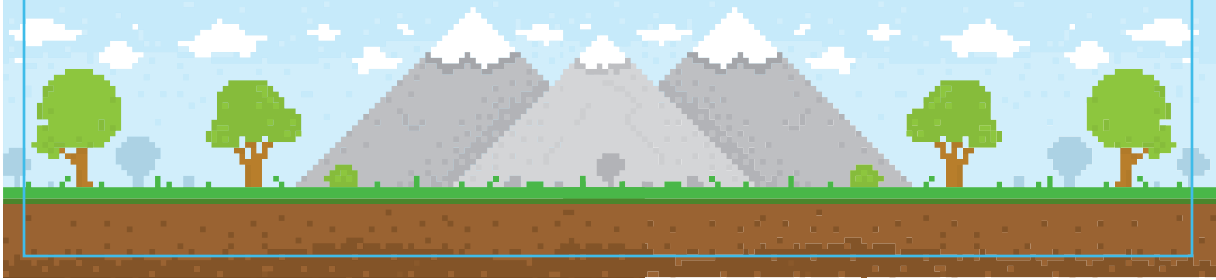# How an Idea Becomes an App The Stages of Mobile App Development Explained

Introduction

In the past few years, the world has truly become mobile. Think of the old mobile phones that were pretty much a portable version of a landline and compare them with today's powerful smartphones that can easily outperform older computers. Add to that tablets and wearable mobile devices and you'll see why the mobile apps industry is booming and will continue to do so in the foreseeable future.

Developing a mobile app is a tempting idea for a lot of businesses and individuals. However, considering making an app is one thing and actually doing so is another. Most people have an app idea lurking at the back of their minds, but they don't know what steps they need to take to make their idea reality. Unfortunately, not all ideas (even the most creative ones) have the potential to become apps and only research can help to determine whether an idea is promising or not.
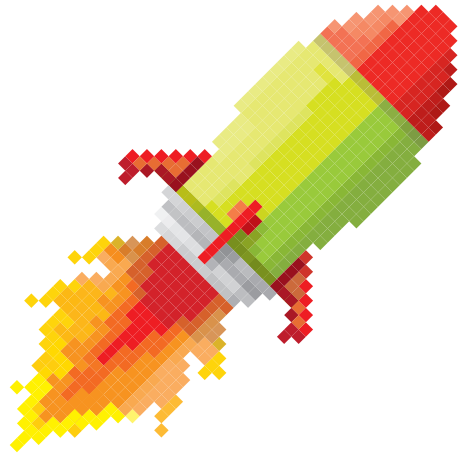
An App Is a Business

One thing most people who are planning to develop their first app don't understand is that an app is a business. Like any other business, it needs a value proposition, a business model, and a business plan. That's why we recommend that you check out the Business Model Canvas and fill it out before you move any further and start getting in touch with app developers.

Like any business, the app business is an ongoing multi-stage process that begins long before the actual coding starts and doesn't end with submitting the app to Apple App Store or Google Play. Any mobile app needs support and maintenance, as well as the introduction of new features and functions when required. In short, creating, publishing and supporting a mobile app requires a solid research background, a business model and the necessary funds. It is a challenge, but a challenge that will pay off if done the right way.

We understand that it's not easy to plunge into app development if you're new to the industry and don't know what stages your idea has to go through to become an app. In this white paper, we'll shed some light on how idea becomes an app and give you all the information you need to put your idea in the making.
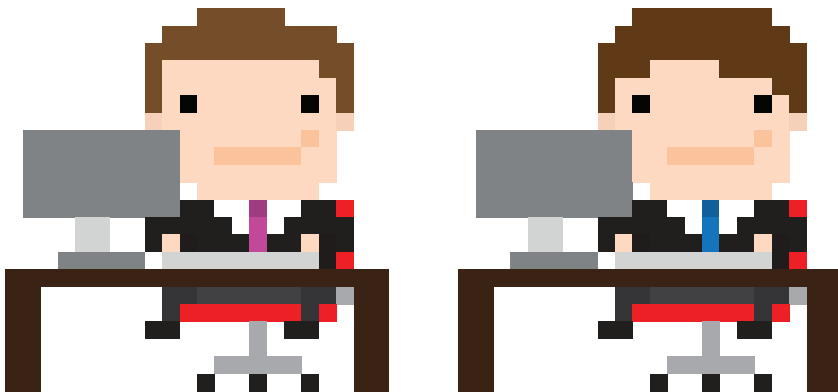
Do You Actually Need a Mobile App?

