

Unity Developer Intern Assessment

Objective

The goal of this assessment is to create a custom Unity Editor window that allows users to list and manage GameObjects in the scene. The window should provide filtering, searching, toggling active states, and support for Undo/Redo functionality.

Requirements

GameObject List

- Display all GameObjects in the current scene within the custom Editor window.
- The list should include each GameObject's **name** and **active state**.

Editing Selected GameObjects

- When a GameObject is selected from the list, the user should be able to edit its **Position**, **Rotation**, and **Scale** values.
- Any modifications must support **Undo/Redo** functionality.

Search Bar

- Users should be able to search for GameObjects by name.
- The search should dynamically update the displayed results as the user types.

Filtering

- Users should be able to filter GameObjects based on their components.
- The filtering options should allow users to display only GameObjects that contain:
 - A **Mesh Renderer** component
 - A **Collider** component (e.g., BoxCollider, SphereCollider, etc.)
 - A **Rigidbody** component

Active State Toggle

- Users should be able to toggle the **active state** of each GameObject using an **on/off checkbox** in the list.

Undo/Redo Support

- All modifications should be reversible using **Undo/Redo** actions.

Multi-Selection & Batch Editing

- Users should be able to select multiple GameObjects and modify their **Position**, **Rotation**, and **Scale** simultaneously.
- The tool should also allow batch operations such as:
 - Adding a component to all selected GameObjects
 - Removing a component from all selected GameObjects

Scene Setup

The scene should include the following GameObjects, each with unique names:

1. **5 Cubes** with a **Mesh Renderer** component.
2. **5 Cubes** with a **Box Collider** component.
3. **5 GameObjects** with a **Rigidbody** component.
4. **5 Spheres** with both **Sphere Collider** and **Mesh Renderer** components.
5. **5 GameObjects** with a **Collider**, **Rigidbody**, and **Mesh Renderer** components.

6. **5 Inactive** GameObjects.

7. **5 GameObjects** that contain only a **Transform** component.

Technical Requirements

- Use Unity 6000.0.40f1

Deliverables

- Fully functional Unity project folder.
- Documentation about the developed module

Submission Instructions

- Submit the Unity project via a Git repository link (e.g., GitHub, GitLab).
- Include all documentation and the gameplay video (if any) in the repository.
- Ensure the repository is public or provide access if it is private.