

using-the-terra-studio-editor

Dashboard

This is the first screen you are shown on logging in and your central hub for managing all your projects in Terra Studio. Here's are the actions you can perform from the Terra Studio Dashboard:

Creating a New Game Project

1. Opt for **Start from Scratch** if you wish to initiate a new project.
2. Enter a desired name for your game and hit **Create Project**.
3. You'll be directed to the Scene Editor for your new game where you can begin creating your game.

Editing an Existing Game Project

1. Click on **In Progress** to see the list of games you've started.
2. Choose the game you want to edit by clicking on it.
3. Choose from one of two options for both the scene and the scripts - **Cloud Save** and **Local Save**. Choose the option most relevant to you.
4. You will be then taken to the Scene Editor for that game

Deleting an Existing Game Project

1. Select **In Progress** to view your ongoing game projects.
2. Find the game you wish to remove and click on the **Delete** icon beside it.

Editor UI

Once you [create a new project](#) or [open an existing project](#), you will be taken to the editor for the game.

Overview of Editor UI

This is the screen you'll see when you first enter Terra Studio

Editor UI Feature	Description
Quick Access Menu	Located at the top of the workspace, the Main Toolbar helps you transition between edit and play modes.
Inspector Panel	Located on the right, the Inspector Panel is hidden by default. It opens up a customization panel for any item selected in Layers, Essentials, SFX or Particles
Main Toolbar	Located at the top of the editor interface, the Main Toolbar helps you transition between edit and play modes.
Camera Toolbar	Located in the bottom of the screen, it allows you to view your game from multiple angles.
Support Chatbot	Located in the bottom right, you get direct access to the Terra Team is available via the Support Chat.
Asset Gizmo	Gizmo next to any selected asset that helps you move rotate and scale assets

Quick Access Menu

The Quick Access Menu is equipped with all the necessary elements for game creation. Once you select any category from the Quick Access Menu, an expanded panel displays details and actions relevant to the selected item.

The Quick Access Menu features eight tabs:

Quick Access Menu Tab	Description
Assets	This tab is used for adding and managing game assets. It opens the Terra Asset Library with over 150,000 3D assets. You can hover over an asset to see its name and polygon count. A search bar at the top allows you to find specific assets by name.
Layers	Lists all Assets, Particles, and SFX added to the scene in a hierarchical format. Includes default items like Player, Ground, and Light. This tab allows you to organize and duplicate assets across different layers.
Essentials	Displays characteristics of the game environment, such as the game timer, health, Game Main Score Tracker
Particles	Offers special effects like smoke, fire, or sparkles. Clicking this tab shows a library of available Particle Effects (VFX), which you can preview and search.
SFX	Provides a selection of sound effects to enhance the game's auditory experience. You can preview sounds by clicking the play button and search for specific SFX using the search bar.
Scenes	Enables setting up and customizing the game's environments and levels. Shows a list of available scenes and environments. You can add a new scene by clicking the + button, entering a name, and clicking OK.
Logic	Displays a list of pre-built logic templates that can be dragged and dropped onto an asset.
Scripts	Displays a list of all scripts added to objects in the scene. Use the + button in this tab to add a new script.

Inspector Panel

The Inspector Panel is available only in Advanced Mode. Enable the Advanced Mode toggle located at the top right of the editor to access it. Once enabled, the right hand side of the editor interface houses the inspector panel for any feature whose properties can be customized.

Some features whose properties are customizable and appear in the inspector panel are as follows:

- Any component added to the Essentials tab in the Quick Access Menu.
- Sound Effect and Particle game objects.
- Transform, Rotate, and Scale fields of asset game objects.
- Material Properties of asset game objects.
- Logic Components attached to asset game objects.
- Scripts & Object Variables attached to asset game objects.

Main Toolbar

This is the `Main Toolbar` that has various functionalities to it. These functionalities range from system properties to publishing the game on Studio. All these have been explained below:

Main Toolbar Feature	Description
File Import	Helps you import custom packages directly into your project. Primarily used to import readymade script packages for your game.
Primitives	Contains a collection of primitive elements that can be used to customize an asset according to your needs. Some of these elements include: Cube, Cylinder, Sphere, and Light. This feature also includes the EditUI feature, which allows you to add Custom UI elements to your game.

