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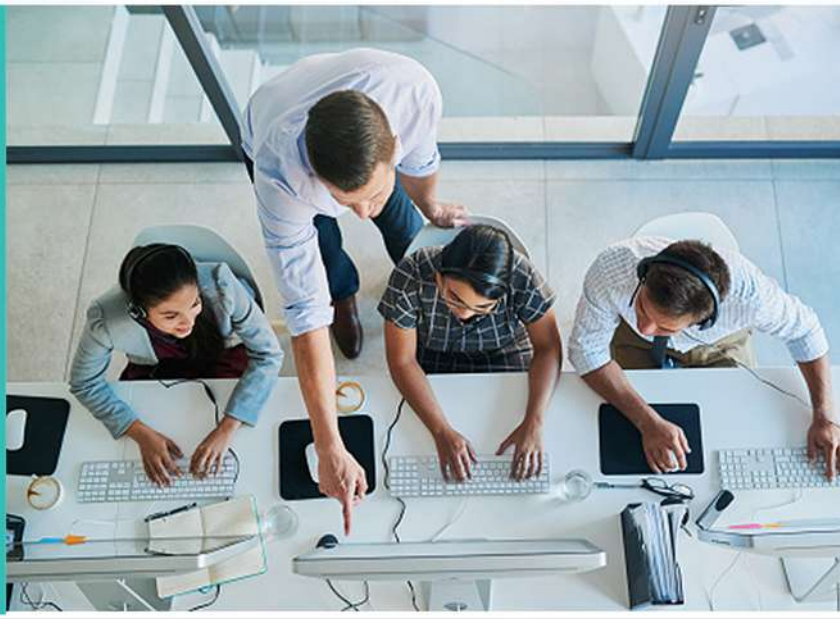


Game Development Using Buildbox

Introduction to Gaming

INTRODUCTION

1.1 What is Gaming:

Gaming refers to playing electronic games, whether through consoles, computers, mobile phones or another medium altogether. Gaming is a nuanced term that suggests regular gameplay, possibly as a hobby. Although traditionally a solitary form of relaxation, online multiplayer video games have made gaming a popular group activity as well. A person who is into gaming is often called a gamer or hardcore gamer.

Gaming is bigger than ever. The games industry is now larger than both cinema and music, and with the advent of mobile gaming, more people are playing games than ever before. However, the appeal of gaming is still a mystery for many people. Some of you will have played games when they were younger, but let the hobby fall by the wayside. Some of you will have never picked up a game in your life.

Gaming has seen several golden ages, each of which were believed to mark the apex of its rise in popularity. As new technologies and games emerge, however, the number of people engaged in gaming has steadily risen. Smartphones and motion sensors are just two examples of new technologies that have spurred new types of gaming. Gaming has become so pervasive that the term “casual gaming” is used to refer to intermittent gaming, while “hardcore gaming” is reserved for people who spend a lot of time gaming.

What types of games are popular:

Popular game genres are constantly shifting and differ across which platform they are being played on. Below is a condensed list of current popular genres with some examples of each:

- **First-Person Shooters (FPS)** – Action games focusing on gun or projectile-based combat through a first-person viewpoint. (Call of Duty, Overwatch, BioShock, Battlefield, Destiny)
- **Action-Adventure** – Games in which the player traverses and explores environments, often involving combat and puzzle-solving. (Grand Theft Auto, Super Mario, Uncharted, The Legend of Zelda, God of War, Bayonetta)

- **Sports** – Games that simulate the strategy and physics of real world professional sports. (FIFA, Pro Evolution Soccer, Madden NFL, NBA)
- **Puzzle** – Games that involve solving logic puzzles, usually increasing in complexity as you progress. (Candy Crush Saga, Professor Layton, Bejeweled, Monument Valley, Threes)
- **Sandbox/Open World** – Games involving minimal or no story-telling or limitations, letting the player freely roam and change the virtual world at will. (Minecraft, Terraria, Skyrim, Fallout)
- **Multiplayer Online Battle Arena (Moba)** – Online games played as two competing teams attempting to capture or destroy each other's base. (Dota 2, League of Legends, Heroes of the Storm, Paragon)
- **Real-Time Strategy (RTS)** – Very similar to a Moba, but sometimes played against AI instead of online. (Warcraft, Starcraft, Clash of Clans, Clash Royale)
- **Role-Playing Game (RPG)** – Usually focused on rich storylines, character development and complex game systems. (Final Fantasy, Dark Souls, Mass Effect, Persona)
- **Massively Multiplayer Online Role-Playing Game (MMORPG)** – Like RPG's, but played online with thousands of other players. (World of Warcraft, Elder Scrolls Online, EVE Online, Final Fantasy XIV)
- **Fighting** – Games involving close-quarter combat with an opponent, with fights usually taking place over several rounds. (Street Fighter, Mortal Kombat, Super Smash Bros., Tekken)
- **Simulation** – A huge category of games that are generally designed to simulate real world activities such as farming, aviation, interior design, city planning .etc (Animal Crossing, Stardew Valley, SimCity)

