

**STUDENT INDUSTRIAL INTERNSHIP PROGRAMME LOGBOOK**

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**Matric No: 24657**

**Programme: Information System (IS)**

**Place of Training: Murdoch University, Australia**

**Period of Training: 7 months**

**Project Title: Neuromender and Stroke Rehabilitation System**

**SIP LOGBOOK REPORT**

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

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| **WEEK NO** | **DATE** | **BRIEF DESCRIPTION OF DAILY ACTIVITIES** |
|  | **30/09/2019** | * **To continue on object snapping in Module 3 environment.** |
| **01/10/2019** | * **To meet with supervisors to update the current progress of Module 3** * **To continue with object snapping.** |
| **02/10/2019** | * **To learn about Joint in Unity.** |
| **03/10/2019** | * **To modify the scene for Module 3** |
| **04/10/2019** | * **To continue with fixing error in object snapping in Module 3 environment** |
|  | **07/10/2019** | * **To continue with object snapping.** |
| **08/10/2019** | * **To continue with object snapping.** |
| **09/10/2019** | * **To continue with object snapping.** |
| **10/10/2019** | * **To do instruction in Module 3 using controller.** |
| **11/10/2019** | * **To fix the error in object snapping.** |

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| 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**

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| **Objective(s) of the activities :**   * **To continue on object snapping in Module 3 environment.** |
| **Contents :**   * **We continued with the object snapping but this time we were focusing on how to snap the screw into the cylinder component-like.** * **The basic idea was to put the slot prefabs into every holes in the cylinder component-like so that the screw can snap into the holes.** * **There is a problem that we faced in the Module 3 environment:**   **1) The cylinder component-like can be snapped on the snap zones. However, sometimes when the other player come in, the table will fly away.**   * **We are still figuring out on how to fix the problem. The table only will fly away when the other players come in but not in single player.**     The picture above shows that I have put the snap zone into the holes in the circle-like components to put the screw snap into the holes. |
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**DETAIL REPORT WEEK NO: 5**

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| **Objective(s) of the activities :**   * **To meet with supervisors to update the current progress of Module 3** * **To continue with object snapping** |
| **Contents :**   * **We were having meeting with our supervisors to update our current progress of Module 3.** * **At first, we were trying the module that the other team had done and we took the opportunity to ask them several questions regarding the problems we encountered in this module which are object snapping and teleporting.** * **After that, our supervisors tested our Module and there were several things that we need to fix.** * **Problems:**  1. **The network sends the signal a bit late.** 2. **The table plane will move and fly away when the other play come into the scene.**  * **Suggestion from supervisors:**  1. **To add follow script to the snap zones.**  * **In the follow script, we were used transform to add the table plane as the parent object that need to be followed.** * **We also used “const float EPILSON” to avoid the table plane shimmering when they joint together.** |
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**DETAIL REPORT WEEK NO: 5**

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| **Objective(s) of the activities :**  **. To learn about Joint in Unity.** |
| **Contents :**   * **We were learned about Joint in Unity and test it to the snap zones in the Module so that the table plane won’t shaking.**  1. **Hinge Joint: groups together 2 rigid bodies, constraining them to move like they are connected by a hinge. The hinge will rotate at the point specified by the anchor property, moving around the specified axis property.** 2. **Fixed Joint: restricts an object’s movement to be dependent upon another object.** 3. **Spring joint: two rigid bodies together but allows the distance between them to change as though they were connected by a spring.** |
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**DETAIL REPORT WEEK NO: 5**

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| **Objective(s) of the activities :**   * **To modify the scene for Module 3** |
| **Contents :**   * **Instead of doing snap zone for the screw snapping into the table, we have made some changes where we were decided to make the snap zone for the table legs only.** * **The changes that we were made:** * **1) Make the snap zone for the table legs by following the size of the table legs.** * **2) We were created 4 cubes represent the snap zone for the table legs.** * **3) For the cube, we have added Rigid Body, box collide, Photon View, Photon Transform View, Moveable script and Transfer Ownership Script.** * **4) Change layer of every cube to Interactable**. |
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**DETAIL REPORT WEEK NO: 5**

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| **Objective(s) of the activities :**   * **To continue with fixing error in object snapping in Module 3 environment.** |
| **Contents :**   1. **We added a few lines of code in the Slot script to let the snap zone disappear after snapping.**   **GameObject Cube = GameObject.FindGameObjectWithTag(“Cube”);**  **gameObject.GetComponentInChildren<Rendered>().enabled = false;**   1. **Result:**  * **When the player snapped the object to the snap zone, the snap zone mesh renderer will be unable.** * **The layer will only see the object that already snapped at the zone.** * **However, we were tested it, the table will still fly away to the space.** |
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**DETAIL REPORT WEEK NO: 6**

