# 유니티 게임 프로젝트

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https://assetstore.unity.com/packages/templates/packs/car-controller-202269

# Car Controller

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# 기본 화면

간단하게 방향키로
차를 운전하는 게임

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# 1. 맵 변경

https://assetstore.unity.com/packages/3d/environments/roadways/cartoon-race-track-oval-175061

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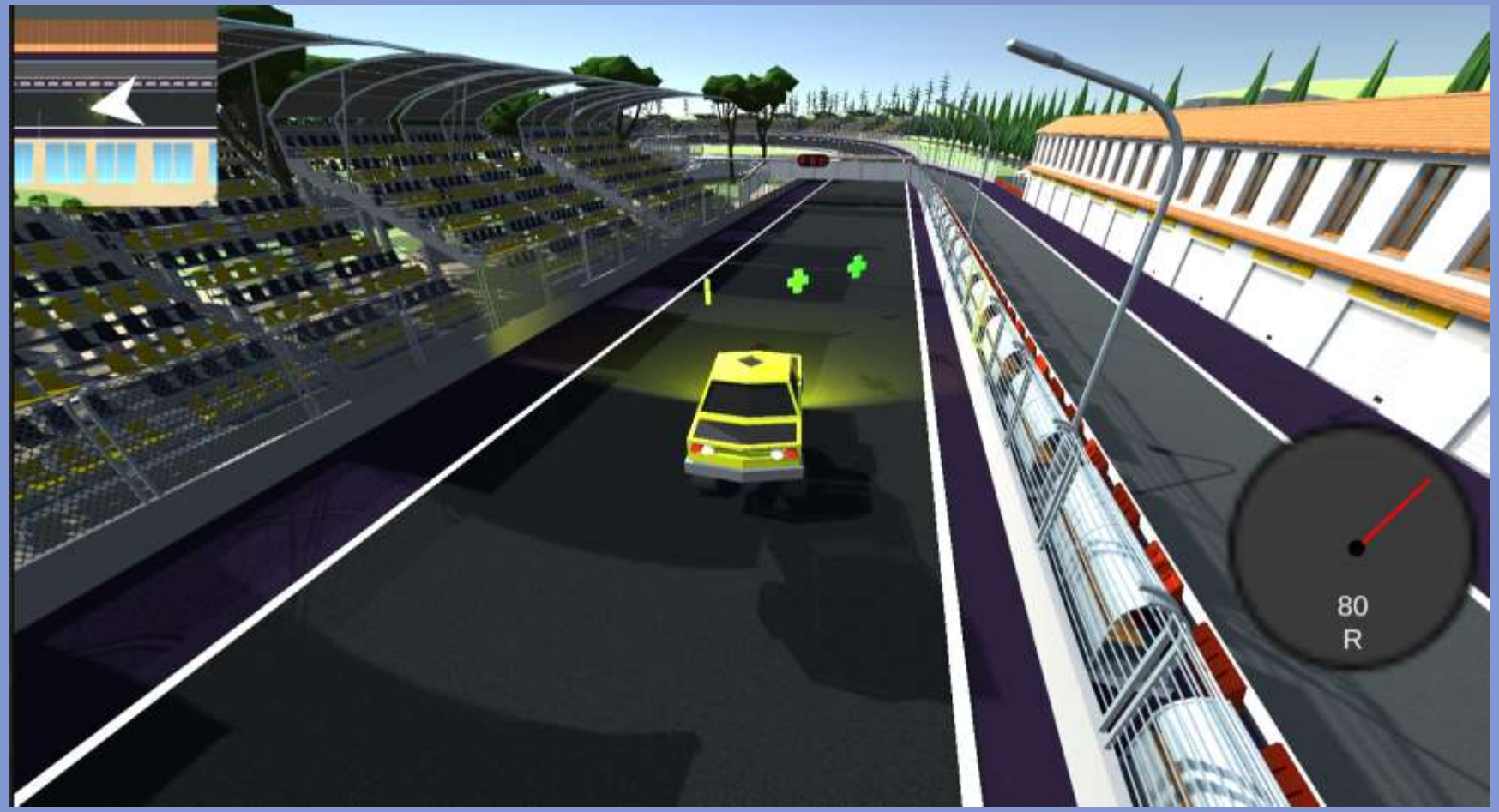
# 2. 아이템 추가




https://assetstore.unity.com/packages/3d/props/free-healing-item-including-c-script-275780

