free!

You need to uninstall/disable/reconfigure the blocking application

or reconfigure Apache and the Control Panel to listen on a different port

5. To solve the problem, we need to change the port we are listening to solve the port are already listen to the VMware.
6. By changing the port, the Xampp can be running.

