Getting Started Making Games

amazon appstore

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1.

Documenting Your Idea

Mapping out the journey

You have a game idea and want to start building right away. But, making a game is more than just having a good idea and the skills to code it. Before you write a single line of code, you first need to think through the gameplay, your target audience, and ultimately create a map for what you are going to build.

Creating a game design document

To help you simplify your idea to something manageable, start by getting it down on paper. No one builds a house without a blueprint, and you shouldn't make a game without a solid plan either. Your plan can be as simple as a task list with everything you need to do or something more specific, such as a document outlining all the details. Either way, your game design process is going to start with a blank page. Let's talk about how to fill it in.

In traditional game development, you are encouraged to make a game design document (GDD). The GDD is usually a large document outlining every aspect of a game. It's the blueprint that the rest of the team must follow when building out the game. You'll want to include sections for project description, characters, story, theme, gameplay, art style, music, marketing, and target audience.

If you are a single developer, this may be excessive for your needs. You can easily boil down a GDD into a single list of tasks with a few introductory paragraphs and any collateral or references, such as screenshots and links to other games or game mechanics you like.

Keep in mind, the more you work through the details, the better your project will end up. It's very "cheap" to work out your ideas on paper or in your head before you start coding. Once you do start coding, you will amass technical debt if you need to go back and

" No one builds a house without a blueprint "

start over. This can make your code unmanageable or, even worse, kill your productivity altogether by forcing you to constantly hack together new solutions or refactor code you've already written.

Finding inspiration

As you start jotting down your ideas, you also need to start playing games, a lot of games. As a game-maker, your hobby should be playing games, taking them apart, and figuring out what makes them tick. Keep a notebook of all the games that you play, and even the ones you don't play, but see online. Write down what you like about the game, what you don't like, and some of your big takeaways from playing it. If you like the art style, capture it through screenshots and keep links to any other collateral. You never know how a game will inspire you, so it's important to be as detailed as you can. It sounds like a lot of work, but this process will be invaluable in helping you find inspiration and avoiding common pitfalls.

Sharing your ideas

Now that you have played a boatload of games and solidified your GDD, it's time to gather peer feedback. Find a select group of trusted friends and share your document with them. It is easier to validate your idea before you start writing your code. Some feedback might be difficult to hear, but listening to feedback with an open mind will ensure you create the best possible product. It's also important to break down the feedback you do receive. Identify if the feedback is describing the problem or if it is going to lead you to the problem. From there, you can determine if there is actually an issue or if there is a problem of perception or understanding.

Going back to the idea of "technical debt," uncovering what resonates and what doesn't early on will help save you from making costly edits to your game once you're in production.

2.

Choosing a framework

You have a game idea...

You can speed up your app's development by using frameworks. Frameworks allow you to work with existing code libraries, so you don't have to create these libraries yourself. These libraries perform functions such as rendering objects in 3D or connecting to external services. Cross-platform frameworks can help you create platform-agnostic apps, meaning you only have to create an app once before deploying it to different types of devices.

Now that you have a well-rounded idea of the end-product you are hoping to create, choosing a framework that best meets your needs will be a lot easier.

Features to consider

When choosing which one is right for your game, you will want to look for:

- Collision, physics, and handles inputs. These will help speed up the development process.
- Documentation and an active community for any questions that will inevitably arise.
- UI that matches your skill level. For beginners, you will want to look for drag-and-drop solutions. More seasoned developers might prefer to have low-level access.
- Multi-platform distribution, allowing you to deliver your new game on as many devices as possible.

Game frameworks with Fire OS support

If you are looking to build a game that you can publish on Amazon's Appstore, you'll need to look for frameworks with support for creating Fire OS or generic Android APKs. This chart shows a list of frameworks that already support Fire OS out of the box.

Each of these frameworks also has support for some of our Appstore services such as IAP (in-app purchases), ads, and cloud saving.

Framework	Primary Audience	Supported Platforms
GameSalad	Non-programmers	Android, Fire TV, GameSalad Arcade, HTML5, iOS, Kindle Fire, macOS, Tizen
Construct 2	Non-programmers	HTML5 (e.g. Chrome, Firefox, IE 9+, Opera)
GameMaker	GM Script (Beg)	Android, iOS, Linux, macOS, PS 4, PlayStation 4, HTML 5, Fire TV, Xbox One, Microsoft UWP
Corona	Lua programmers (Beg-adv)	Android, iOS, Kindle Fire, macOS, tvOS, Windows, WP8, Steam
Unity 3D	C# programmers (Beg-adv)	Android, iOS, Windows, macOS, Linux, WebG
Cordova	Javascript programmers (Inter-adv)	Android, iOS, OS X, Windows, Electron
Cocos2d-x	C++ programmers (Inter-adv)	Android, iOS, Linux, macOS, Tizen, Windows

3.

