RCC_Damage

Public Variables

internal RCC_CarControllerV3 carController; // Car controller.

public bool automaticInstallation = true; // If set to enabled, all parts of the vehicle will be processed. If disabled, each part can be selected individually.

// Mesh deformation
public bool meshDeformation = true;
public DeformationMode deformationMode = DeformationMode.Fast;

public int damageResolution = 100; // Resolution of the deformation.

public LayerMask damageFilter = -1; // LayerMask filter. Damage will be taken from the objects with these layers.

public float damageRadius = .5f; // Verticies in this radius will be effected on collisions.

public float damageMultiplier = 1f; // Damage multiplier.

public float maximumDamage = .5f; // Maximum Vert Distance For Limiting Damage. 0 Value Will Disable The Limit.

public struct originalMeshVerts { public Vector3[] meshVerts; } // Struct for Original Mesh Verticies positions.

public struct originalWheelPos { public Vector3 wheelPosition; public Quaternion wheelRotation; }
public struct meshCol { public Collider col; public bool created; }

public originalMeshVerts[] originalMeshData; // Array for struct above.

public originalMeshVerts[] damagedMeshData; // Array for struct above.

public originalWheelPos[] originalWheelData; // Array for struct above.

public originalWheelPos[] damagedWheelData; // Array for struct above.

public bool repairNow = false; // Repairing now.

public bool repaired = true; // Returns true if vehicle is completely repaired.

public bool recalculateNormals = true; // Recalculate normals while deforming / restoring the mesh.

public bool recalculateBounds = true; // Recalculate bounds while deforming / restoring the mesh.

public bool wheelDamage = true; // Use wheel damage.

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public float wheelDamageRadius = .5f;       //   Wheel damage radius.

public float wheelDamageMultiplier = 1f;       //  Wheel damage multiplier.

public bool wheelDetachment = true;     //          Use wheel detachment.

public bool lightDamage = true;     //       Use light damage.

public float lightDamageRadius = .5f;       //Light damage radius.

public float lightDamageMultiplier = 1f;       //Light damage multiplier.

public bool partDamage = true;     //       Use part damage.

public float partDamageRadius = .5f;       //Light damage radius.

public float partDamageMultiplier = 1f;       //Light damage multiplier.

public MeshFilter[] meshFilters;    //  Collected mesh filters.

public RCC_DetachablePart[] detachableParts;       //  Collected detachable parts.

public RCC_Light[] lights;      //  Collected lights.

public RCC_WheelCollider[] wheels;      //  Collected wheels.
```

Public Methods

```
public void Initialize(RCC_CarControllerV3 _carController) {}                  //          Collecting all meshes and detachable parts of the vehicle.

/// Gets all meshes.
public void GetMeshes(MeshFilter[] allMeshFilters) {}

/// Gets all lights.
public void GetLights(RCC_Light[] allLights) {}

/// Gets all detachable parts.
public void GetParts(RCC_DetachablePart[] allParts) {}

/// Gets all wheels
public void GetWheels(RCC_WheelCollider[] allWheels) {}

/// Moving deformed vertices to their original positions while repairing.
public void UpdateRepair() {}

/// Moving vertices of the collided meshes to the damaged positions while deforming.
public void UpdateDamage() {}
```

```
/// Detaches the target wheel.
public void DetachWheel(RCC_WheelCollider wheelCollider) {}

/// Raises the collision enter event.
public void OnCollision(Collision collision) {}
```