

**Unity Game Project File**

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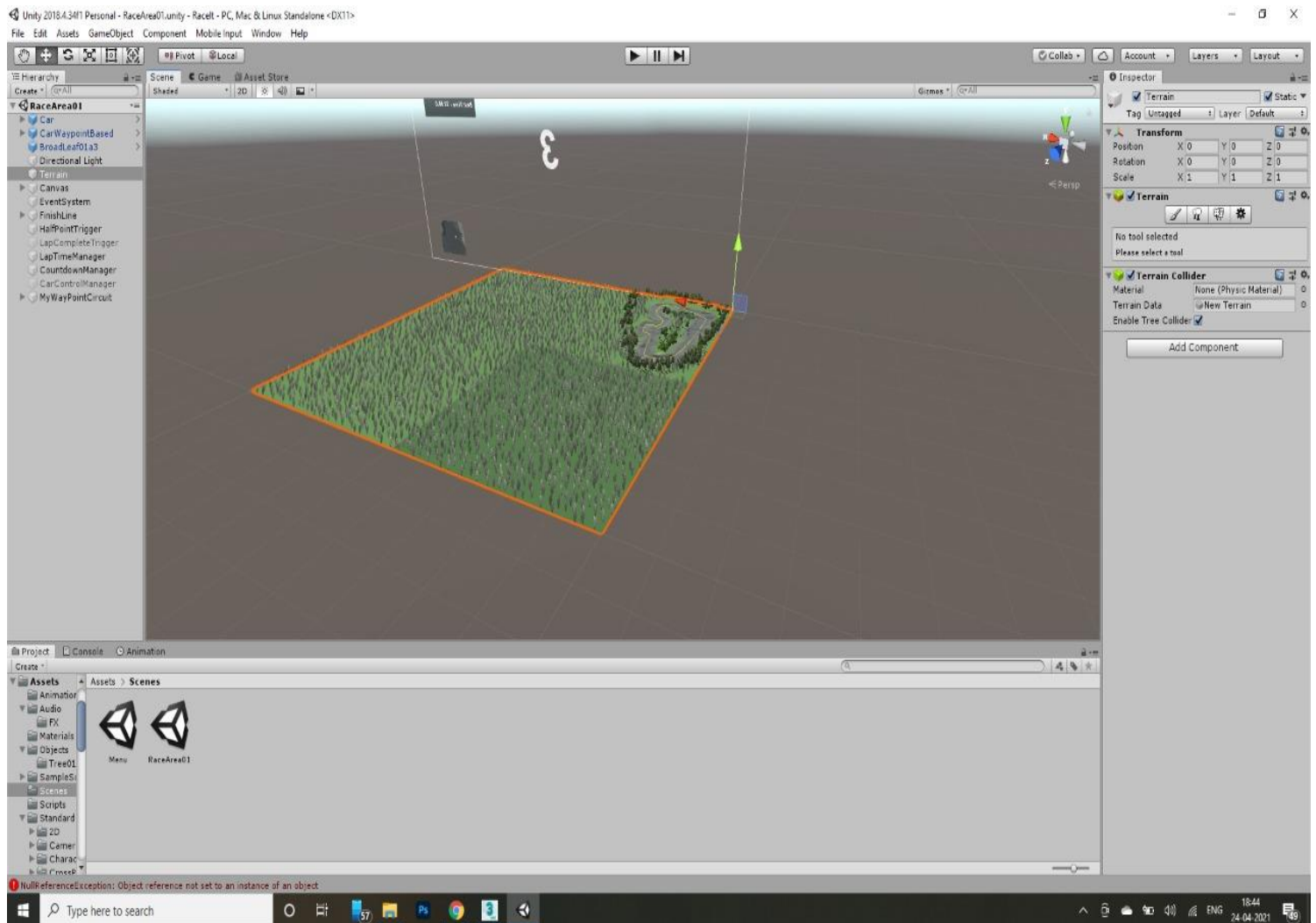
**Section – K19KH**