Working with art and sound

Make it beautiful

If you don't come from an art or music background, you might find this part of the game creation process the most daunting. Building a game for the first time will stretch all of your skills, including your creativity. It's easy to get bogged down in the details and forget the most valuable part of making a game: building something fun to play.

Starting without art and sound

To minimize productivity-draining distractions, use placeholder art and sound to start out. This way you can focus on getting the game mechanics right. If you build a compelling enough game, you may even be able to convince an artist or musician to provide your game's art and sound (for a share of the profits, of course). It also helps to look at games that use minimalistic or dynamically generated art as inspiration, such as Thomas Was Alone or Super Hexagon. Both of these examples use very simple artwork and hook players because of their captivating gameplay.

Adding in art

Possibly the easiest path is to create pixel art. The style will make your game feel like a throwback to the early days of video games. There is a whole range of free software that allows for pixel art art. Some of the most popular ones are MS Paint, Paint.net, GIMP, and the in-browser pixel editor by Lospec. The "best one" depends on your personal preference, so try them all and see which one you like best.

You can also explore the following design tools:

Photoshop: *This software is one of the most popular and expensive art tools on the market, but with Adobe's Creative Cloud plan, you can pay for it as a monthly service. Photoshop is ideal for creating rasterized and vector artwork, as well as layout.*

Illustrator: *Similar to Photoshop, this is the most popular vector-based art tool out there. We suggest using a vector-based editor if you are going for a "cartoony" look or want to ensure your game's artwork can scale to any resolution.*

Aseprite: *If you are doing pixel art, this is one of the best editors available on the market. Not only is it free and open source, but it is also perfect for making pixel animation, and supports importing and exporting sprite sheets.*

GIMP: *If you are searching for a Photoshop alternative, check out GIMP. It is free and a lot of today's game developers and artists use it.*

Inkscape: *This free software allows you to create vector art as opposed to bitmap art. The workflow is similar to software used by professionals and it's a great tool to get started with.*

Or, save precious minutes or hours while developing your game by leveraging asset store goodies. Art assets are available for purchase from sites like OpenGameArt, FreeMusicArchive, and many more. But, beware: using art from asset stores won't always mesh together. Avoid creating a game cobbled together with nothing but content created by others. Make sure there is a combination of store assets and your own content.

Adding in sound

Similar to artwork, creating sound effects can be a daunting process. One secret weapon we recommend is Bfxr, which you can use online or install on your computer as an AIR app. Bfxr is perfect for generating simple, 8-bit sound effects for your game. The tool features many pre-defined sound templates, such as pickup, laser, explosion, and jump sounds. You can also use the randomize button to develop new sound effects and the synth option to modify your sounds.

Once you have created your sound effects, you will need to convert them. Bfxr likes to generate .wav files, but most frameworks do not use this file format. You can use programs such as Audacity to output your sound as .mp3 and .ogg files, and more.

4.

Polishing your game

- [x] Gameplay
- [x] Art Style
- [x] Music
- [ ] Marketi

Bells and whistles

Your game works and now has brand new artwork and unique sounds. You're almost ready to release your game into the wild. Your final task is to ensure your game is perfectly polished.

Consistent design

Ensure your art style is consistent throughout the game. Your in-game graphics and your UI (and even the splash screen) should all look and feel like they belong together. Don't get overzealous with promotional artwork. You want to make sure that you are setting the right expectations for new users, and nothing disappoints more than being drawn into a game for its promotional artwork only to find out that the in-game design doesn't align.

Multiple resolution support

When it comes to designing for multiple resolutions, you must understand how aspect ratio works and decide whether your game will attempt to maintain it. We recommend starting with a comp of the three main resolutions you plan to support and make sure your game works across all three. As the aspect ratio increases, the key is to show more gameplay and adjust the UI elements accordingly. For smaller 800x480 resolutions, show less action and scale down the UI to ensure there is no overlapping.

Perceived performance optimizations

Developers often spend countless days trying to optimize their code and end up forgetting that a few minor tweaks to the way their game runs can give the impression of better performance to players. Don't stop at optimizing artwork. Try making your loading screen look more interesting for people while they wait. Or, make transitions from screen to screen more seamless. Finally, use animation transitions and frames to reduce the feeling of slowness or unresponsiveness in gameplay.

Supporting Fire devices

If you are interested in publishing your game to Amazon Fire TV and tablet devices, you can check out the follow design guidelines:

Fire TV display and layout guide:
https://developer.amazon.com/docs/fire-tv/device-specifications.html

Fire tablet screen and layout guide:
https://developer.amazon.com/docs/fire-tablets/ft-specs-custom.html

5.

