

UIObjectTemplateEditor: Comprehensive Documentation and User Guide

The `UIObjectTemplateEditor` is an Editor Window extension for Unity that enables you to create, modify, save, and load `GameObject` templates in JSON format. This editor is particularly useful for game and XR developers who frequently need to prototype UI/UX elements or other `GameObjects`.

- **Table of Contents**

1. [How to Install](#how-to-install)
2. [Features](#features)
3. [How to Use](#how-to-use)
 1. [Opening the Editor Window](#opening-the-editor-window)
 2. [Creating a New Template](#creating-a-new-template)
 3. [Loading Existing Templates](#loading-existing-templates)
 4. [Saving Templates](#saving-templates)
 5. [Modifying Existing Templates](#modifying-existing-templates)
 6. [Instantiating GameObjects from Templates](#instantiating-gameobjects-from-templates)
 7. [Setting Parent-Child Relations](#setting-parent-child-relations)

- **How to Install**

1. Open your Unity project.
2. Add the Scripts folder provided to the project.

Note: Place your json file in a resource folder in Assets

- **Features**

- Create GameObject templates with customizable properties: `Name`, `Position`, `Rotation`, `Scale`, and `Color`.
- Save GameObject templates into a JSON file.
- Load GameObject templates from a JSON file.
- Modify loaded templates and save them back to the JSON file.
- Instantiate GameObjects in the scene based on templates.
- Create parent-child relationships between GameObjects.

- **How to Use**

- Opening the Editor Window

1. Once the `UIObjectTemplateEditor` script is in the project, go to `Window` in Unity's main menu.
2. Select `UI Object Template Editor` to open the editor window.

- Creating A new Templet

1. In the editor window, you can see fields for `Name`, `Position`, `Rotation`, `Scale`, and `Color`.
2. Fill in these fields with the properties you want for your GameObject template.
3. Click `Save Changes to JSON` to add this new template to your current JSON data.

- Loading Existing Templates

1. To load an existing JSON file with templates, click the `Load JSON` button.
2. Choose the JSON file you want to load.
3. The templates within the JSON file are loaded into the editor.

- Saving Templates

1. To save the currently loaded templates into a JSON file, click the `Save All Templates` button.
2. Alternatively, click `Save JSON` to save the raw JSON data into a file.

- Modifying Existing Templates

1. If you've loaded templates, they will be available in the `Select Object to Modify` dropdown.
2. Select a template you wish to modify.
3. Modify its properties using the fields provided.
4. Click `Modify` to apply these changes.
5. Save the changes by clicking `Save Changes to JSON` or `Save All Templates`.

- Instantiating GameObjects from Templates

1. To instantiate GameObjects from the currently loaded templates, click the `Instantiate` button.
2. GameObjects will appear in your scene based on the templates.

- Setting Parent-Child Relations

1. Use the `Select Object to Modify` dropdown to choose the 'child' GameObject.
2. Use the `Select Parent Object` dropdown to choose the 'parent' GameObject.
3. Click `Add as Child` to set the parent-child relationship.