

Scott Rogers

Author of *Level Up! The Guide to Great Video Game Design*

swipe this!

The Guide to Great Touch Game Design



Touch Controls



Marketing Games



Interface Design



StoryVSGameplay



Augmented Reality



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Swipe This! The Guide to Great Touchscreen Game Design

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Swipe This!
The Guide to Great
Touchscreen Game Design
Scott Rogers



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Swipe This! The Guide to Great Touchscreen Game Design

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About the Author

Once upon a time, **Scott Rogers** played video games, Dungeons and Dragons and drew comic books without realizing he could do these things for a living. After being “discovered” in a coffee shop and realizing game designers have more fun, Scott helped design video games including Pac-Man World, the Maximo series, God of War, Darksiders and the Drawn To Life series. A lecture about his two favorite things – level design and Disneyland – led to writing “Level Up! The Guide to Great Video Game Design,” lecturing at the prestigious Interactive Media Division at the USC School of Cinematic Arts and employment with the Walt Disney Imagineering R&D team. Scott is currently living happily ever after in Thousand Oaks, CA with his family, action figure collection and an iPad full of games.

Evelyn and Jack – Thank you for being so patient while Dad worked on this book. I love you both. Now let’s play!!

Swipe This Book!

Well, don't literally *swipe* this book.

Swipe This! The Guide to Great Touchscreen Game Design is all about making touchscreen games, like the kind you play on tablets such as your iPad, on smartphones such as your iPhone, and on handheld gaming systems like the Nintendo DS or Sony PS Vita. You'll learn how to design gameplay that's as simple as moving your finger (or stylus)—or *swiping* it—across a screen. It's a *pun*. Ugh. Now I've just explained the title of the book to you: that's as bad as explaining the punch line of a joke.

Look, would it help if I told you that it took a long time to write this book? I (and my publisher) would prefer that you buy *Swipe This!* rather than actually swiping it . . . or pirating it electronically, or memorizing it in the bookstore, or borrowing it from a friend and never giving it back. What can I do to convince you to not swipe *Swipe This!?*

I know! In a previous video game design book I wrote,¹ I explained that every good book has to start off with an excerpt so gripping, so exciting, so thrilling that the reader has to keep reading it to its conclusion. An excerpt that has zombies in it! Preferably something like this:

Jack leapt aboard the helicopter as two dozen zombies reached out, entangling the struts. "There's too much weight!" yelled Evelyn from the cockpit. "We'll never be able to take off!" Jack hew at the clawing creatures and yelled back, "Working on it!" He wasn't sure whether zombies could feel pain, but they sure couldn't hold onto

the helicopter strut without hands. As the zombies dropped off one by one, Jack waved them goodbye, calling out: "Good-bye! Toodle-loo! See you later!" Splat. Splat. Splat. The 'copter rose into the sky and Jack collapsed to the floor. "I must be losing it," he muttered. "Face it, Jackie boy. The zombie apocalypse isn't as much fun as you thought it would be." That's when the skeletal dragon swooped in front of the 'copter, spreading its enormous bat wings with a sound not unlike knuckles cracking. Jack thought "Nuts. I shouldn't have opened that book."

Okay, so maybe you didn't pick up *Swipe This!* to read about zombies, dragons, or helicopters,² but the good news is there *are* zombies, dragons, and helicopters in this book—just not right this second.

What I am sure of is that you picked up this book (or are previewing the first few pages on your e-browser) for one of the following reasons:

Some Possible Reasons You Picked Up *Swipe This!*

- 1.** You don't know anything about tablet games but want to learn all about them.
- 2.** You've played tablet games and want to make one of your own, but don't know where to start.
- 3.** You already create tablet games and want to make your games even better.
- 4.** *Swipe This!* has an awesome cover.
- 5.** *Swipe This!* has zombies, dragons, and helicopters in it.
- 6.** _____³

If you have picked up this book for any of these reasons, then we're off to a great start. *Swipe This!* is definitely the book for *you*.

Who Is This Book For?

*You!*⁴

And since there are four types of people who enjoy reading books about video games, you are probably one of the following: **nerd**, **geek**, **otaku**, or **fanboy**. I'm kidding! What I meant to say is that you are probably a **gamer**.