This may seem a silly question because you're sure you want to develop an app. But are you really sure? Not all ideas are great for an app and even if yours could work as an app, it doesn't necessarily have to be a native one. Not to mention that sometimes you'd be better off optimizing your website for mobile devices rather than building an app. It all depends on your business. So, let's try to figure out what's the best path for your idea: an app or a mobile-friendly website.

You need a native mobile app if:

-You plan to utilize the native functions of a mobile device
-Offering your service in the form of an app gives you competitive advantage
-Your idea will only function together with location services
-Your idea is based on tracking or delivering information in real time

Think of it this way, your idea is good as a mobile app if it can't really function as a website or if there are websites that are too strong a competition.

For example, apps like Uber, bus apps or weather apps use a mobile device's location services to make it easy for the user to get things done. The reason Uber works so well and is so popular is because nobody would ever go to a website to get a taxi when they can get one within minutes thanks to a mobile app. Even the best website is slower than an app and not nearly as convenient. The same applies to weather apps - it's so much more natural to check one's phone's widget than go through all the pain of browsing to weather.com, selecting a location and waiting for the information to load!

Another reason to go for developing an app is if your service will get a competitive advantage as an app rather than as a website. A good example of this case is Mailbox, which could only compete with the big names like Google, Yahoo and Microsoft by offering a super-convenient and user-friendly way to manage email on a mobile device.

An important thing to consider when making your choice between building an app or a website is your budget. Developing a mobile app is a lot more costly than creating a website because app development is a complex process that involves a whole team of professionals. On the other hand, having both an app and a website raises your chances of getting noticed by more people and adds another stream of revenue to your business.

The bottom line is that if all you want is an app to replicate the features of your website, you'd be better off making your site responsive or at least creating a mobile version.

If you're still not sure whether you need an app or a website (or both), you can use this simple tool by Crew to help you decide.

iOS or Android: Which Platform to Choose?

Now that you've got everything planned for the actual app development, you need to decide which platform to develop for first, iOS or Android? Both iPhone and Android apps can be equally popular and profitable, but it's very important that you choose the best platform for your app idea from the start. And that's not very easy to do.

Generally speaking, the choice of platform depends on your audience, the features you want to include in your app, and your resources.

A lot of people are tempted to develop an app for Android first because of the sheer number of Android devices and users around the world.
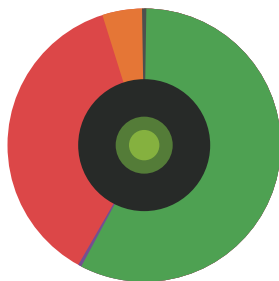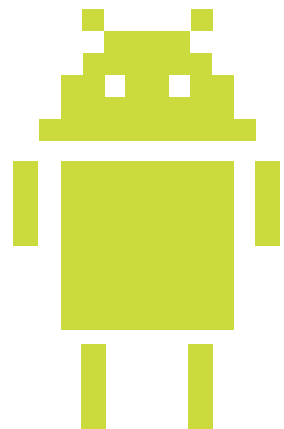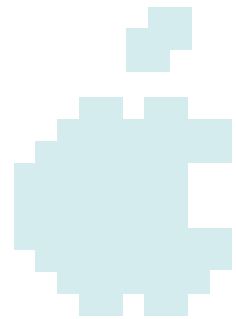
USA
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|	
Android 58,1 %	
BlackBerry 0.4%	
iOS 36.5	
Windows 4.3%	
Other 0.6%	

Research by Kantar Woldpanel

But if you look at US, UK, Canadian and Australian markets, you'll see that iOS and Android run pretty much side by side.