**Roll No. 09**

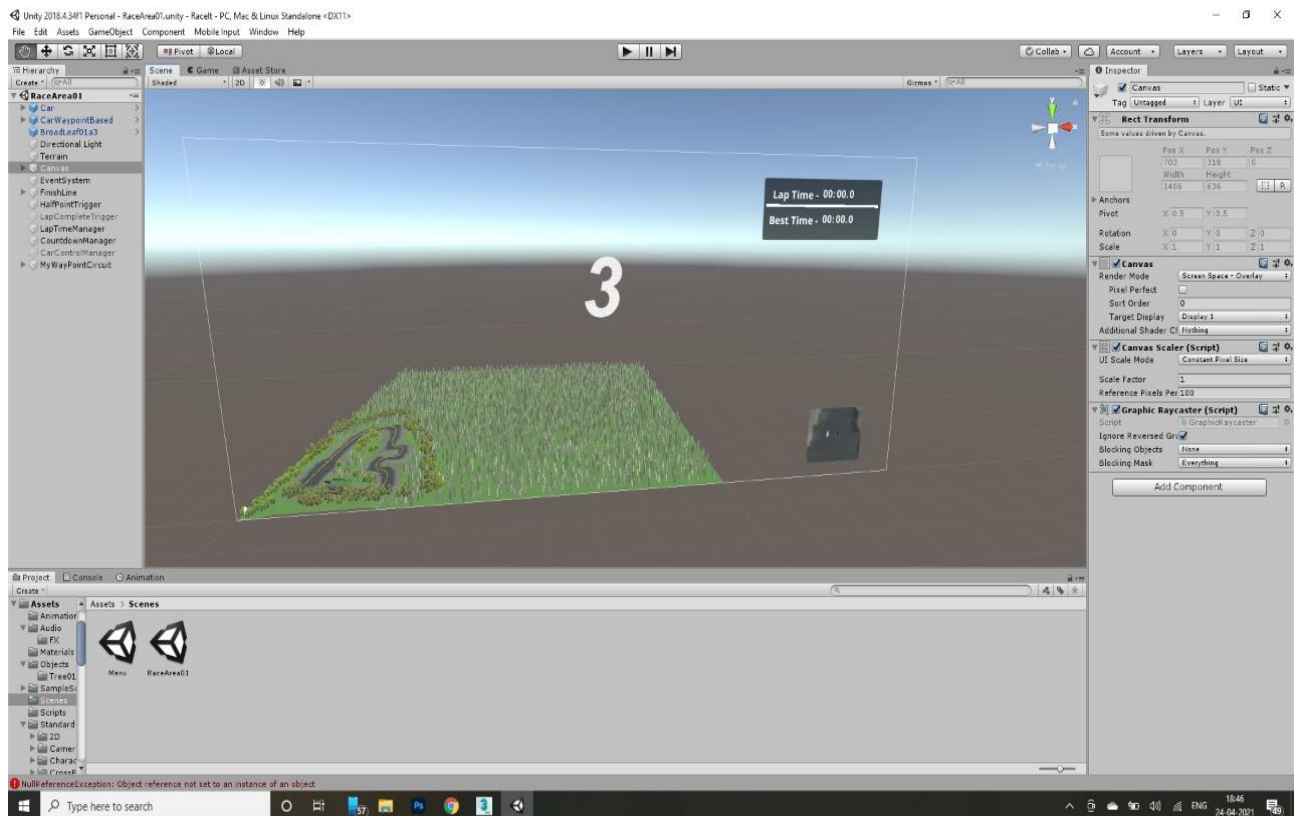
**Registration No.**  
**11903816**

**Project