These genres are not necessarily self-contained – many popular games incorporate ideas and mechanics from several different genres at once. Also, with more and more people making games, new genres are being created all the time.

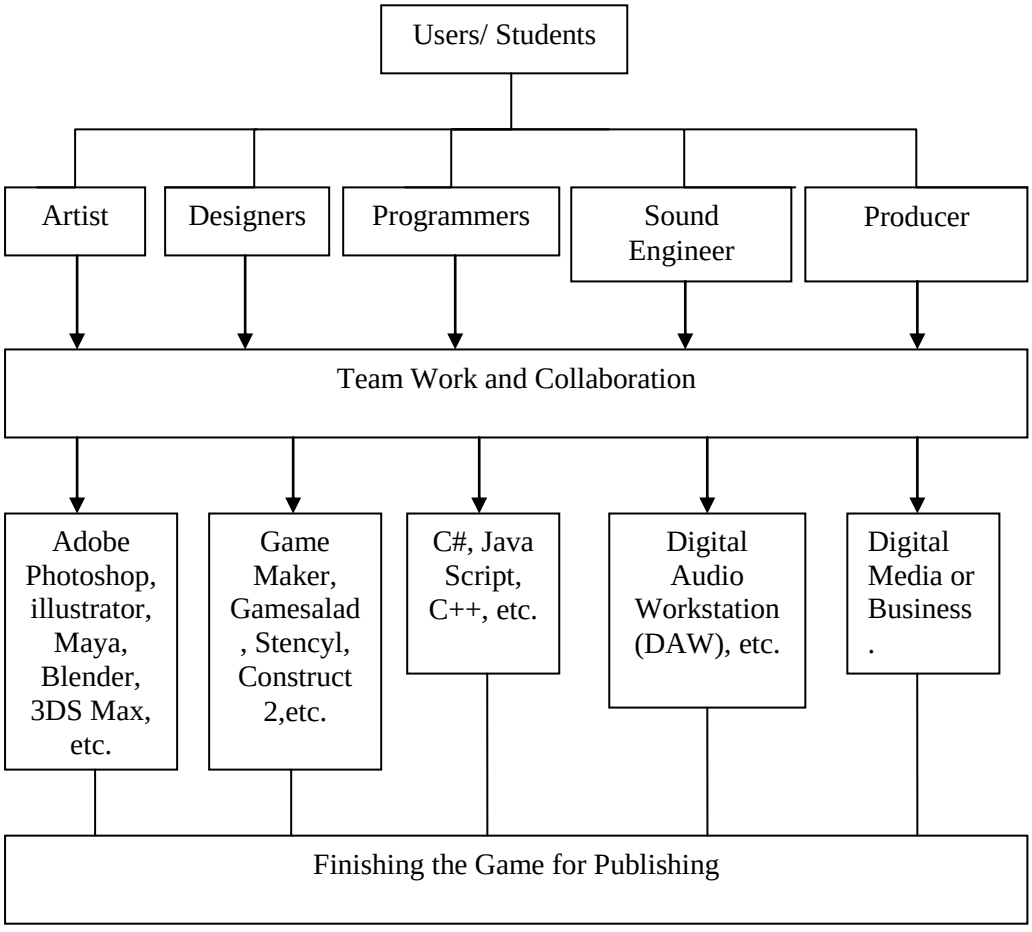
Roles in Game Development:

Game development has a very rich history and games are very popular among all age groups. According to a recent report by Newzoo senior market analyst Tom Wijman, the global gaming market will generate $159.3 billion in revenue in 2020. That would be 9.3 percent year-

over-year growth. What's more, Newzoo projects the industry to surpass $200 billion in revenue in 2023.