You should also take into account the following factors:

• It's easier and more affordable to develop an iOS app
• The typical iPhone user is easier to engage than a typical Android user
• iOS apps tend to generate more revenue than Android apps
• iOS users regularly update their operating systems because Apple made it so easy. This allows developers to stop supporting old operating systems and save money.

So, unless you are planning to release an app for markets like South America and Spain where iOS's market share is less than 10%, we recommend releasing an iPhone app first and developing an Android version later.
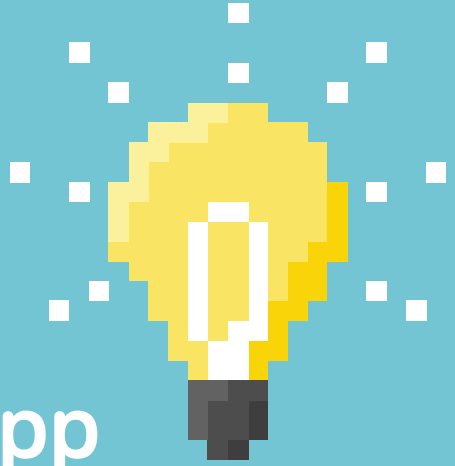
From Idea to App

Regardless of which platform you are going to choose to develop for, your idea will go through a number of stages to become an app. All the stages are equally important in the development process and, when properly executed, ensure the top quality of the final product.

At Fan Studio, we believe that the client needs to understand what each development stage involves. Once the project is in the makings, we thoroughly explain everything about each stage and we are always happy to answer any questions that may arise.

We thought we'd explain the basics in this white paper, so that you have a better idea about what's needed for your idea to become an app.

Stage 1: Market Research and Analysis

Every business idea, including a mobile app, needs solid market research and analysis to back it up. The main areas that need to be thoroughly researched are:

• Target audience (customer persona, demographics, niche)
• Long and short-term App Store trends
• The competition

Researching and analysing these areas will help to validate your app idea and help the developer team decide how your project will be approached and implemented.
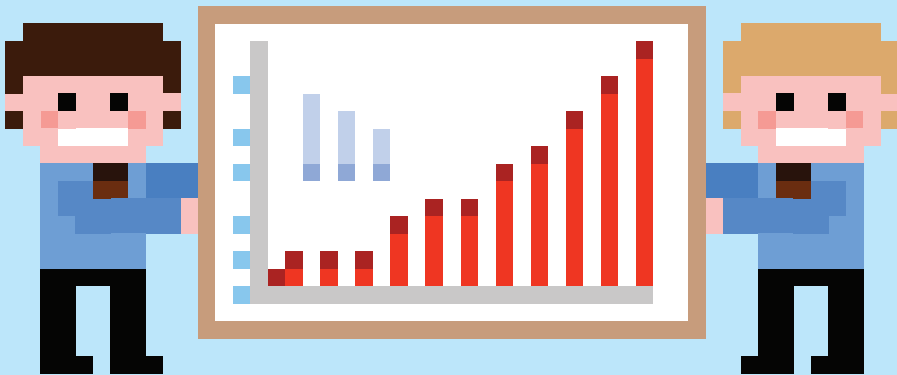
Target Audience

The target audience research helps you to determine who your app is for, what your potential users want from an app, where does your main audience live, and whether your app is going to be for a wide market or for a small niche.

To get a clear idea of who your users are likely to be, the following information should be collected

- Age
- Gender
- Location
- Income (optional)
- Ethnicity (optional)
- Marital status (optional)

You may also need more specific information, such as your target audience's hobbies, behaviour and lifestyle. It also helps to create your typical customer persona because that will help you to better understand the needs of your target audience.

