

DEAKIN UNIVERSITY

CAPSTONE TEAM PROJECT (B)

ONTRACK SUBMISSION

Update Your Company Mentor (IV)

Submitted By:

Dyson Yong Shen TAN
s222255254
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Tutor:

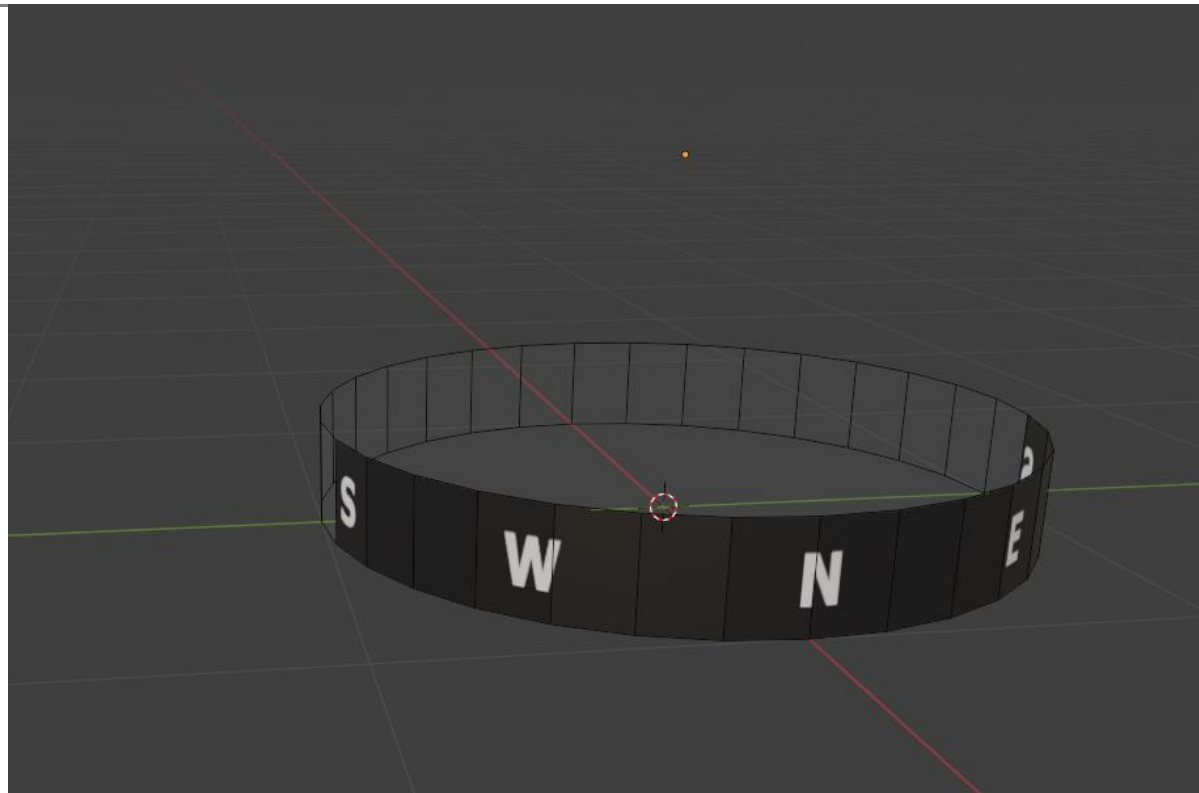
Morgaine BARTER

September 5, 2024



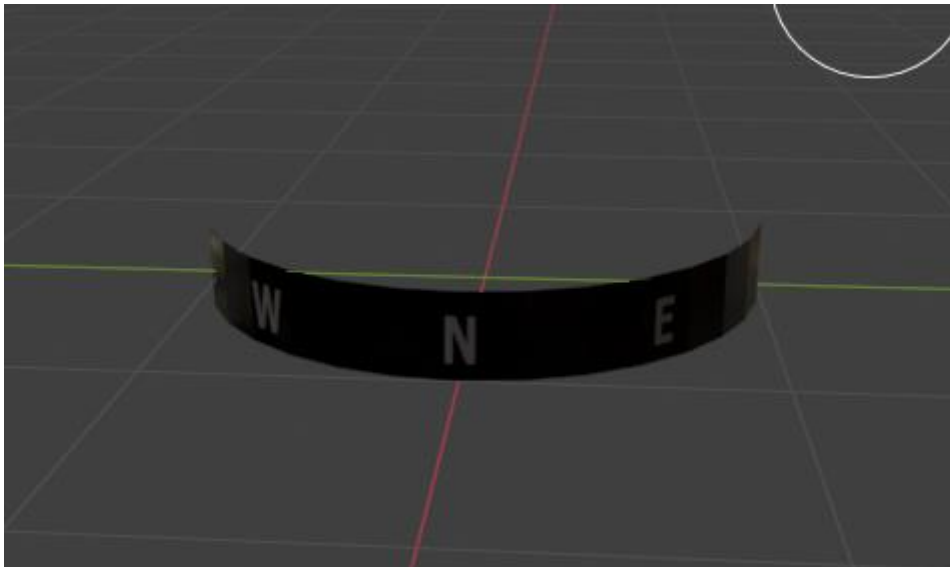
Brief summary of the most recent activities and progress you have made in Week 8

I've successfully finished creating the Bike Shop model in Unity, as well as the template model for the Bike Cafe. However, I still need to figure out how to export the glass texture for the Bike Cafe and continue working on the in-game compass script and functionality.



```
1 using UnityEngine;
2
3 public class Compass : MonoBehaviour
4 {
5     // Reference to the player's transform component
6     public Transform PlayerTransform;
7
8     // Reference to the Transform of the compass cylinder (3D model)
9     public Transform CompassCylinder;
10
11 void Update()
12 {
13     // Calculate the rotation difference between the player and north (north is Y = 0 degrees)
14     float playerRotationY = PlayerTransform.eulerAngles.y;
15
16     // Rotate the compass cylinder in the opposite direction of the player's rotation
17     CompassCylinder.localRotation = Quaternion.Euler(0f, playerRotationY, 0f);
18 }
19
20
```

In the original code, I adjusted the RectTransform's X-axis position instead of rotating the compass itself, aiming for a dynamic compass that responded to the player's rotation. Rather than achieving the desired rotational movement, I shifted the compass bar horizontally based on the player's Y-axis rotation. As a result, the compass slid left when the player turned right and vice versa, mimicking a 2D compass strip. While this worked well for a flat UI, it didn't achieve the 3D cylindrical rotation I wanted, where true rotational movement was needed rather than simple positional shifts.



After discussing with my project lead, I realized that placing the compass coordinates on the outside of the cylinder with the camera positioned outside led to a cluttered and unreadable display during rotation. The coordinates appeared too close together and made the experience feel cramped. To address this, I decided to move the compass coordinates to the inner face of the cylinder and position the camera inside at the center. This adjustment allows the coordinates to spread out more evenly and provides better clarity as they move across the field of view. Although this new setup promises a cleaner and more immersive experience, I still need to return to Blender to invert the faces of the cylinder before implementing the change. Additionally, next week, I plan to rebuild the UI main menu assets that were lost and should have been pushed to GitHub, ensuring they are included in the current garage scene.