The biggest growth is in mobile gaming, with many internet cafes closed during the pandemic and the accessibility to mobile devices growing. According to Wijman, mobile gaming will account for $77.2 billion in revenue in 2020, an increase of 13.3 percent from 2019. Of the 2.7 billion total gamers projected to play in 2020, 2.6 billion will play on mobile devices. However, only 38 percent will pay to play games on mobile, according to the analysis.

Game development is a very sequential and consistent process. It requires a very skilled team of many members and each has their own roles. Each role has their own specific task, the team can be a single unit or can be an international team based upon requirement. Here are some specifically defined roles in Game Development.



Roles and Responsibilities

1. Artist: Artist is a team member or team who create game art. This art includes creating the jungle view, different viewport, and another related task. They are also graphic oriented team but mostly work on creating the scene and their visuals. These may be 2D or 3D oriented.

2. Designer: Game Designer is a team member which creates gameplay, rule, and structure of the game. It includes the User interface, documentation, and narration, content and packing video game. They are responsible for creating the game character, their graphics, their roles, their voices, their visual and all graphics related work. There can be multiple people in the team with more specific roles and there will be one lead person which will coordinate with the game development team for the development process.

3. Programmers: A programmer is a team which writes logics within the game and allows the user to make relatable to normal life. Programmer controls the flow of the game. Codebase is handled by the programmers. Individual programming disciplines roles include

- Physics
- AI
- Graphics
- Sound
- Gameplay
- Scripting
- UI
- Input processing
- Network communications
- Game tools

4. Sound Engineer: Sound Engineer is the person responsible for the sound effect and sound programming. It includes voice editing, audio merging in the game.

5. Producer: Most video and computer games are developed by third-party developers. In these cases, there may be external and internal producers. External producers may act as "executive producers" and are employed by the game's publisher. Internal producers work for the developer itself and have more of a hands-on role. Some game developers may have no internal producers, however, and may rely solely on the publisher's producer.

About Buildbox 2.0:

During the 2015 yeaar, there were over 30 Buildbox games that were featured by Apple and btoke the top 100. However, this was just the beginning of what we like to call the ‘Buildbox Movement’.

A great example of this is the game, Color Switch, originally created by David Reichelt using Buildbox which hit #1 on the iOS App Store on January 22. The game held its top position for a ground-breaking record of 28 consecutive days, beating out the infamous Flappy Bird which

was #1 for only 23 days. Color Switch has amassed over 75,000,000 downloads. It was initially built in one week using our software and continues to dominate the charts.

Within the past month alone we've had 5 different Buildbox games featured by Apple. This makes 9 for the year. Making Buildbox the most featured codeless game development platform.

With Buildbox 2.0, we wanted to expand the possibilities of what you can create even further, through the addition of multiple worlds, new logic pieces, effects, and more control over your environment. Buildbox 2.0 has been completely redesigned from the ground up. We kept our intuitive easy to use drag and drop level editor and integrated over 137 new options to give users the ability to create a wider variety of games at a much quicker pace.

There's no coding skills or programming knowledge required. This software was designed to allow anyone with an idea to dive straight in and start creating.