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# 3. 게임 리셋 (R)

reset.cs

Assets > reset.cs

```
using UnityEngine;
using UnityEngine.SceneManagement;

public class SceneResetManager : MonoBehaviour
{
    void Update()
    {
        if (Input.GetKeyDown(KeyCode.R))
        {
            ResetScene();
        }
    }

    void ResetScene()
    {
        SceneManager.LoadScene(0);
    }
}

```

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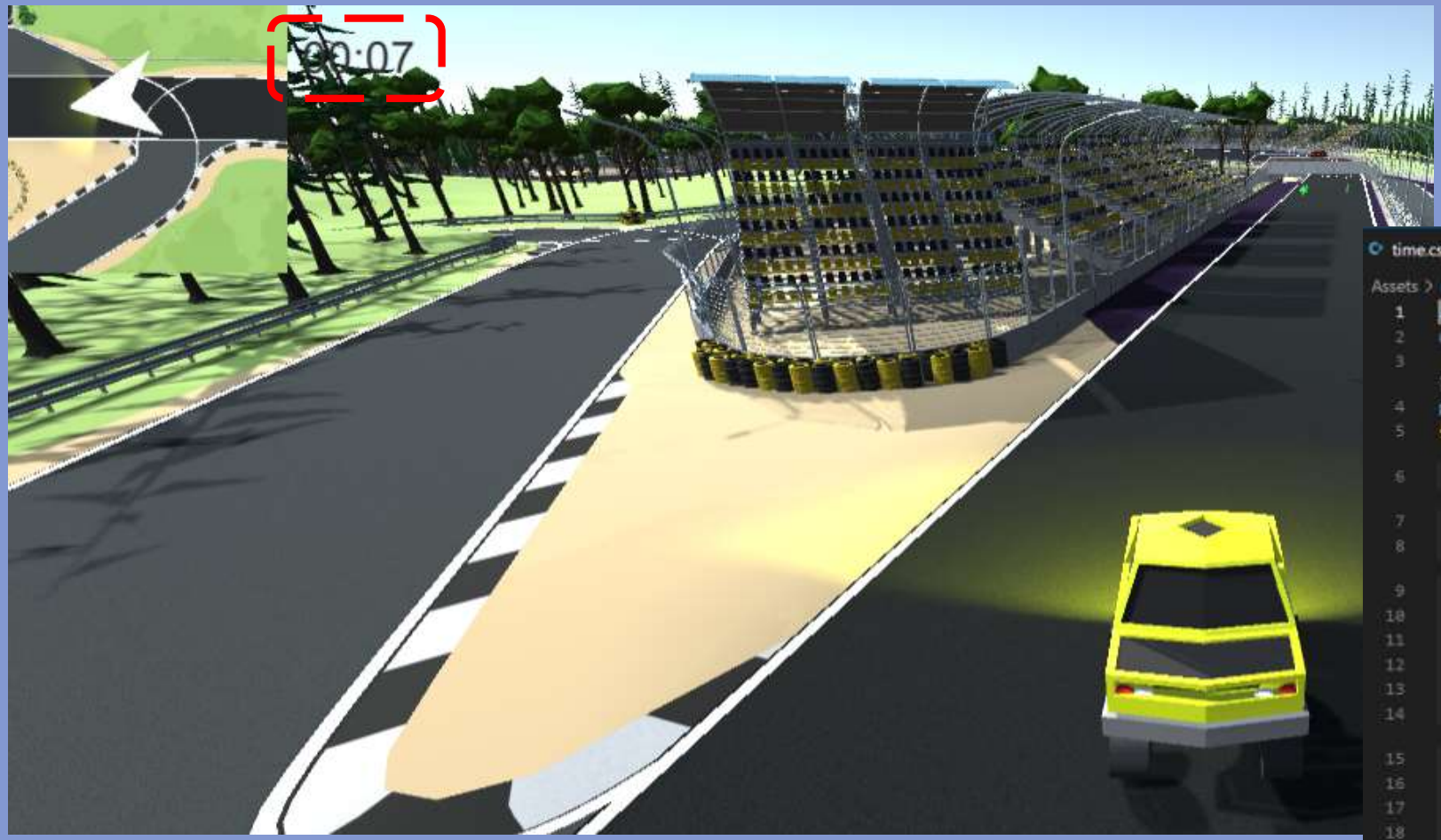
# 4. 타이머 추가




