GameSalad Essentials

This guide will teach you everything you need to know to start developing your own game, from the design process, to the creation, and in-depth development features of GameSalad.

You will start by designing your game and importing artwork, and quickly move to setting up in GameSalad. Once you set up your menu and controls, you will create players and make them attack all they find while detecting collisions. Of course, it’s important to keep track of their health, ammo, and other stats, so you will learn that next! To spice things up further, we will add enemies, teach them how to behave (or not), and create minimaps and other objectives to keep your players hooked.

We will round off with some important details about monetization, cross-platform deployment, and other pearls of wisdom to help you on your own journey. Phew!

Who this book is written for

If you want to create your own game, but don’t know where to start, this is the book for you. Whether you’ve used GameSalad before, or have prior game development experience or not you are sure to learn! Imaging software experience, such as Photoshop, is good to have, but art and assets are provided in the book’s resources.

What you will learn from this book

- Design your game from the initial concept to paper to screen
- Set up GameSalad on your system and get started with your first project from scratch
- Understand and implement logo animation and preprogrammed introduction animations
- Create gameplay mechanics such as health system, lives, scoring, power ups, ammo, inventory, GUI, and more!
- Use GameSalad’s new, extremely powerful tables system to create RPG-style conversations and inventory systems
- Create enemies and level objectives, along with saving player progress
- Polish your game and get some useful input about the challenges of game development

In this package, you will find:

- The author biography
- A preview chapter from the book, Chapter 1 'Setting Up GameSalad'
- A synopsis of the book’s content
- More information on GameSalad Essentials

About the Author

Miguel DeQuadros is a game developer and founder of the independent development studio Wurd Industries, based in Ontario, Canada. He has been developing iPhone games since the release of the App Store back during the exciting release of iOS 2.0. Since then, working under Wurd Industries, he has developed and released nine games and one entertainment app worldwide on the App Store, with more to come.

Originally interested in 3D animation and graphical design, in 2008, he got the game development "bug" and has been developing iPhone apps ever since, which also allows him to use his creativity and knowledge of 3D animation for cutscenes and videos within his apps, and he loves every minute of it. Starting from his first project, Toy Tennis, back in 2008 down to his current project, SpaceRoads, for the PC, Mac, and other platforms, he now has switched focus away from mobile platforms, and is focusing on PC, Mac, and console-based development. He now primarily uses Unity3D, 3D Studio Max, and the Unreal engine for his current and future projects in an aim to create very high-quality games.

His games can be seen on the App Store on iOS, Steam Greenlight, Amazon, and IndieCity, and of course on his website, www.wurdindustries.com. His games have been reviewed on YouTube by Action Soup Studios, who have also interviewed him about the games.

He began expressing interest in GameSalad when it was first launched in March 2009, but never started using it until January 2010 when he started to develop his third iOS game, iMMUNE 2: Rise of the Salmonella, a 2D platformer sequel to the iMMUNE series. To this day, he continues as a professional member of the GameSalad community and continues to use GameSalad for prototyping and developing games for iOS devices, and has even branched out to personal computergame development.
Acknowledgments

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GameSalad Essentials

Have you always wanted to learn how to create an awesome game, but never had the time to go and learn a new programming language? Then this book is for you! We will harness the power of GameSalad, one of the greatest game development platforms out there. You will learn how to create a complete game through the course of the book. Best of all, you won't have to write a single line of code! GameSalad is a behavior-based development system with a drag-and-drop interface.

What This Book Covers

Chapter 1, *Setting Up GameSalad*, teaches you how to sign up for an account for GameSalad, download the software, and install it on your system. We will then go through the interface to see what does what.

Chapter 2, *From Design to Production*, covers the process of designing your game, from a game design document to level and character design. From there, you will learn how to take your sketches from the design document and put them on the screen using imaging software to create "sprites". Then, you will start producing your game.

Chapter 3, *Diving In – Introductions and Menus*, teaches you how to create a logo animation for your game, as well as introductions and a main menu. We will make full use of GameSalad's tables feature as well.

Chapter 4, *Diving In – Player Creation*, teaches you how to create the main character from the images we created earlier. We will discuss player movement, controls, collisions, and more!

Chapter 5, *Diving In – Gameplay Mechanics*, teaches you how to create health for our player, a scoring system, lives, and an inventory system.

Chapter 6, *Diving In – Enemies*, teaches you how to create enemies, which will include movement with a great path finding system, health, attacking, and more.

Chapter 7, *Diving In – Objectives*, teaches you how to integrate level objectives into your game. We will discuss a way finding system, boss fights, and finally we will discuss publishing your game and how to make money off it!

Appendix, *The Challenges of Game Development*, covers the hardship of independent game developers along with the journey of two of the biggest indie titles ever released—*FEZ* and *Super Meat Boy*. 
Setting Up GameSalad

Do you have an amazing idea for a game? Do you want to create the next **Super Mario, Portal, or Half-Life**? (The gaming community could probably release the third instalment of Half-Life sooner than Valve, but hey! I joke.)