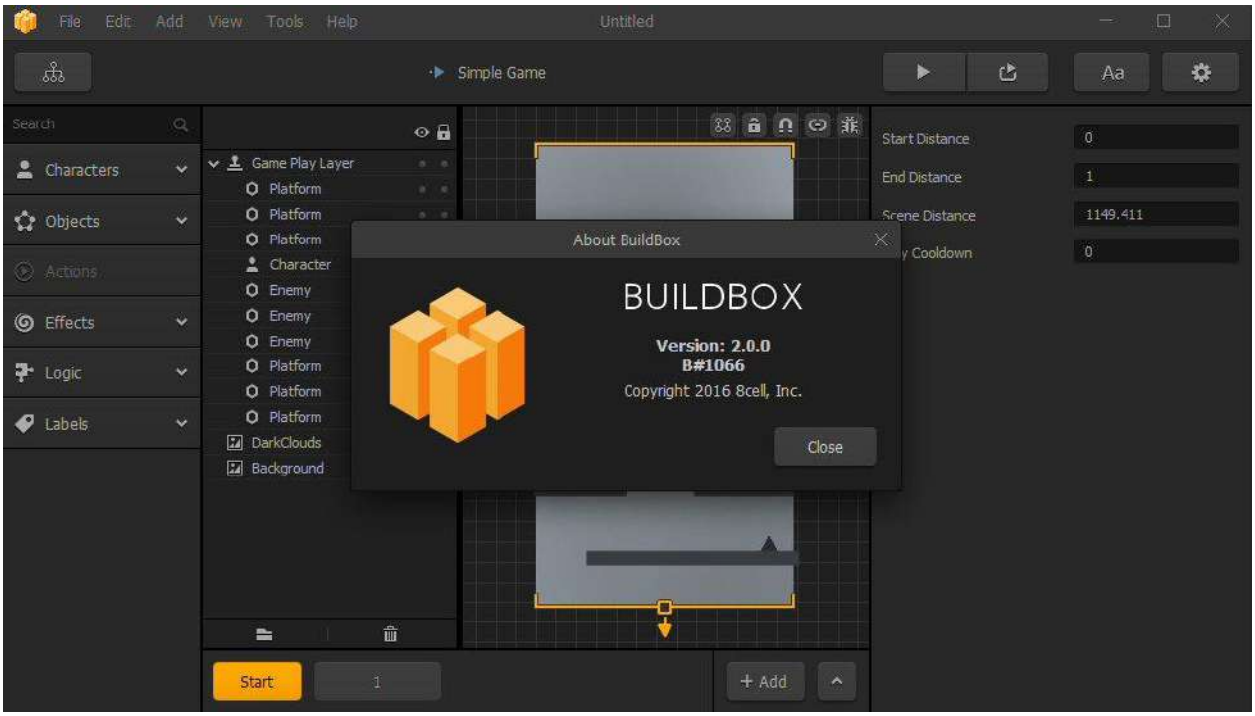
In Buildbox 2.0 you can create stage clear games that wildly open up gameplay possibilities. The multiple world features allows you to create multiple worlds to mix and match as you see fit. The options are endless. Make a simple casual game or a comples adventure game with test, playable cutscenes, and multiple themed worlds.

Animated menus are another new feature that lets users customize their players gaming experience. Animate your menus or create your own complete cutscenes with our new keyframe animator. Buildbox 2.0 is loaded with new tools and editing options to easily add advanced elements into your game with minimal effort.

1.2 Installation of Buildbox Software:

Buildbox is the world's first software that truly allows anyone to create amazing games regardless of technical skill. Due to its unique user interface, making games becomes a fluid process that doesn't require any scripting, programming or software design experience.

Buildbox 2 Crack is live now! No need to pay $2675 for Buildbox, you can have all features and the full software with our Buildbox 2 Crack. Every single feature and even automatic updates are available. 100% FREE DOWNLOAD**,** click the download link and download Buildbox 2 with a fully working crack. Amazing games with just drag and dropping assets, zero CODING, 100% DRAG AND DROP.



1.1 Homepage of Buildbox Software

Buildbox 2 crack unlocks the world's first software that allows anyone to create games regardless of technical skill. With its superior user interface, making games becomes a piece of cake that doesn't require any scripting or programming.

Installation steps:

Installation link for Buildbox 2.0 software is,

https://drive.google.com/file/d/1-ZYKIuS26RvB0cpwahgUD9Mk3VrN7ZX1/view?usp=sharing