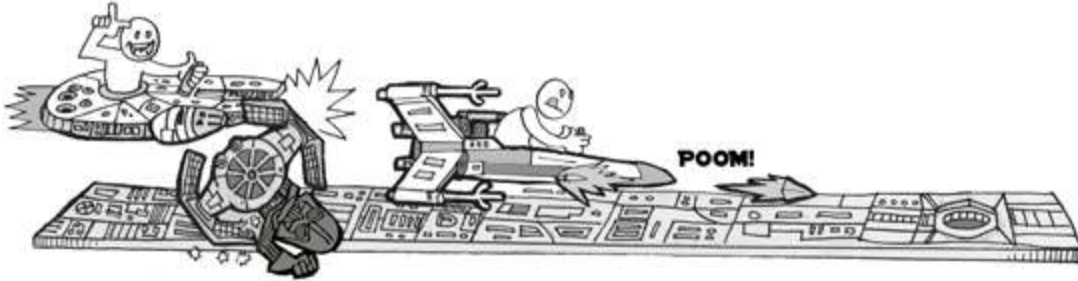


What (or who) is a gamer? According to that source of all knowledge, Wikipedia,⁵ the term gamer is “commonly used to identify those who spend much of their leisure time playing or learning about games.” That said, you don't have to be a gamer to read *Swipe This!* You just need to fit into one of my four easy-to-stereotype classifications:

Working Video Game Professionals

These hard-working men and women can be found fighting the good fight in development studios around the world. As experienced game creators, you'd think they would already know everything there is to learn from a book such as this. But, as I've learned over the years, no one can know *everything*. And even if they think they do, no one can *remember* everything. The human brain is a very slippery thing⁶—which is why books exist in the first place!

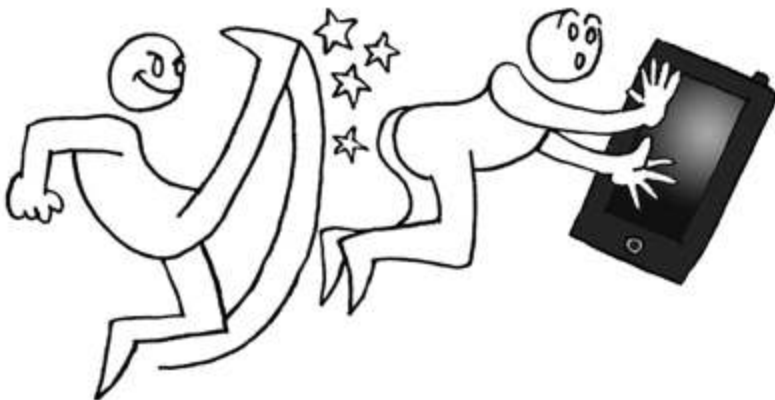
Books (like this one) can be very helpful because game creators often develop what I call ***designer blinders***. Designer blinders happen when a game developer becomes so engrossed in his work that he overlooks important details. For example, developers spend so much time playing their games that they end up tolerating their sloppy controls. Sometimes they don't realize their controls could be better. Other times they're just satisfied that the darn things are working at all. They might neglect ways to improve their gameplay because they are so focused on getting features into a game under a tight deadline. They're like Luke Skywalker flying down the trench of the Death Star, so hyper-focused on shooting that photon torpedo into the exhaust port⁷ that they fail to notice Darth Vader and his wingmen have just flown into the trench behind them and have them in their sights! But never fear! *Swipe This!* is your Han Solo, flying in for the assist, knocking Vader and his wingmen out of your way so you can make the shot, blow up the Death Star, and be the hero!



Despite my blatant pandering-to-nerds analogy, I hope that *Swipe This!* will help inspire an idea, a gameplay feature, or merely provide some reassurance to the working professionals that they are on the right track and that the exhaust port is still in their sights.

Future Video Game Designers

The future of tablet games is wide open, and in this group are those brave pioneers who are ready to take flight! These pioneers come from all walks of life. Maybe they're game developers who have decided to "take a break" from the grind of producing "triple A" games and strike out on their own. Perhaps they are programmers, artists, or designers who feel their creative ideas and self-expression are being crushed under their day jobs and they want to create something of their own. Maybe they're wannabe game developers who just need a push in the right direction.



When I started out in games (the ancient 16-bit days), it wasn't easy to learn how to make games. It was black magic, a secret art practiced by programmers and the Japanese. Heck, I didn't even realize video games were a career path until I was actually working in the industry! There sure as heck weren't places like game schools or products like DVDs on how to design games, and only a precious few magazines and books.⁸

But I was lucky enough to have a mentor—someone who had a few successful games under their belt, enough experience to know what worked and what didn't, and (thankfully) didn't have a huge ego to be offended when a very eager (and slightly frustrated) video game artist walked into their office and told them he wanted to be a game designer. Since then, I've been inspired by my mentor and learned that it's important to pass knowledge on and help those who ask for help. The information in this book is based on many years of experience making games on touchscreen devices. With each game, I made mistakes, learned something new, discarded what didn't work, and applied what did. And that's what you'll find in this book. Everything I've learned. So, let me be your mentor. All you need to do is follow my advice, work hard, and take advantage of opportunities when they eventually arrive.