Main Toolbar Feature

Description

Provides various system properties for game customization. These include:

- **Game Timer**: Adds a timer to the game.
- **Checkpoint**: Adds a checkpoint in the game.
- **Game Progress**
- **Fake Player**
- **Level Upgrader**: Makes your game multilevel.
- **Delete Game Prefs**

System Properties

Although the Studio autosaves your work locally, this feature allows you to save your progress on the cloud. Simply click on the Save icon to save your project to the cloud.

Save

Switches the scene to the gameplay mode of your project. Use this to check if everything is working as per your vision. Remember to save your game before entering the gameplay mode.

Play

Sends your project for review. After passing standard procedures, your project will be live on the app within 2-4 days.

Publish

Contains tools for accessing scripts and debugging errors in your code.

Debug Panel

Camera Toolbar

You can achieve different views of the scene using the camera control.

There are 6 different orientations provided to the user:

- **Top** - This allows you to view and edit the scene from the **top view** of the camera.
- **Bottom** - This allows you to view and edit the scene from the **bottom view** of the camera.
- **Left** - This allows you to view and edit the scene from the **left view** of the camera.
- **Right** - This allows you to view and edit the scene from the **right view** of the camera.
- **Front** - This allows you to view and edit the scene from the **front view** of the camera.
- **Back** - This allows you to view and edit the scene from the **back view** of the camera.

You have access to two different projections of the scene:

- **Perspective Projection** : This will help you to feel the depth of the elements while considering the distance with respect to the viewer.
- **Orthographic Projection** : This maintains the uniform scaling of the elements irrespective of the distance.

To achieve a custom orientation of the camera, you can right-press on your mouse, and move the cursor adjusting to your preferred orientation.

Asset Gizmo

The Asset Gizmo is a small tool that appears next to any asset when you select it. This gizmo includes three icons: the **Move** icon, the **Rotate** icon, and the **Scale** icon. \ \ Selecting any of the three icons displays the X, Y, and Z axes. You can choose any axis to perform operations along it. Alternatively, click the center where all axes intersect to apply the operation uniformly along all axes.

Support Chatbot

Here, you can ask technical questions and receive guidance, ensuring smooth progress in your game development journey. Simply type your query into the chat, and a Terra Team member will provide you with the assistance you need.

You can attach images in png format or type responses as threads.

Keyboard Shortcuts

Keyboard Shortcuts for Mac

Mac Shortcut	Description
Right Click + W	Pans the camera forward
Right Click + A	Pans the camera to the left
Right Click + S	Pans the camera backward
Right Click + D	Pans the camera to the right
Right Click + Q	Pans the camera downward
Right Click + E	Pans the camera upward
Right Click + Mouse	Hold down right mouse button while moving the mouse to change the camera orientation.
Mouse Wheel Scroll Up	Scroll the mouse wheel up to zoom in.
Mouse Wheel Scroll Down	Scroll the mouse wheel down to zoom out.
⌘ + D	Duplicates an object.
⌘ + Del	Deletes an object.
⇧	Hold down left shift to add or remove objects from selection.
⌘ + Z	Undoes the last editing step.
⇧ or ⌘ + Y	Redoes the last editing step.
⇧ or ⌘ + 5	Enable or disable snapping an object to another objects surface

Keyboard Shortcuts for Windows

Windows Shortcut	Description
Right Click + W	Pans the camera forward
Right Click + A	Pans the camera to the left
Right Click + S	Pans the camera backward
Right Click + D	Pans the camera to the right
Right Click + Q	Pans the camera downward
Right Click + E	Pans the camera upward
Right Click + Mouse	Change camera orientation
Mouse Wheel Scroll Up	Zoom in.
Mouse Wheel Scroll Down	Zoom out.
Ctrl + D	Duplicates an object.
Ctrl + Del	Deletes an object.
Left Shift	Add or remove objects from selection.
Ctrl + Z	Undoes the last editing step.
Ctrl + Y	Redoes the last editing step.
Ctrl + 5	Enable or disable snapping an object to another objects surface