But *wait!* I know what you're thinking, "Man! I have no idea how to do any of that fancy fandangled coding." That's why you've come to the right place! I'm going to guide you through a fantastic program called GameSalad. What is GameSalad you ask? It's a great studio for creating multi-platform, super powerful games, and requires no coding! Everything is behavior based, but we'll get into that a little later. In this chapter, we are going to look at some of the following:

- What's new in GameSalad version 0.11
- Downloading and installing GameSalad
- A quick tour of GameSalad's interface

For those of you who have used GameSalad in the past, this is just a refresher course; for those of you who haven't, sit tight and enjoy the ride! First, let's see what's new in GameSalad.

**Looking into version 0.11**

There have been a lot of changes in GameSalad recently. From a nice redesign of the interface to many new features and changes; it's worth looking into.
So, what exactly is new in version 0.11?

- **Massive improvements to the engine:**
  - The website announced over 240 bug fixes. 240! That's a lot of bugs to squash, but the GameSalad developers have done a great job.

- **Network behaviors:** You can now sync information from any server. This really opens up a lot of game development possibilities! Now you can store data remotely, and you can even create a turn-based game all synced through servers! Awesome! Available on a pro account only.

- **New monetization options:** New ways to make money! Chartboost and RevMob Ad Networks have been added to the software, which means more ads being inserted into your game, equalling more profit for your game.

- **Looping behaviors:** I'm super excited about this one! Looping and loop over table behaviors reduce the complexity of your project by far! For example, what would have taken 10 behaviors now will only take 1 or 2 at the most.

- **Enhancements to text and strings:** You can now display text relative to the position of an actor. This alone is exciting, but there's more. New display options, substrings, and replace and find functions allow complex string editing.

- **Optimized rendering:** The whole rendering system for images has been revamped, which drastically improves the performance of your game. I've seen this already running some of my old projects in version 0.11

- **New multi-touch options:** Now you can detect up to 11 touches at a time, increasing the complexity of gameplay that you can deliver to the world.

- **Custom loading icon (pro accounts only):** Instead of the standard loading icon, you can now create your own. Thus, this allows you to unify your design throughout the game.

- **And more features:** Tables (a super powerful system we will use throughout this book), changes to the Change Scene behavior, Google Play Tablet Support (for pro users), stretch mode allowing you to develop for the iPhone and deploy to a PC (GameSalad will compensate for the screen size difference and stretch the screen accordingly), tweaks to the rule system, and changes to the OpenURL behaviors.
All these changes are drastic, and you will see how great it is when you dive into GameSalad. If you've used GameSalad in the past, you are going to notice a massive difference in performance and ease of development. I'm already astonished at the bug fixes. Oh! How many projects I've lost to crashes and bugs! Now we don't have to worry about any of that!

Now that you know what's new, let's get it on our computers.

**Downloading and installing GameSalad**

Let's head over to www.gamesalad.com; while the creator is downloading, let's register an account as well.
Right on the front page, there's a button to download GameSalad Creator. Click on that button and you will now be greeted by a screen requesting your e-mail address. Fill yours in and check the **I am over 13 years of age and have read and agreed to the Terms of Service** checkbox. GameSalad will start downloading. You are now one step closer to creating your very own awesome game!

The current version, at the time of writing this book is 0.11 for Mac and 0.10.5 for Windows.

Now, while you're waiting for the download to finish, let's create an account. On the top-right corner of the GameSalad banner, you will see an avatar button next to a drop-down arrow. Click on it and it says **Sign Up**; click that bad boy. There will be a pop-up box asking for your information. Simply fill it in. This is shown in the following screenshot:
After this, you will receive an e-mail asking you to activate your account. Once you do, boom! You're done! That was super easy.

**Why do I need an account?**

Good question! An account is required for publishing, but you also get great benefits such as:

- Access to the GameSalad forums
- The ability to view your portfolio (all the games you've uploaded are stored on the site so you can edit them at any time)
- Purchase graphics, audio, and templates from the GameSalad Marketplace for use in your game
- Go Pro!

Now, let's install GameSalad. This is pretty standard stuff, but if you don't know how, let me walk you through it.

**Mac installation**

Locate the GameSalad installation file (normally downloaded in your Downloads folder) and open it. Agree to all EULAs (End User Licence Agreements). The installation will now show up. If it doesn't, go to your desktop and locate the GameSalad Creator DMG that was just mounted and simply click-and-drag the GameSalad icon into the Applications shortcut, as shown in the following screenshot:
Setting Up GameSalad

Once this is done, you will have officially installed GameSalad on your Mac!

**Windows installation**

Locate the saved installation file and open it. You will be prompted throughout the installation process. Once it's done, all you have to do is open it.

Some users have reported issues with the installation stating they need to check their Internet connection. GameSalad installation requires an active Internet connection. Some users have reported simply re-downloading the install file works, while others report using an alternate Internet browser such as Internet Explorer 9, Mozilla Firefox, Google Chrome, or Safari works as well. All you need to do is drag and drop your installation file on one of these browsers.

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1. Open the downloaded .exe file.
2. Walk through the install process.
3. Open GameSalad and get started!

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Easy peasy lemon squeezy! Once that's done, let's dive in to GameSalad for a quick overview of the new interface.