Students of Game Design

Are you a student going to one of the many universities and trade schools that offer a program in video game design? LUCKY!! Man, I wish they had that when I was a student! Go to school to make video games? That is so freakin' cool! Jealous! Ahem. But I digress. As a video games student, you are going to dive deep into the study of all aspects of video game development. You'll sit

through courses on the history of gaming; critically discuss why a game was a success or failure; take labs to learn coding or character animation; get into adult beverage-fuelled debates with your dorm mates why *Angry Birds* was a lucky fluke or the most calculated game design ever created. And while you will be learning, learning takes time. You know what accelerates learning? Books.

Now there are lots of textbooks on video game design. Some pretty good books filled with academic theory on why games are fun. You should read those books⁹. But first, you should read *Swipe This!* The information, tips, and tricks you will find in these pages will enhance all of those classes, labs, and discussions. I think you'll find *Swipe This!*'s practical approach to game design to be the antidote to that heavy diet of theory your teachers are going to be feeding you. Theory is great for the classroom, but the reality is, what matters most in the trenches of the video game industry is practical advice. *Swipe This!* brings you that advice from some of the industry's best and brightest. This is why *Swipe This!* will be indispensable over the course of your academic career.

Besides, I've read those dry game design textbooks, and I can guarantee you that none of them contains a picture as awesome as this:



People Who Love Video Games

Just because you aren't a working professional, student, or future game developer, that doesn't mean you can't love video games, much less not read a book about them. As with movies and art, the more I learn about how something is made, the more I appreciate it. The saying goes "Knowing is half the battle."¹⁰



Besides, what's not to love about video games? The best games make your wishes come true. They make you feel smart, strong, rich, and athletic. They'll take you to places you've never been, and will allow you to experience lives you'll never have in the real world. This is why video

games are the most popular form of entertainment in the world¹¹: They make you awesome.

I hear some of you more skeptical readers thinking¹² “I need more proof!” And while I’m generally not a statistics person, try these on for size:

- Goldman Sachs’s research indicates that 79.2 million touchscreen devices will be sold in 2012.¹³
- A Google survey reports that 84% of touchscreen owners use their devices primarily for gaming.¹⁴
- Nintendo reports that 144 million DSs (including DSi, DS Lite, and DSi XL) have sold worldwide as of early 2011.¹⁵

That’s a lot of people who love tablet games! And they aren’t alone. I’ve said it before, and I’ll say it again: I love video games too! I love to play them and I love to make them. I love to read about making them. Wouldn’t you rather read a book written by someone who loves video games than one that wasn’t?

So would I.

Why Another Book on Game Design?

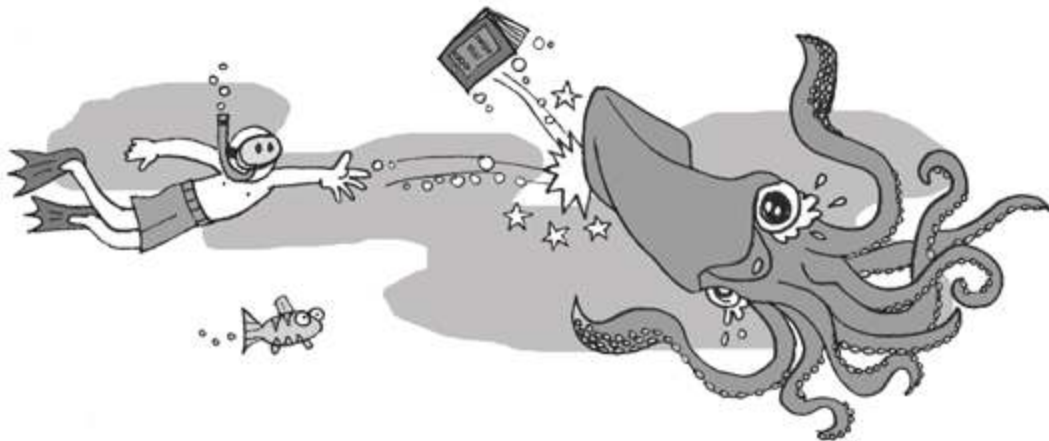
No one has written a book quite like *Swipe This!* before: a book **specifically** about the design of tablet and handheld games.