Name - RaceIt**

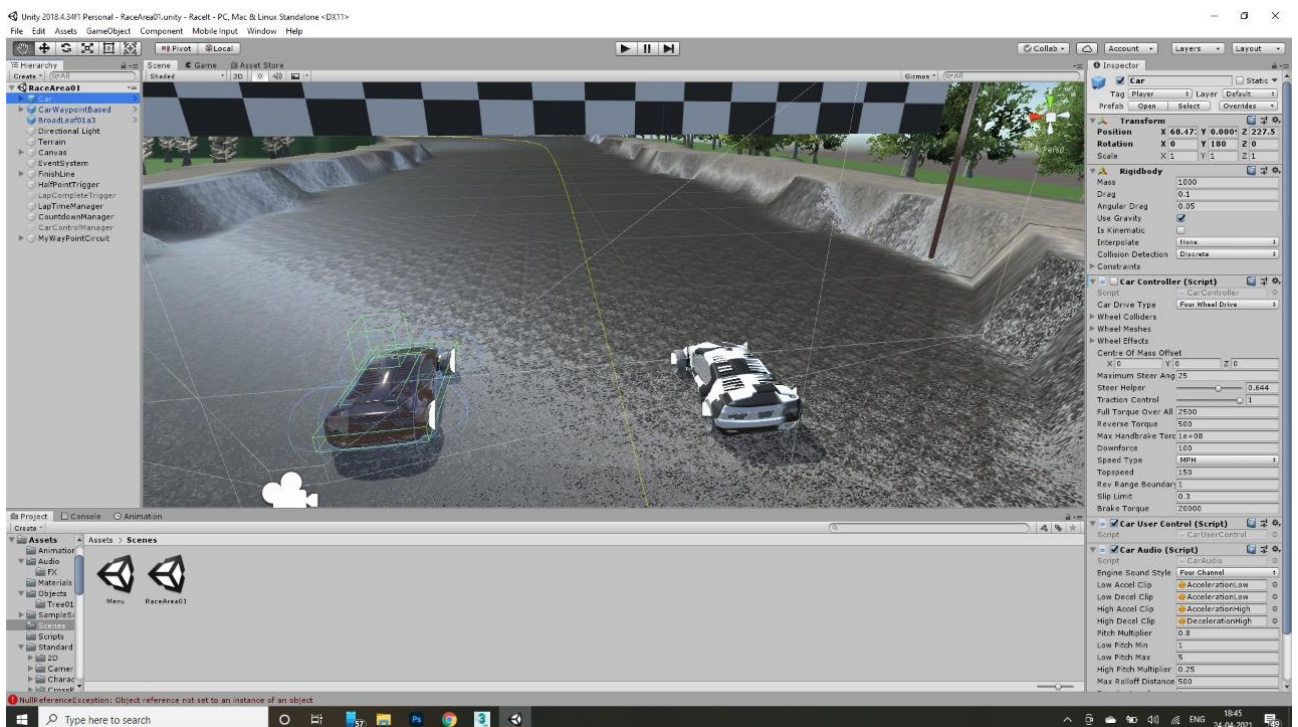
## Step 1: Build a terrain, add trees and track.