time.cs

Assets > time.cs > ...

```
using UnityEngine;
using UnityEngine.UI;

참조 0개
public class GameTimer : MonoBehaviour
{
    참조 1개
    public Text timerText;
    참조 4개
    private float currentTime = 0f;

    참조 0개
    void Start()
    {
        // 타이머 시작
        currentTime = 0f;
    }

    참조 0개
    void Update()
    {
        // 시간 증가
        currentTime += Time.deltaTime;

        // 시간을 분:초 형식으로 변환
        int minutes = Mathf.FloorToInt(currentTime / 60);
        int seconds = Mathf.FloorToInt(currentTime % 60);

        // UI 텍스트 업데이트
        timerText.text = string.Format("{0:00}:{1:00}", minutes, seconds);
    }
```

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# 5. 도착지 설정

```
public class FinishZone : MonoBehaviour
{
    public GameObject finishText; // "FINISH" 텍스트 UI 오브젝트

    private void Start()
    {
        if (finishText != null)
        {
            finishText.SetActive(false);
        }
    }

    private void OnTriggerEnter(Collider other)
    {
        if (other.CompareTag("Player"))
        {
            if (finishText != null)
            {
                finishText.SetActive(true); // "FINISH" 텍스트 활성화
                SceneManager.LoadScene("GameOverScene");
            }

            Debug.Log("Game Finished!");
        }
    }
}
```

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# 6. 체력바 설정

```
public class CarHealth : MonoBehaviour
{
    public float maxHealth = 100f;
    private float currentHealth;
    public Slider healthBar;

    void Start()
    {
        currentHealth = maxHealth;
        UpdateHealthBar();
    }

    void OnCollisionEnter(Collision collision)
    {
        if (collision.gameObject.CompareTag("Obstacle"))
        {
            Debug.Log("Collision detected with obstacle");
            TakeDamage(30f);
        }
    }

    void TakeDamage(float damage)
    {
        currentHealth -= damage;
        currentHealth = Mathf.Max(currentHealth, 0);
        Debug.Log("Current Health: " + currentHealth);
        UpdateHealthBar();

        if (currentHealth <= 0)
        {
            Debug.Log("Car Destroyed");
        }
    }

    void UpdateHealthBar()
    {
        if (healthBar != null)
        {
            healthBar.value = currentHealth / maxHealth;
        }
    }
```

충돌 시 체력 감소 기능

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# Referenc
# e


- https://www.perplexity.ai/search/yunitieseo-low-poly-car-1-iran-dbffUbOaQtyzhzdNwhWZ3Q
- https://assetstore.unity.com/packages/3d/props/free-healing-item-including-c-script-275780
- https://assetstore.unity.com/packages/3d/environments/roadways/cartoon-race-track-oval-175061
- https://velog.io/@yarogono/Unity-Health-Bar%EC%B2%B4%EB%A0%A5%EB%B0%94-%EA%B5%AC%ED%98%84-%EB%B0%A9%EB%B2%95


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# 점수 : 25

- 업그레이드(수정) 7개
- 게임 완성도 부족

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