Over the years, I have learned that designing games for touchscreens and handheld gaming systems is very different than designing the types of games played on consoles and computers. Everything from the genres of

games people like to play, to the do's and don'ts of designing gameplay for handheld devices, to thinking about how the player interacts with the controls is different.

As more and more game developers embrace tablet gaming, they will need to know how to make great games for these devices. *Swipe This!* is the place to learn it. I've been creating games for a very long time, so let me be your guide into the brave new frontier!

What You Won't Find in This Book



Books can be many things. Paper weights, door jams, anti-squid projectiles. But did you know the insides of a book are often useful too? You will find lots of useful information on how to design tablet games in *Swipe This!* On the flip side, here are five things you *won't* find:

1. Very deep theory.
2. The complete history of video games.
3. How to program tablet games.
4. How to create art for tablet games.

5. Lameness.

Very Deep Theory

To quote cultural theorist Johan Huizinga from his seminal *Homo Ludens*: “Poiesis, in fact, is a play-function. It proceeds within the playground of the mind, in a world of its own which the mind creates for it. There, things have a different physiognomy . . . zzzzzzzz.” I’m sorry. I must have dozed off. I’m sure ludic theory has its place . . . in academia or during dinner conversation with the royals,¹⁶ but when it’s time to roll up your sleeves, and get to work, theory can stay home and clean the house. Lord knows it needs it.

This isn’t to say that this book doesn’t have *some* theory in it. I’ve been known to come up with a theory or two of my own: *The Theory of Unfun*. *The Triangle of Weirdness*. *The Rule of Three*. You can find all these (and probably more than I care to admit) in my previous video game design book.¹⁷ But the point of this book is not to overwhelm you with theories. It’s to overwhelm you with helpful, practical, factual designing goodness that will help make designing a tablet game a breeze.

The Complete History of Video Games

There are already dozens of books on this subject, and at least three of them are good.¹⁸ Besides, you can find a truncated history of arcade and console games in *Level Up!* If you are looking for another invocation of the holy quartet of video gaming¹⁹, you can look elsewhere. However, since *Swipe This!* is a book about touchscreen gaming, I *will* be covering the origins and evolution of touchscreen games. As philosopher and *Bejeweled*-enthusiast George Santayana once said “Those who

cannot remember the past are condemned to replay it.” Or something like that.

How to Program Video Games

By trade, I am a game designer, not a programmer. I don't know how to code games, so I'm not going to pretend to include “how to program a game” in this book. I wouldn't want to steer you in the wrong direction. But as a functioning member of a creative team, you still need to know what a programmer is talking about. You should know the difference between iOS (Apple's mobile operating system) and an SDK (Software Development Kit). You should know that games can be programmed in Cocoa, Open GL ES 2.0, and Objective-C. The more you can understand *programmer-ese*, the easier it will be to communicate your design needs to a programmer. If you want to learn more or go deeper, many good books on the topic²⁰ will help you gain some working knowledge. Feel free to learn a programming tool to really learn how things work, or to program the game yourself.

How to Create Video Game Art

Like I said, I'm a game designer, and although I used to create game art for a living (waaaay back in the 16-bit days), this book does not get into the technical aspects of creating art for your tablet game: topics like “How to create 3D models,” “How to texture and shade objects and environments,” or “How to draw bitmaps or create alpha layers.” But that doesn't mean I am not going to discuss game art. I talk about choosing an artistic style for your game, deciding what kind of art works best on those little tiny mobile touchscreens, applying lighting tricks, and understanding color theory, UI design . . . all types of artsy topics. Once again, there's nothing

stopping you from learning about this yourself and, just like with programming, the more you know, the easier it is to communicate your ideas.

Lameness

I'm hoping this one is self-explanatory.

What You Will Find in This Book

1. Practical information (check out the following section)
2. Tips and tricks
3. Interviews
4. Analysis
5. Helpful documentation
6. Lots and lots of drawings
7. Lists²¹

Practical Information

Swipe This! will guide you through the entire process of designing a tablet and touchscreen game, from coming up with your initial (dare I say brilliant?) idea to learning strategies on how to best release your game into a fiercely competitive market. And how are we going to do this? By using the following three methods:

1. *Designing games.* First and foremost, *Swipe This!* will teach you how to create a design *exclusively* for a tablet and touchscreen video game. Unlike console and PC games, tablet and touchscreen games have very different design requirements and their players have very different needs. We will take these exceptions into