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| **Objective(s) of the activities :**   * **To continue with object snapping.** |
| **Contents :**  **Monday (7th October 2019)**   * **We tried to trace the script that is not related for the module and we tried to fix the snapping for the table legs.** * **The problem was that, the table still fly away when all the table legs have been snapped to its snap zone.** * **Based on the Unity Forum, the suggestion given was to make the rigid body mass of the table plane higher. This makes sure that there need to be more force to push them away.** * **Different rigid bodies with large differences in mass can make the physics simulation unstable.** * **Higher mass objects push lower mass objects more when colliding.** * **Other than that, another suggestion given was to enable the collision of the fixed joint for the table legs. However, the result was still the same where the table plane still flying away.** |
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**DETAIL REPORT WEEK NO: 6**

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| **Objective(s) of the activities :**     * **To continue with object snapping in Module 3.** |
| **Contents :**  **Tuesday (8th October 2019)**   * **We tried to do script parent game object to get access to other scripts attached to the parent.** * **The purpose we did the parent game Object script was to fix the table plane from flying away.** * **We tried to not put the snap zone game Object under the table plane game Object.** * **Syntax:** * **transform.parent.gameObject.GetComponent<ScriptName>();**   **cube.transform.Setparent(newParent);**   * **Problem:**  1. **How to make two objects that have collider merging together into one? We wanted to make the collider of the table plane and the collider of the table legs combined after the snapping the table legs into its snap zone so that when we want to rotate the table down, it will not flying away.**  * **After finishing doing the parent game object script, we tried the functionality of the script.** * **When we unchecked the parent game object, the snap zone will be not attached to the table plane it will remain float on the space.** * **We are still figuring out other way to fix the problem since making the parent game Object script doesn’t work.** |
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**DETAIL REPORT WEEK NO: 6**

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| **Objective(s) of the activities :**   * **To continue the object snapping in the Module 3.** |
| **Contents :**   * **Problem:**  1. **Is there any way in which we can directly associate one object’s movement with another so that they really act like they are one single entity?**  * **When the table legs have been snapped to its snap zone, it will combine with the table plane so that it will become one entity and make it easy to rotate (to put the table legs down after snapping).**   **Answer:**   1. **Based on the Unity Forum, we can have a single rigid body with multiple colliders that will give the results that we wanted.** 2. **Put a rigid body component on the parent object (table plane) and then have as many colliders as we want as children or even put all the colliders on the same object.**  * **However, we cannot remove the rigid body in the children object because there is fixed joint in the game objects. We cannot remove the rigid body when there is the fixed joint.** * **As the result, the table plane will still fly away after snapping.** * **When the table legs falling down if the player wanted to do snapping, sometimes, the players can just then press the trigger and they do not have to pick it.** |
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**DETAIL REPORT WEEK NO: 6**

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| **Objective(s) of the activities :**   * **To do instruction in the Module 3.** |
| **Contents :**   * **We have made the instruction for the players to assemble the equipment using controller. The steps to do the instruction was quiet simple and everything went smoothly.** * **The steps are:**   **1) Create an empty game object named Instruction and create UI panel under it and put text.**  **2) After that, dragged the Instruction game object into prefab and delete the Instruction game object in the hierarchy.**  **3) In the Camera Rig, drag the Instruction into both controllers, left and right.**  **4) Add Input Manager script into the both controllers' inspector.**  **- Under the trigger action, choose MenuDisappear function. The function is to disappear the instruction when the player clicked on the trigger.**  **- Under the touchpad action, choose MenuAppear function. The function is to appear the instruction when the players clicked on the touchpad.** |
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**DETAIL REPORT WEEK NO: 6**

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| **Objective(s) of the activities :**   * **To continue fix the table plane from flying away after snapping.** |
| **Contents :**  **Friday (12th October 2019)**  **Problem:**   1. **How to turn an object around an axis by grabbing it using Virtual Reality?**   **Solution:**   1. **The transform position of the object is fixed (the rigid body is set to freeze X, Y and Z position in constraints.** 2. **Then, put box collider so that the table plane can move around the axis specified in the hinge joint by hitting it with the collider (Vive Controller with collider attached).**   **Problem:**   1. **How to return back object position I the hinge joint?**   **Solution:**   1. **Based on what I’ve read on the Unity Forum, Game Object that has a hinge joint attached to another game Object with rigid body.**  * **However, the table still flying away but this time, the table will fly with the table legs down which means in appropriate way.** * **We had a meeting with our supervisor to update the current progress of our Module 3.** * **There were several feedback from the supervisor:**  1. **Create room button still cannot be clicked** 2. **Write “Enter name” in the instead of “Enter character” for the player.** 3. **Change the layout for the create room so that it can fix in VR environment.** 4. **Provide leave room in the games.** 5. **Change the position of instruction above hand.** |
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