Gaining this information will help the developer team to determine the kind of person who is likely to download your app and why. It will also help you market to the right user and thus ensure better user retention, engagement and revenues.
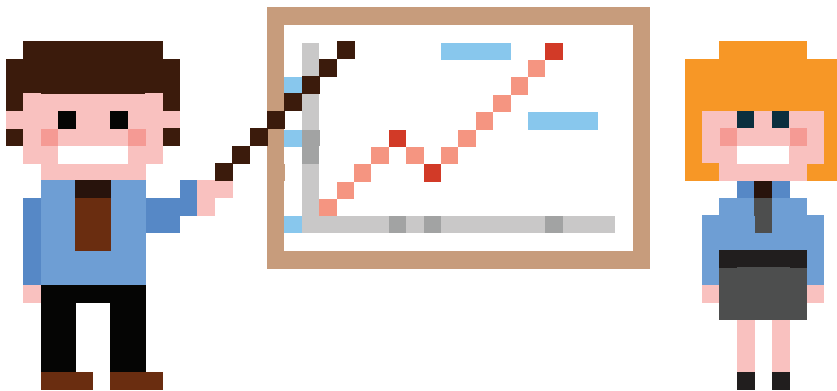
App Store Trends

Knowing what's hot on the App Store is another thing that will give you competitive advantage. It's important to research both the short term and the long term trends because often apps that become hugely popular in a short period of time lose it after just a couple of months. Researching and analysing the trends will give you confidence and help you find inspiration for new features or perhaps even another app.

When researching App Store trends, it's particularly useful to pay attention to the Top Grossing and Top Paid charts. The Top Free chart is also worth tracking because it provides valuable insights into what people download..
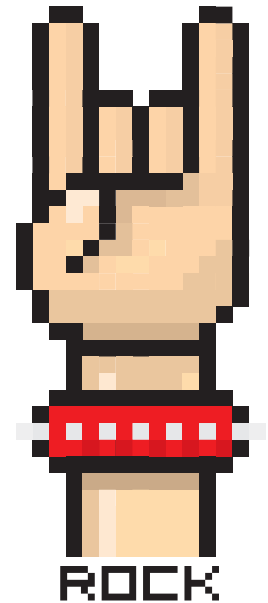
The Competition

Mobile app development is a very competitive industry with new players entering the game every day. This means that your app has to stand out and be better than existing competitor apps to get a chance on the App Store.

When doing competitor research, pay special attention to the top apps in your category and make a note of the following:

• Your competitor's audience
• Competitor app's rating and reviews
• Which features and functionality can be improved
• The app's title, screenshots, icon, description and keywords

If after this research you still believe that your app idea is viable, use the knowledge you gained to see how your app can be better than the competition.

Stage 2:
Planning

Now that the initial research and analysis are done, it's time to start planning the development process. At this stage you start clarifying your app idea. Using the information you gained during the research and analysis phase, you start planning specific features and functionality your app will have, its general look, and find a more specific niche for it.

When you are considering which features to include, strongly base your choices on your customer persona research. Don't be surprised if a lot of the features you've initially planned for will get discarded because your target audience needs and wishes may be very different from what you've originally planned for. Research from The Standish Group shows that in a vast majority of apps only 55% of app features are really used, so be careful with your choices to avoid wasting up to 45% of your money and resources.

Start with mapping out your app's goals and then transform ideas into actions. This will make it possible for you to map a story and translate your goals and potential user actions into tasks. For example, if your goal is for the user to take a photo and share it, you will need your app to have access to the camera function, include some basic filters and editing features, and integrate with social media. Map the story for each of your app's features - this will make the development process a lot easier and will help you dismiss unneeded features from the start.