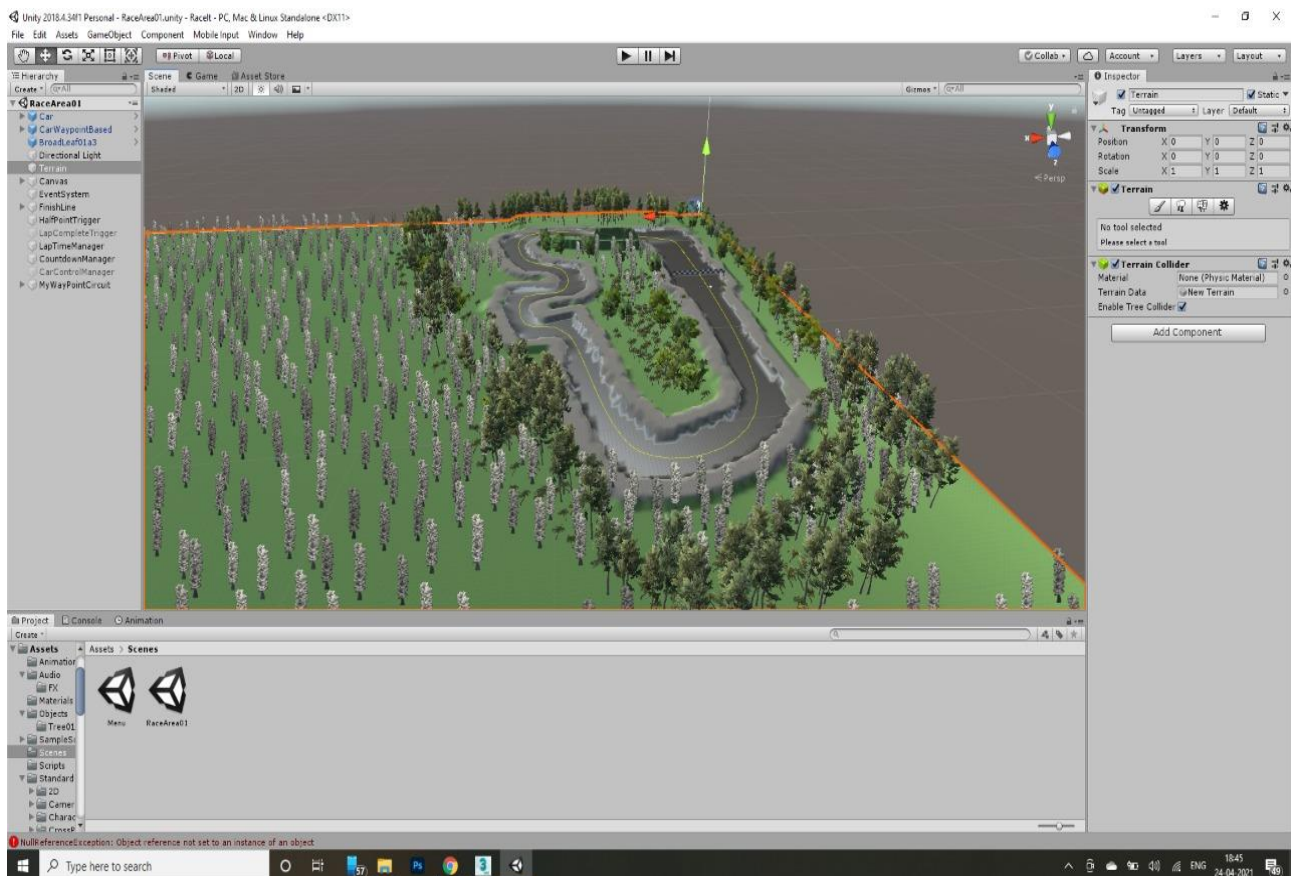
## Step 2: Add canvas with a minimap rendered texture, a lap timer and best timer.