**A quick tour of the interface**

Now that we have installed GameSalad, let's open it. For Mac, go to your Applications folder and open GameSalad. For Windows, the default location is under Program Files | GameSalad | GameSalad Creator. Or you can find it in the Start menu.

This is the screen you will be greeted with if you are running GameSalad on Mac OS X; the new main menu is as shown in the following screenshot:
If you are running Windows, you see a brand new blank project. From here you can open up tutorials, your recent projects, or create a new project either from a blank project or through template projects. If you are running Mac, for now, let's open up the Alien Conquerors template project. If you are running Windows, you can download template projects from the GameSalad website under Help | Cookbook Tutorials | 6. Windows Creator | 6.7 - Windows Creator Templates. You will then find all the templates. Click on the Alien Conquerors template to download the project.
Now we are met with the **Project Info** tab, as shown in the following screenshot:

On this screen, you can set the title of your project, whatever platform you want to develop for, and a description. We will start with what the buttons do:

- **Back/Forward** buttons: These buttons allow navigation through the screens we will see throughout our development.
- **Home** button: A fast way to pop back to the **Project Info** screen.
- **Scenes** drop-down button: A quick way to jump to scenes without having to go back to **Home** and select the **Scenes** tab.
- **Tables** button: Allows you quick access to your created tables.
- **Preview** button: Plays your project. If you have a scene opened, it will play that scene; but if you are at the home screen, it will play the whole project.
- **HTML 5 Preview** button: Simulates your project in HTML5.
• **Publish** button: Allows you to publish your project. (We will get into this later.)

• **Feedback** button: Opens up your default Internet browser and allows you to send feedback to the GameSalad creators.

• **Help** button: Opens up your Internet browser again and brings you to the GameSalad cookbook, a quick reference for all things GameSalad.

**Tabs in GameSalad**

Tabs in GameSalad are placed so that we can navigate through the interface. Let's take a close look at what the various tabs do in the interface. Let's first discuss the **Scenes** tab.

**Scenes**

Click on this tab and you will see the different levels you have created. You can see in this template project that there are three scenes—two levels and one for a "You Win" screen.
At the bottom of this screen, you have a '+-' button, which allow you to create (+) and delete (-) scenes. Give it a try. Click on some of the scenes and explore the levels a little bit to see how things work. Again, we will get into more details on this later.

**Actors**

This tab shows you all the actors and objects you have created throughout your project. What are actors? Actors are the visual objects in your game. Actors can be characters you play, enemies, obstacles, platforms, background objects, and so on. Here you can create and delete actors as well as manage them. You can also create tags and arrange the actors accordingly. These are all things we will discuss later. Look at all the potential you have here. Can you picture the awesomeness you are about to create?
When you start editing these actors, you will be greeted with the actor editor, as seen in the following screenshot:

![The actor screen](image)

Scroll through some of the behaviors or actions and get an idea of the things you can do. I'm sure you'll see you can get into some pretty powerful rules and behaviors.
Setting Up GameSalad

Tables
From here, you manage all your tables. What are tables? Essentially, they are a great way to store data and information. Think of it as an Excel file that stores all the players' items, scores, and information. GameSalad has the ability to save information into them and load them all on the fly. This project we opened didn't have any tables created, so I added a few just so you can get an idea of what this screen looks like when populated. When you click on a table, you will essentially open an Excel file. You can add rows and columns and populate them accordingly. You can also import and export CSV files, if you prefer to use your own editor. We will get into using tables later in this book.

![Table Screen](image)

I did some test populating of a table. These would be items available within your game. As you can see, I created a few items just so you can see how the table editor works.

The Text column is obviously the name of the item. The Integer column is the value of the item, should you choose to sell it in-game. The Boolean column is to detect whether you already own the item in your inventory.
Boolean? What's this trickery? A Boolean is a complicated way of saying whether something is true or false. Let's check out the table in the following screenshot:

<table>
<thead>
<tr>
<th></th>
<th>Text</th>
<th>Integer</th>
<th>Boolean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sword of Awesomeness</td>
<td>Sword</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Shield of Protectivity</td>
<td>Shield</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Hat of Wearing</td>
<td>Hat</td>
<td>10</td>
</tr>
</tbody>
</table>

Do things seem easy to navigate? They sure are. Don't worry if you don't understand some interface elements right now. We are going to get into them in the next few chapters.
Summary

In this chapter, we learned about the great new features in GameSalad 0.11, and we downloaded GameSalad and set up our own user account. We also had a quick overview of the GameSalad interface. This is all preparation for using the software, getting to know what's new, and the advantages of having an account. An interface tour will help you in your game development.

As we continue through this book, we are going to get as deep into the interface and development as we can get; but don't worry, it's not hard at all! Hopefully, by the end of this book, you will be able to take what you've learned and create your own awesome game!

In the next chapter, we are going to discuss the design process-how to design your game and get things into production.

Sit tight... It's going to be a fast-paced ride!
Where to buy this book

You can buy GameSalad Essentials from the Packt Publishing website.

Alternatively, you can buy the book from Amazon, BN.com, Computer Manuals and most internet book retailers.

Click here for ordering and shipping details.