This is also the stage when you plan your app's monetization. Is it going to be a free or a paid app? If you're going for free, will it make money through ads or in-app purchases? Your monetization strategy will depend on the type of your app and on your market research.
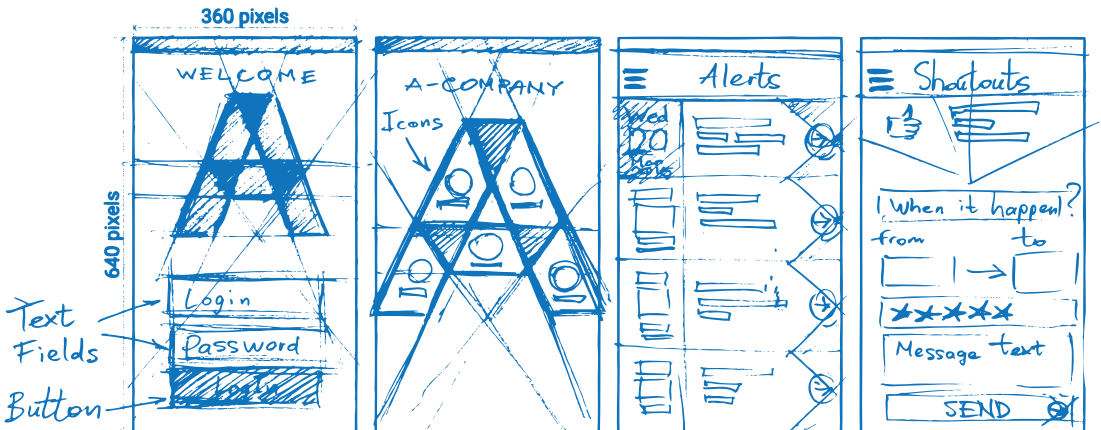
Stage 3: Wireframing the App

App Icon
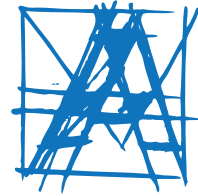
The next step is to start working on your app's design. The first thing to do is to plan the app's functions on a sketched screen and then to wireframe the app. Doing that not only helps the team to better understand the app's functionality, but also helps to make the first steps towards the app's design. Inexperienced developers may jump to designing the prototype straight away, but that's not advised because there's a risk of making a mistake that will ruin the app at a later stage.

Wireframing the app on a piece of paper is an essential app development phase that shouldn't be overlooked because it helps to see the app in essence and arrange all of the app's components in the best possible way. In addition to that, wireframing the app can sometimes help to come up with new features that weren't obvious from the start.
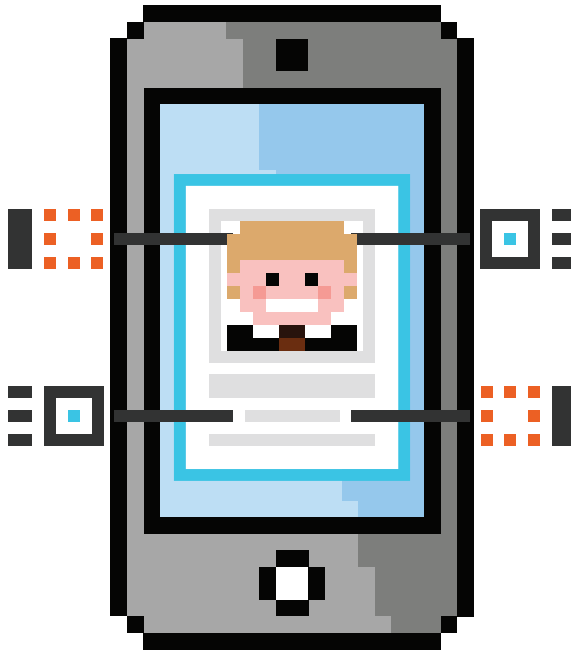
Stage 4:
UI Design, Prototyping and User Testing

When wireframing is finished and the key features of the app are settled, the team moves to designing the app's interface. At this stage the designers not only work on the app's look and feel, but also thoroughly think through the app's architecture and user interactions. To do the job, the design team uses the information collected during customer persona research to make the app as appealing to the target audience as possible.

Once the design mockups are ready, the whole team plans future steps and prepares an action plan, as well as estimates all resources such as time, manwork and the cost.

When all the mockups are approved and the estimates are ready, the development team creates a clickable prototype. This is usually done with the help of Invision, a free prototyping, collaboration and workflow platform. The clickable prototype is the first thing that allows to see your app in action, even though that's only on the computer screen.

