

#Change Log

All notable changes to Driving Task project will be documented in this file

[2021-05-13]

Fixed:

- `NullReferenceException`: Object reference not set to an instance of an object
`HoverMotor.UpdateTurning ()` (at Assets/Scripts/Car/HoverMotor.cs:89)
`HoverMotor.FixedUpdate ()` (at Assets/Scripts/Car/HoverMotor.cs:58)

Were fixed by adding `Start()` method in `HoverMotor.cs`, getting `Rigidbody` component and assigning it to `carMain`. (An object is trying to be used by a script but does not refer to an instance of an object.)

[2021-05-14]

Added:

- Obstacles. (Obstacles size set to 3 and prefabs dragged in Level Block Script/Obstacles section).
- Obstacle spawn probability set to 50 for the optimal difficulty.
- Obstacle tags set to "Obstacle".
- Mesh colliders.
- Explosion particles. (Downloaded "Unity Particle Pack" from the Asset Store and dragged "BigExplosion" particle in HoverCar / CarTag(Script) / Explosion Effect).
- On Collision Explosion.

Fixed:

- Camera destruction along with the object.
Fixed by removing camera parent before destroying game object.

[2021-05-15]

Added:

- Idle and collision animations for bone, cactus and rock prefabs. (On collision activate animators bool "hasCollided" to activate collision animation).
- Missing walls. Copied walls from the other prefabs and modified them.
- Missing wall tags.
- Death on collision with walls.
- Level Block prefabs tags.
- Level Block destruction. (Using `Destroy(transform.parent.gameObject)`).

Fixed:

- Minor Level Block prefab obstacle spawn modifications.

[2021-05-16]

Added:

- Game Over UI:
 - Set Canvas / Canvas Scaler to "Scale with screen size".
 - Checked Canvas / Canvas / "Pixel perfect".
 - Set Canvas / Canvas / Sort order to 1.
 - EndGamePanel fade in effect animation. (Using black image and changing its transparency).
 - EndgamePanel set to inactive. (Box unchecked).
- Canvas Manager:
 - timeText text is set and updated.
 - Save highScore using PlayerPrefs.
 - Update highScore if beaten.
 - EndGamePanel is set to active. (Created hasCollided boolean in CarTag.cs to know when the collision happened).
 - Implemented RestartGame and QuitGame buttons logic.
- Countdown cutscene. (Using timeline, creating animations).

Fixed:

- In Canvas / Canvas Manager CurrentRunTimeText and BestTimeText objects were put in the wrong places. Changed them with each other.
- Ground Cube in LevelBlock prefab needed to be tagged as LevelBlock individually.

[2021-05-17]

Added:

- Countdown sound. (Downloaded "Race countdown" from mixkit.co, free to use.)
- 3,2,1,GO text and animations.

Fixed:

- Added 4s delay in CanvasManager.cs so that timer starts at 0, when game begins. (Better way is to activate timer, when animation ends or race starts, but didn't have time to figure out how exactly).
- Adjusted lighting by setting Directional Light / Day Night Controller / Current Time Of Day to 0.33.
- Turned off HoverCar gravity, because sometimes car would jump of the obstacles.

[2021-05-18]

Added:

- Main Menu:
 - Copied a Main (renamed to DrivingScene) scene and left what is necessary.
 - Copied buttons from the DrivingScene and adjusted the text, colors, anchors.
 - Created car animation.

Fixed:

- Movement glitch – after a while car position glitched.
Fixed by deleting transform.position in HoverMotor.cs.
- Deleted / adjusting some spawn points as they were too close to the start and finish of the LevelBlock, which led up to player dying right in the beginning of the race.

[Conclusion]

- Overall, it took me 5 days to complete this task. Most of the time was spent remembering/learning/understanding how Unity works.
- When problems occurred, I tried to fix them myself, by reading error messages / analyzing the code / looking at the information that was presented in the project. If it was too difficult, looked up for the solutions online and tried to find the best fit for the project.
- Committed all changes to the [GitHub repository](#).
- The task itself was challenging. It included the basic and “must know” things for the Unity3D developer. Each task was clearly described and the time limit of one week worked perfectly for me.