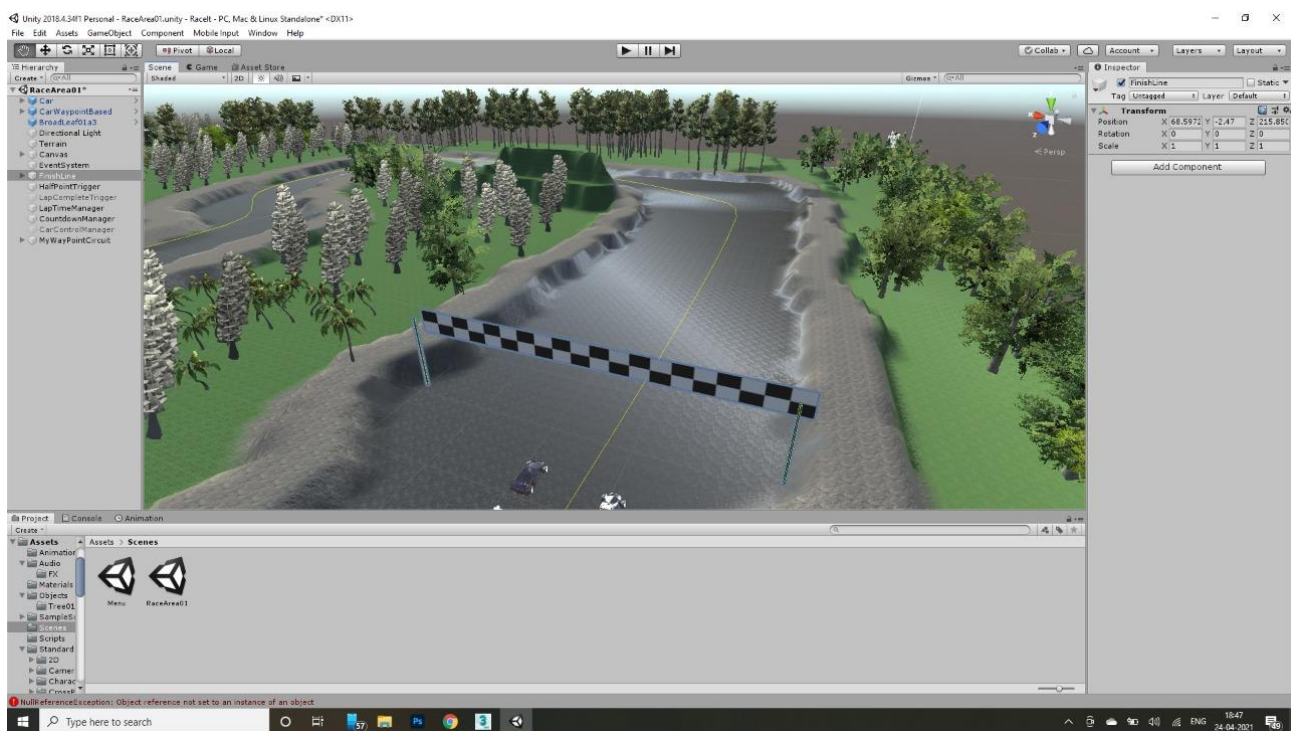
Step 3: Add Car and Way-Point Car with a point base system for adding ai TO WAYPoint car.



Step 4: Final Track looks like this -



## Step 5: Add Finish Line





## Step 6:

### Add Another Scene for Main Menu.



### Scripts Used ---

#### Camera Stable Script --

*using System.Collections;*  
*using System.Collections.Generic;*  
*using UnityEngine;*

*public class CameraStable : MonoBehaviour {*

*public GameObject TheCar;*  
*public float CarX;*  
*public float CarY;*  
*public float CarZ;*

*void Update () {*  
*CarX = TheCar.transform.eulerAngles.x;*

```

        CarY = TheCar.transform.eulerAngles.y;
        CarZ = TheCar.transform.eulerAngles.z;

        transform.eulerAngles = new Vector3 (CarX - CarX,
CarY, CarZ - CarZ);

    }
}

```

## Car Controls Active Script --

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityStandardAssets.Vehicles.Car;

public class CarControlActive : MonoBehaviour
{
    // Start is called before the first frame update
    public GameObject CarControl;
    public GameObject Dreamcar01;
    void Start()
    {
        CarControl.GetComponent<CarController>().enabled =
true;
        Dreamcar01.GetComponent<CarAIControl>().enabled =
true;
    }
}

```

## CountDown Script --

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

using UnityEngine.UI;