Creating a prototype is very important because it helps you to instantly see any problems with the app's UI and flow. It's a stage when all mistakes are easy to fix because there is no expensive to modify code yet.

When the prototype is created and approved, it's good to do some initial user testing to see if the app's potential users react to the UI the right way, find the app easy to use and like its overall look. On a smaller scale, this can be done by inviting friends and family to test out the prototype. However, if you are looking for accurate test results that represent your target audience's opinion about your prototype, you'd be far better off using a service like UserTesting.com to get the opinions of random people from the right demographic group.

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Stage 5: Development

The actual development stage may not look as exciting to the client as the design stage because there are no visible results during the first days. Nevertheless, it's the core of making your app idea reality and therefore it requires the most time, resources and budget. Developing a specific app requires professionals with the right programming skills and the more complex your app is, the higher the cost will be especially if it's a native app.

The good thing is that all the costs and resources usage should have been mapped out during the planning stage, so there shouldn't be any nasty surprises unless the client decides to add or change something unexpectedly.

While the app is being developed, the team will closely monitor and test its quality during all of the development phases. This helps to eliminate errors straight away and create a better final product faster.
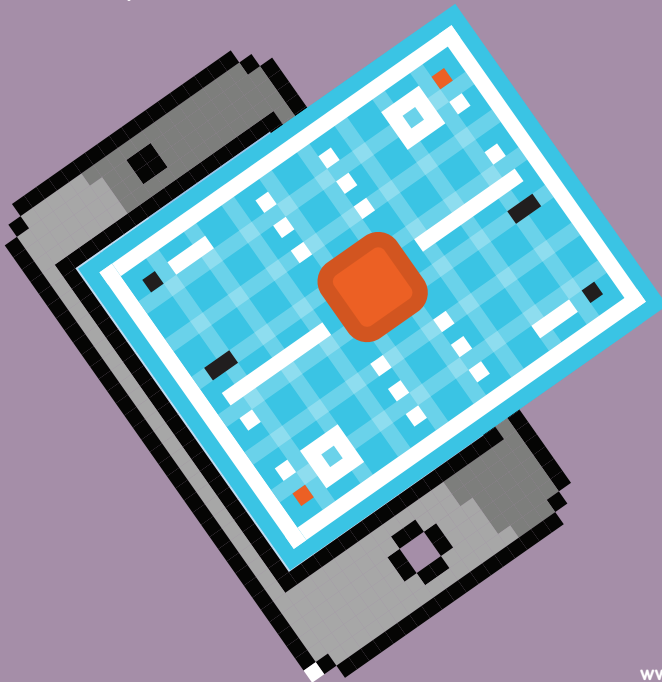
Stage 6: Quality Assurance and Testing

As we mentioned before, QA is actually a part of the development process that starts long before the app is assembled. The goal of quality assurance is simple - to ensure that the app works as intended while minimizing the risks of releasing a buggy product.

The QA process consists of the following phases:

The preparatory phase - the initial phase of the QA process, which begins long before an app is assembled. The goals of the preparatory phase are to define all future QA steps and to identify the target devices.

Next comes the functional requirements phase. This phase uses the set of requirements created during the preparatory phase where the core functions of the app are clearly defined.

Creating test documentation is the next step. During this phase detailed instructions for testing are created. For most mobile apps they don't need to be very rigid and can contain only high level tasks because things within an app are usually done in just a couple of taps and swipes. However, all apps are different, so there may be the need to add more complex tasks if the app's functionality requires that.

When the documentation is ready, testing environment is created where QA specialists install the app on a number of test devices and try to do everything they can to make the app hang, crash and behave in a weird way. This helps to identify bugs and fix them before the app is released to the users.

And finally comes the most exciting and dreaded part - user feedback. Ideally, the app is submitted to a limited number of beta testers before it's posted on the App Store or Google Play to avoid bad ratings and reviews. The beta testers submit their feedback, which allows the developers to polish out any remaining glitches and prepare the app for the launch.