Editor UI Workflows

Setting up the game scene environment

Asset Management

Asset Action	Steps to perform Action
Adding an Asset	<ol style="list-style-type: none">1. Select Quick Access Menu and click on the Asset tab. An expanded Asset Library opens up2. Search for the right asset by scrolling through the library or entering a keyword for the asset3. Click on the desired asset and drag & drop it on to the scene
Selecting an Asset	<ol style="list-style-type: none">1. Locate the asset visually in the scene and click on it. A yellow highlight shader shows up on the outline of the shader2. Alternatively, Go to Layers > Select the asset from the layer if you know the asset's name
Deleting an Asset	<ol style="list-style-type: none">1. Select asset > Press Ctrl + Del or Cmd + Del2. Alternatively, Select asset > Goto the Asset in the Layers > Right Click on Asset > Select Del
Duplicating an Asset	<ol style="list-style-type: none">1. Select asset > Goto the asset in the Layers > Right Click on Asset > Select Duplicate2. Alternatively, Select asset > Goto the Asset in the Layers > Click on the Duplicate Icon next to it
Renaming an Asset in Layers	Select asset > Goto the asset in the Layers > Click on the Edit Icon next to it > Rename the asset
Making an Asset a Child of Another Asset	Select Asset > Goto the asset in the Layers > Right Click and Drag to the desired Parent Asset
Adding an Empty parent to an Asset	Select Asset > Goto the asset in the Layers > Right Click on Asset > Select Add Empty Parent
Moving an Asset in the Layers	Select Asset > Goto the asset in the Layers > Right Click and Drag to desired location
Moving an Asset	Click on Asset in the Scene > Click on the Move Icon in the Asset Gizmo > Select Axes > Use mouse to move
Scaling an Asset	Click on Asset in the Scene > Click on the Scale Icon in the Asset Gizmo > Select Axes > Use mouse to scale along that axis
Rotating an Asset	Click on Asset in the Scene > Click on the Rotate Icon in the Asset Gizmo > Select Axes of Rotation > Use mouse to rotate along that axis

SFX & Particle Management

SFX & Particle Management Action	Steps to Perform Action
Adding an SFX	<ol style="list-style-type: none">1. Select Quick Access Menu and click on the SFX tab. An expanded SFX Library opens up2. Preview the SFX by clicking on the Play icon3. Add the SFX by clicking on the + button
Customizing SFX	<ol style="list-style-type: none">1. Select the added SFX from the Layers2. Set the Advanced Mode toggle to 'on' state. You will view the Inspector Panel for SFX3. Customize the properties for the SFX

SFX & Particle Management Action

Steps to Perform Action

Adding a VFX

1. Select Quick Access Menu and click on the **SFX** tab. An expanded Particles Library opens up
2. Scroll through the particles preview
3. Add the particle VFX by clicking on the + button

Customizing VFX

1. Select the added Particle VFX from the **Layers**
2. Set the Advanced Mode toggle to 'on' state. You will view the Inspector Panel for Particle VFX
3. Customize the properties for the Particle VFX

Scene Management

Scene Management Action

Steps to perform action

Adding a New Scene

1. Select Quick Access Menu and click on the **Scenes** tab.
2. Click on the + icon to add a new scene
3. Set a name to the scene and press Enter

Load a New Scene

1. Select Quick Access Menu and click on the **Scenes** tab.
2. Double Click on the scene you want to load on the editor

Deleting an Existing Scene

1. Select Quick Access Menu and click on the **Scenes** tab.
2. Press the Delete icon next to the scene you want to delete

Setting a Scene as Default Scene to load on game start

1. Load the the Scene you want to set as default
2. Select Quick Access Menu and click on the **Scenes** tab.
3. Right click on your current scene and click **Set Default**

Adding Logic to the game

Logic Action

Steps to perform action

Adding a Logic Template to an Asset GameObject

1. Click on the asset
2. Select the **Logic** Tab in the Quick Access Menu
3. Select the correct Logic Template
4. Drag and drop the template to the asset GameObject

Creating a Script

1. Select the **Scripts** Tab in the Quick Access Menu
2. Click on the + button
3. Name your script.
4. Press **Enter**

Logic Action

Steps to perform action

Adding a Script to an Asset
GameObject

1. Click the asset GameObject to which you want to add the script
2. Select the **Scripts** Tab in the Quick Access Menu
3. Drag and drop the script to the asset
4. You will see the script added as a tab in the Inspector Panel on the right. You can add multiple scripts to your object

Creating Variables for
GameObjects

1. Add the script to the asset
2. An **Object Variables** tab will show up in the Inspector Panel
3. You will be shown four fields - one each for String, Float, Int and GameObject.
4. For String, Float and Int , enter the name and the value
5. For GameObject , enter a name and drag the object whose reference is to be entered as the value.

Opening, Viewing and Editing a
Script

1. Click on the Visual Studio Code icon in the Debug Panel of the Main Toolbar on top. VS Code Editor will open the entire project with a folder containing all the scripts
2. Select the script you want to open, view or edit from