Marketing your game

Show and tell

You are finally ready to release your game to the world. While there is a lot you can do after you have completed your game to help make it a success, you should always be thinking about marketing your game, even from the very beginning. Promoting a game is not an exact science, and its overall success has a lot to do with the actual quality of your game (and sometimes, luck!). However, there are a few necessary steps to ensure your game gets the attention it deserves.

Find the right name

The name of your game is one of the most important decisions you make. No wonder large companies spend large amounts of money conducting market research to come up with product names. Since you likely don't have the luxury of a large marketing research budget, your best bet is to come up with a clear and descriptive name.

Try out some of these naming methods:

Main character(s): *While this won't necessarily describe what a player will do in your game, it helps establish the lead, and his/her name helps defines your brand. For extra points, use an adjective to describe your main character.*

Story of a spoiler alert: *Put your game's ending right in the title. We are all familiar with the Legend of a certain princess. Letting people know what to expect from your game will pique interest.*

Gameplay description: *Is there a main action that your players perform throughout the game?*

Naming your game is another area where playing a lot of other games will come in handy. Look through the list of the games you played and try and remember why you chose them in the first place. This will help you zero in on a naming convention that will work for you. Finally, make sure your game's name makes sense for sequels and continuations if you find yourself with a hit on your hands.

Optimize your product description

Think of your detail page as a place to create a narrative about your app. A great product description can help to put your app in the best light and convert users. Make sure your description is clear, honest, and straightforward. Introduce your app clearly and succinctly, while describing your app's most notable features. Explain why and how your app benefits users. Avoid any grandiose promises about your app, as customers can see through inflated claims (you don't want to lose credibility). Read your product description out loud to check for continuity and flow. If it sounds good, you're on the right track!

End your description with a strong call to action (CTA), such as "Get started now," or "Download now and play today!"

Select strong keywords

When you're crafting your app marketing strategy, one of the most crucial steps is identifying the right app keywords. This is how people will find your app in search results, even if they weren't looking for it in the first place. The best part is you can do this for free!

Keywords that work well are ones that are uniquely descriptive of your app or game. For example, 'Fun', 'Free', and 'Game' are not unique because they are commonly used words, so your app will be buried under more popular search results. It's also not a good idea to list the names of similar games that may be more popular. Your game may be similar, but it is not that game. Be accurate about what your game is and don't fudge the truth in your keywords.

Cross-play
Mini-games
8-bit
Friendly
Retro
Sports
Dinosaurs
Knights
DinoJoust!
Medieval
Jousting
Dueling
Combat
Party
Multiplayer
Competitive
Casual

Consider investing in video

For many people, seeing is believing. Give your customers a way to see what it would be like to play the game by posting a gameplay video to the app detail page. You can capture video directly from your device and create one to include on your app store product page.

When creating a video, make sure you show the following: basic gameplay, what makes your game unique, and the most beautiful, captivating, or dramatic part of your game. During the video editing process, add a voice-over or text overlays to explain what is happening.

Leverage social media

Social media sites, including Facebook, Twitter, or Instagram, can provide effective opportunities to connect with fans and reach new users. Create a presence to share videos, artwork, and screen grabs, and also deliver news about updates, exciting new features, and your upcoming projects.

You will also find that these sites provide a mechanism for users to reach out with their customer service queries. Be sure to respond to these questions as soon as you can.

lol RIP my wallet this fall
a few seconds ago

game of the year material
a few seconds ago

I NEEEEEEEEED ITTT
a few seconds ago

6.

Make more games!

Back to the drawing board!

- [ ] Gather inspiration
- [ ] Project descriptio

Other ideas

First-person shooter
~gophers vs gnomes

Turn-based RPG with
traditional chess pieces

Super fast racing game
but with turtles/snails

Practice makes perfect

Making a game is a learning experience. The more games you make, the better you become, which increases your chances of making a hit new game. Even if people don't download your first, second, or even third game, you should never give up. In fact, one of the best things your game can be is a promotional tool for you and your next game.

You can use your Appstore listings and in-app messages to include links to your latest games. Over time, you will find that you have developed a following of fans who are willing to pay for your next game.

Publish to Amazon Appstore

App submission for Android apps and games is easy: More than 75% of mobile and tablet Android apps already work on the Amazon Appstore, with no additional modification. And, because Fire OS is based on Android, the games you publish can be available on millions of Fire tablets, Amazon Fire TVs, and Android devices in 236 countries and territories.

Get started!

First, review the Amazon Appstore Presubmission Checklist, and make sure that your app meets the specified requirements and guidelines. Then, pre-test your app and see if it passes. Address any failures before submitting your app.

Then, you're ready to publish your app. Here are the steps:

1. *Log in and create a new app*
2. *Enter a description*
3. *Add availability and pricing*
4. *Enter app description(s)*
5. *Upload image and media assets*
6. *Assign a content rating*
7. *Upload Android application package (APK) files*
8. *Submit your game!*

amazon appstore

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Thanks for reading!