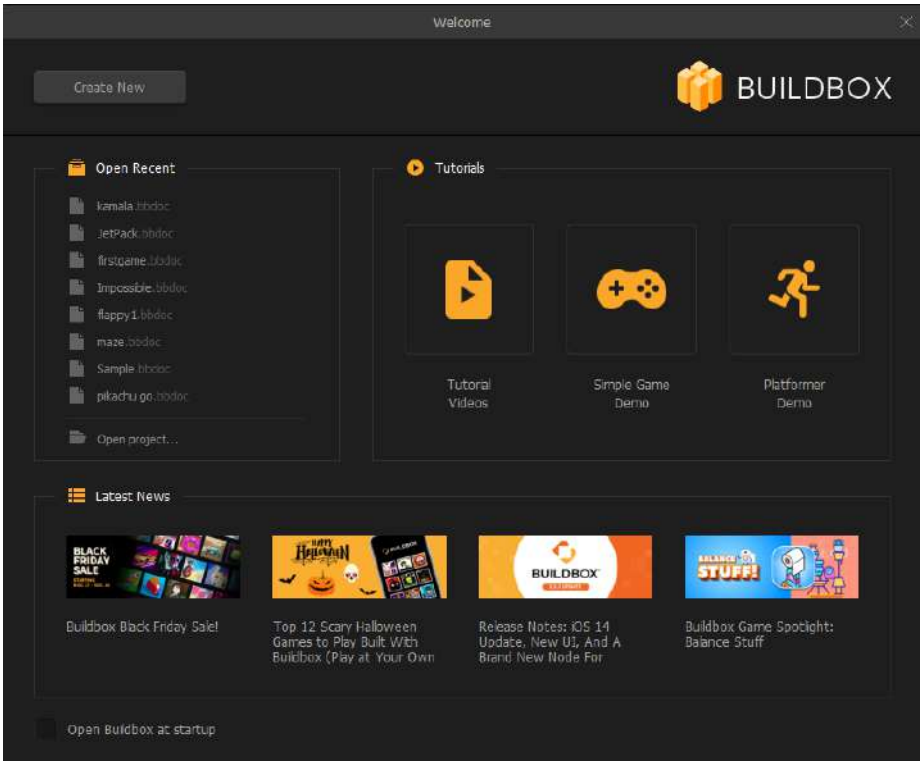
- Click on the above link to download the software
- Then buildbox 2 will be downloaded to your system and then install it
- Close the buildbox window after Install
- Copy and paste licence file to

  C:\Users\Hero\AppData\Local\eightcell\BuildBox\com.eightcell.buildbox

- Now Installation process is completed

1.3 Create a new game

Open Buildbox by clicking on icon on your desktop



1.2 First Screen of Buildbox

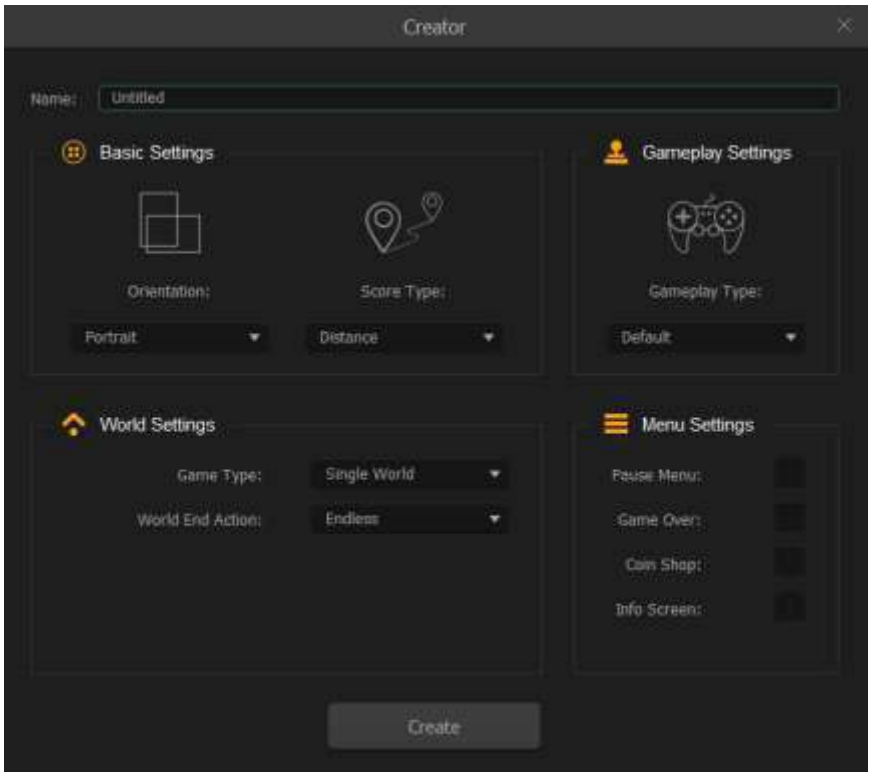
This is the first screen you will see when opening the software. You can also access it via the menu bar (help -> Welcome Screen). There are three main sections:

- **Open Recent:** this is a list of your recently saved Buildbox projects. The last item brings up a dialog to browse to any project on your computer.
- **Tutorials:** These may change over time. At The time of this document, there is a button for Tutorial Videos that take you to the website, and two example tutorial games.
- **Latest News:** Latest news from our website. Click on one to view in a browser.