Stage 7: Marketing

Now the app is ready for launch, but there are several things that need to be done before the big day - you need to start marketing the app and create the right buzz, so that it will start getting downloads from day one. Usually, pre-launch marketing involves creating a dedicated website for the app and building up a newsletter list, engaging on social media with the right target audience, notifying industry publications and bloggers, and creating some teaser videos as well as special offers to attract downloads.

Ideally, the marketing team will be involved from the early stages of your app's development because that will help them find your app's USP, help them create ASO-optimized title and app description for the listing, and plan both pre and post launch marketing activities.
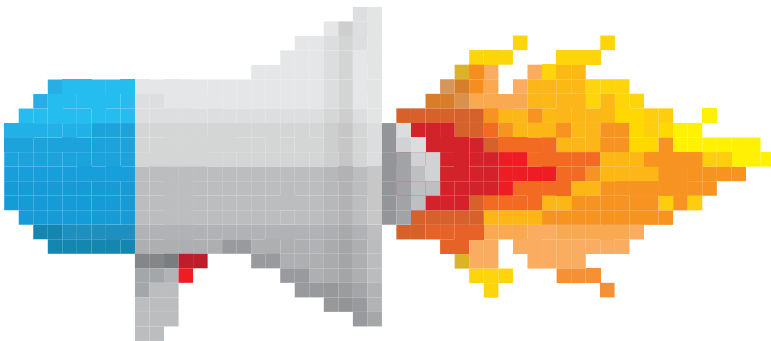
Stage 8:
Launch

When the team is sure that the app is ready to be submitted to Apple's App Store or Google Play, the submission date is set. The app should be of excellent technical quality to meet Apple's and/or Google's strict policies and you should have all the media materials ready. These include the app's title, description, keywords, as well as screenshots and a preview video.

Your app's submission to app stores should be accompanied by pre and post launch marketing activities designed to gain publicity and raise the awareness of your target audience to encourage installs.
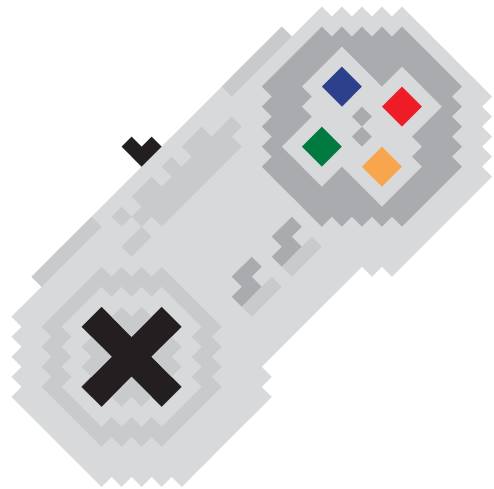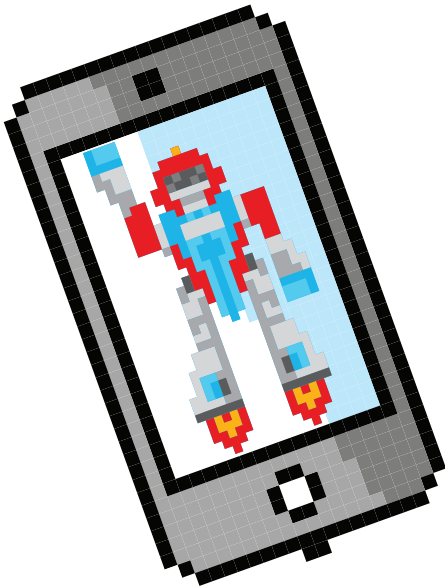
Support & Maintenance

Contrary to what many people believe, launching your app is not the end of the journey, but rather its beginning. In order to provide a good user experience, every app needs to be well maintained and supported.

While no two apps are the same, it's important to ensure the app's functionality is working well and is constantly improved. In addition to that, the app's UI needs to look and perform well on all versions of iOS and/or Android. At the very least, you should create an update schedule, so that you can release improvements and new features on a regular basis. This schedule should have room for new features' development, testing and release.

