Class Diagram: Scene Integration System

SceneLoader

-scenePath: String
-scene: Scene
-camera: Camera
-renderer: Renderer

+loadScene(path: String): void
-parseSceneData(): void
-initializeScene(): void

Renderer

-canvas: HTMLCanvasElement

+render(scene: Scene, camera: Camera): void

ModelImporter

-modelPath: String
-loadedModels: List<Object3D>

+loadModels(path: String): List<Object3D>

MaterialHandler

-texturePath: String

+applyMaterials(models: List<Object3D>): void

LightingManager

-lights: List<Light>

+setupDefaultLighting(): void

EnvironmentHandler

-hdriPath: String

+applyHDRI(path: String): void

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uses

WebGLRenderer

+render(scene, camera)
+setSize(width, height)