You will also see the [Create New] button that shows the Creator screen for a new project, and a tick box down the bottom to have BuildBox open every time you boot up your computer.

1.4 Basic Settings:

Creator Screen: This is what you see when you request a new game in Buildbox.



1.3 Creating a Game

Set the following options, and then press the [Create] button. All of these can be changed later – they are however the fastest way of getting your base settings correct before you start. Pay particular attention to the menu and world settings, as they set up a lot of elements, automatically, that you would otherwise have to set up by hand:

- **Name:** Name of the project.
- **Basic Settings:**
    - **Orientation:** Which way is “up” Portrait or Landscape
    - **Score Type:**
        - **Distance:** Score based on distance travelled in game.
        - **Coins Collected:** Score based on coins collected.
        - **Points Collected:** Score based on points collected.

- **Gameplay Settings:** The following presets are available – they will be used for physics settings on every World when the project is created. Each option, excluding Default, comes with an example level to get you started:
    - **360 Shooter:** Space shooter where you can shoot in any direction like Smash TV.
    - **Around the World:** An orbiting game where you jump over objects as you circle a globe.
    - **Avoidance:** Avoidance game. Drag characters around the screen or use an arrow.
    - **Dogfight:** Vertical shooting game.
    - **Downward Bounce:** Like Jupiter Jump, where the player jumps down when button pressed.
    - **Fall Buttons:** Pitfall style, with left and right controls
    - **Fall Switch:** Pitfall style, with single touch control to change direction between left and right.
    - **Flappy:** Like Flappy Bird.
    - **Gravity Portal:** Side-scroller where the player controls two characters at once and a touch of the screen swaps gravity between up and down.
    - **Gravity Runner:** Side-scroller where a touch of the screen swaps gravity between up and down.
    - **Impossible:** Like the Impossible Game where the game scrolls from right, and the main user control is jump.
    - **ISO Jump Slide:** Isometric slide and jump game. Tap screen to jump.
    - **ISO Jump:** Isometric slide and jump game. Tap screen to jump.
    - **Jetpack:** Like Jetpack Joyride or similar.
    - **Jumping:** Like Twee Jump or Jump Pack. Jump up the platforms.
    - **Motorcross:** Physics-driven vehicle game where the user controls acceleration/deceleration.
    - **Platformer:** Classic platformer where you move around and jump over platforms in a side scrolling world.
    - **Racing:** Classic vertical car racing game like Spy Hunter
    - **Runner:** Sideways running game, without shooting.
    - **Shooting Runner:** Sideways running game, with shooting, likes Robot Unicorn Attack.

- **Side Shooter:** Classic space shooter game where enemies come from the right and there is no gravity, like R-Type.
- **Stage Clear:** Move around and collect all coins to complete stages of the game.
- **Stick Jump:** Side scroller where the game field scrolls when the Character is in the air, and remains mostly stuck otherwise.
- **Wall Jump:** A vertical version of Gravity Runner. Character moves up the screen, and will move to the left or right till it hits a wall. A tap on the screen will change direction.
- **Wall Reverse:** Character jumps repeatedly off the air by tapping the screen, and must avoid the obstacles as it bounces from wall to wall till it reaches the top.
- **Zig Zag:** Similar to Wall Jump, but the Character is moving diagonally upwards all the time. Tap to swap movement direction between left to right.

- **World Settings:**

Game Type:

- **Single World:** (Buildbox mode) A single game world only.
- **Multi World:** More than a single game world to select and/or move through.

World Amount: Will only appear if Multi World selected. The number of worlds to create. Values 1 to 10.

World End Action:

- **Endless:** game never ends
- **Next World:** (only if Multi world selected) Move to the next world.
- **World Select:** (only if Multi world selected) Take user to screen to select next world to play.
- **End Scene:** put in a game over scene.

Single UI for World: (only if Multi World selected) Tick for a single UI, or leave unticked for a separate screen for each World.

- **Menu Settings:** screens to create in your initial game
- **Pause Menu:** shows when game is paused.
- **Game Over:** shows when a player dies.
- **Coin Shop:** allows purchase of in game currency.
- **Info Screen:** to show information about the game – like instructions.