Together with app's functionality and UI updates, you should plan your app's further marketing, seasonal promotions, and regular social media activities to maintain your target users' interest and expand your audience.

Conclusion

Great apps can only grow out of great ideas. However, not all fresh and creative ideas turn into great apps and that's not because they lack potential. Usually the problem lies with implementation and even brilliant ideas come to nothing because of poor planning, low quality development and lack of proper marketing.
Put simply, your idea's success depends on having a strong business plan, careful market research, and professional development and marketing teams.

Whether you choose to work with an in-house or external team to make your app idea reality, you need to make sure that each stage of the development and marketing process will receive the necessary attention and has the right budget to ensure proper user targeting, functionality, compatibility, UX and support.

No matter if you are a large company or a startup, it's the end user who decides whether an app is worth downloading and using or not. That's why it's so important to pinpoint your target audience wishes and hire the best team you can afford to develop and publish your mobile app.
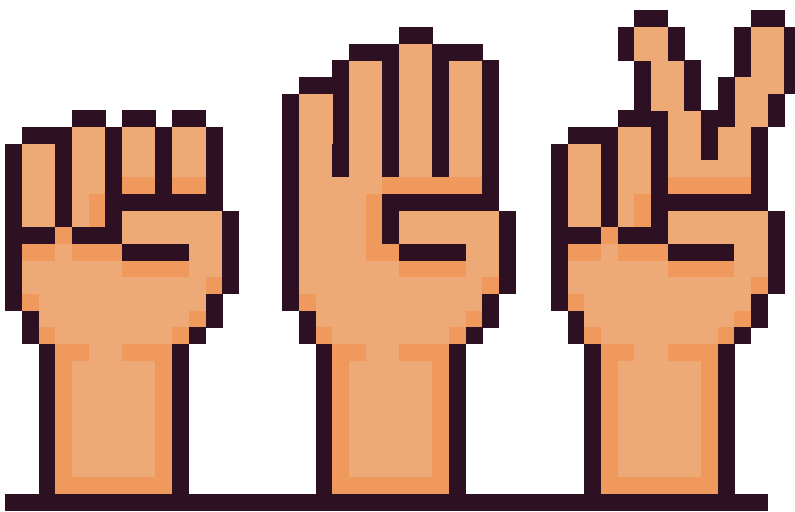
About Fan Studio

Fan Studio was founded in 2008 and it specializes in iOS app and game development. Our team is here to help you find the best way to materialize your idea, launch your app and give you advice whenever you need it.

Fan Studio has been a top UK iOS app developer for years and is the app development company of choice for many businesses across the UK, United Arab Emirates, Ireland, Canada and the USA.

Our team of experienced and talented professionals is here to offer you the very best of mobile app development. Feel free to get in touch with us any time by email or phone, and we'll turn your unique ideas into brilliant apps.
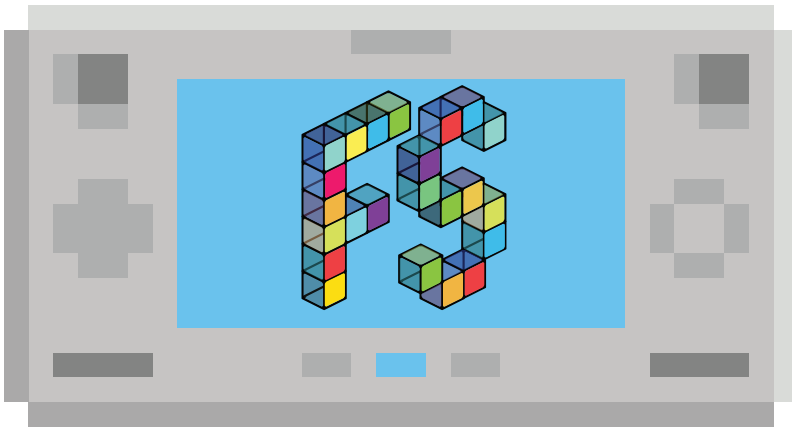
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