```

```
public class Countdown : MonoBehaviour {
```

```
    public GameObject Countdown;  
    public AudioSource GetReady;  
    public AudioSource GoAudio;  
    public GameObject LapTimer;  
    public GameObject CarControls;
```

```
    void Start () {  
        StartCoroutine (CountStart ());  
    }
```

```
IEnumerator CountStart () {  
    yield return new WaitForSeconds (0.5f);  
    Countdown.GetComponent<Text> ().text = "3";  
    GetReady.Play ();  
    Countdown.SetActive (true);  
    yield return new WaitForSeconds (1);  
    Countdown.SetActive (false);  
    Countdown.GetComponent<Text> ().text = "2";  
    GetReady.Play ();  
    Countdown.SetActive (true);  
    yield return new WaitForSeconds (1);  
    Countdown.SetActive (false);  
    Countdown.GetComponent<Text> ().text = "1";  
    GetReady.Play ();  
    Countdown.SetActive (true);  
    yield return new WaitForSeconds (1);  
    Countdown.SetActive (false);  
    GoAudio.Play ();  
    LapTimer.SetActive (true);  
    CarControls.SetActive (true);  
}
```

```
}
```

## Half Point Trigger Script --

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class HalfPointTrigger : MonoBehaviour {

    public GameObject LapCompleteTrig;
    public GameObject HalfLapTrig;

    void OnTriggerEnter () {
        LapCompleteTrig.SetActive (true);
        HalfLapTrig.SetActive (false);
    }
}
```

## Lap Complete Script ---

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;

public class LapComplete : MonoBehaviour {

    public GameObject LapCompleteTrig;
    public GameObject HalfLapTrig;

    public GameObject MinuteDisplay;
    public GameObject SecondDisplay;
    public GameObject MilliDisplay;

    public GameObject LapTimeBox;
```



```

void OnTriggerEnter () {

    if (LapTimeManager.SecondCount <= 9) {
        SecondDisplay.GetComponent<Text> ().text = "0"
+ LapTimeManager.SecondCount + ".";
    } else {
        SecondDisplay.GetComponent<Text> ().text = "" +
LapTimeManager.SecondCount + ".";
    }

    if (LapTimeManager.MinuteCount <= 9) {
        MinuteDisplay.GetComponent<Text> ().text = "0"
+ LapTimeManager.MinuteCount + ".";
    } else {
        MinuteDisplay.GetComponent<Text> ().text = "" +
LapTimeManager.MinuteCount + ".";
    }

    MilliDisplay.GetComponent<Text> ().text = "" +
LapTimeManager.MilliCount;

    LapTimeManager.MinuteCount = 0;
    LapTimeManager.SecondCount = 0;
    LapTimeManager.MilliCount = 0;

    HalfLapTrig.SetActive (true);
    LapCompleteTrig.SetActive (false);
}

}

```

## Lap Time Manager Script --

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;

```

```

public class LapTimeManager : MonoBehaviour {

    public static int MinuteCount;
    public static int SecondCount;
    public static float MilliCount;
    public static string MilliDisplay;

    public GameObject MinuteBox;
    public GameObject SecondBox;
    public GameObject MilliBox;

    void Update () {
        MilliCount += Time.deltaTime * 10;
        MilliDisplay = MilliCount.ToString ("F0");
        MilliBox.GetComponent<Text> ().text = "" +
MilliDisplay;

        if (MilliCount >= 10) {
            MilliCount = 0;
            SecondCount += 1;
        }

        if (SecondCount <= 9) {
            SecondBox.GetComponent<Text> ().text = "0" +
SecondCount + ".";
        } else {
            SecondBox.GetComponent<Text> ().text = "" +
SecondCount + ".";
        }

        if (SecondCount >= 60) {
            SecondCount = 0;
            MinuteCount += 1;
        }
    }
}

```

```
        if (MinuteCount <= 9) {
            MinuteBox.GetComponent<Text> ().text = "0" +
MinuteCount + ":";
        } else {
            MinuteBox.GetComponent<Text> ().text = "" +
MinuteCount + ":";
        }
    }
}
```