Scene Tree:

The second column of the Scene editor shows a tree of all items in the scene. You can select any item in the scene by clicking on it in the tree. By default all items are listed in the order they were created. You can rearrange the tree by clicking and dragging an item. All non-background items are under the GamePlay Layer at the top. Press the trash icon down the bottom to delete the currently selected item.

There are two columns to the right, one with an eye symbol, and the other with a lock symbol. Next to each item there are two dots – that line up with those symbols. Clicking those tots will toggle their setting.

The dots under the eye you can use to suppress display of an item. The dots under the lock symbol will allow you to lock an item down so you can't accidentally move it.

Group Layer:

Press the folder icon down the bottom to create a Group Layer at the current location (you will be prompted for a name). A Group Layer cannot be embedded in another Group Layer. There are three you can see on the right when a Group Layer is selected:

- **Auto Depth Sorting:** Turn on the options, below. The further up the selected Axis, the object will either ascend or descend on the Z axis i.e. move toward or away from the screen toward the viewer.
- **Sort Direction:**

  X Axis: Change Z order/depth based on movement down the X axis.

  Y Axis: Change Z order/depth based on movement down the X axis.

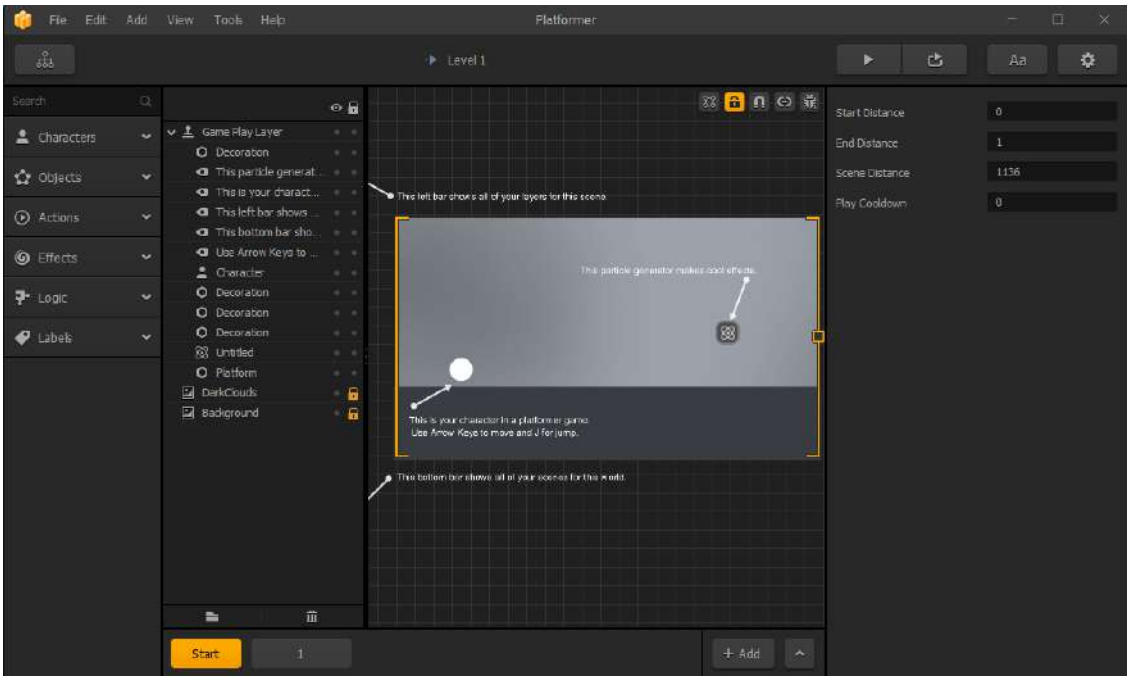
- **Sort Order:**

  Ascending: Move toward the viewer based on the selected axis, above.

  Descending: Move away from the viewer based on the selected axis, above.

1.5 Scene Editor Buttons:

This is the screen you will be spending most of your time in, while using Buildbox. It is where you edit the scenes that make up a World.



1.4 World Screen

At the top-right of the central second of the Scene Editor you will see four buttons:

- **Show Game Frame:** Overlay the game frame over the current Scene in yellow.
- **Lock Backgrounds:** Lock all background elements.

  Note: you can lock and unlock individual background elements though the Scene Tree.

- **Snap Movement:** snap to a grid on object placement, to make things easier to line-up.
- **Activate Connection Mode:** See Connections
- **Debug Mode:** Show additional information on screen.