

The Key to Successful iPhone Development: Choosing the Right Developer

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Introduction

Given the meteoric rise in popularity of Apple's iPhone, and its sister device the iPod touch, the company has opened to both users and non-users alike the ability to create and distribute custom applications through an authorized portal, Apple's App Store.

Such embracement by Apple of third-party development allows individuals to not only benefit from others' applications, but to monetarily gain through the sale of their own applications to the ever growing user community. Individuals receive 70% of the revenue generated by the application. We're just now beginning to see success stories of people who have parlayed a simple idea into thousands (and hundreds of thousands) of dollars.

This brief paper will help guide the reader through the process of application development. This paper is intended for the individual who possesses the idea for an application, but not the programming expertise to create it.

The Development Process

Anyone wishing to distribute an application through the App Store will need to sign-up for Apple's iPhone Developer Program, regardless of whether they will do the actual coding or not.

Apple offers two options: the Standard Program and the Enterprise Program. Unless the individual works for a company with 500 or more employees and wishes to create and distribute custom in-house applications within the organization, the Standard Program is the option to choose. Apple charges \$99.00 USD for the Standard Program. The Enterprise Program is \$299.00 USD.

When selecting a development team, ensure that they are a certified Apple developer and have obtained an App Store Distribution Provisioning Profile.

Throughout the development process, keep in mind that the iPhone is by nature a more visual-centric device. Elements of design should be made with this in mind. Obtaining the talents of a capable designer to handle the graphics, or a development firm with either one on staff or access to one, will be critical to the overall look, feel, and success of the application.

Things to consider:

- The application's icon will often times be the first impression made upon potential purchasers. An icon that makes the application easy to identify will increase the chances of getting it noticed and downloaded.
- The user is able to customize the Home screen of their iPhone. Creating a visually engaging icon increases the chance of gaining a highly coveted spot on the user's Home screen. This will increase the use and visibility of the application.
- The way each screen is laid out and designed. (See Example 1)
- The buttons on the screen. Pay special attention to spacing and sizing as the finger is the primary tool for making selections on screen. Avoid compacted image placement.
- The iPhone's original pixel resolution is 320x396 in the upright position. However, the pages do not need to be developed at that resolution. The iPhone has the ability to scale images down. Applications should be designed to scale down 100% of the screen image.

- If possible, take advantage of two of the more interesting features of the iPhone – the accelerometer and the GPS functionality. This can make your application more relevant and exciting to the individual user.



Example 1: A clean, well spaced application

Development:

- The application must be developed on a Mac computer running the Leopard OS (Version 10.5 or later.) The development team must be well-versed in Xcode, a suite of tools necessary for Mac development. Full knowledge of Xcode and Apple Instruments is necessary for testing, provisioning, and delivering the app to the App Store.
- The development team will use the Apple Software Development Kit (SDK) to create the application.
- Testing of the application should not be limited to only being performed on the iPhone simulator. Using only the iPhone simulator is not indicative of the application’s performance, most notably with one of the iPhone’s defining features: the accelerometer.

- For a client to view their application during development, the developer will either use the AdHoc process, utilizing the AdHoc Helper Application, which makes it possible to obtain the client’s Universal Device Identifier (UDID) or post to an Apple account, later sending the app to an Apple Developer Account.
- To effectively produce the application for AdHoc distribution, the developer will generate and download an AdHoc Distribution Provisioning Profile. Because the App Store Provisioning Profiles do not allow for a distribution-built application to be installed on an Apple device outside of the App Store, to install a distribution-ready application, the developer will need to create an AdHoc Provisioning Profile.

To create an application, the developer will take the necessary steps:

- Navigate to the ‘Provisioning’ section of the Program Portal.
- Select the ‘AdHoc’ radio button.
- Enter the name for the AdHoc Distribution Provisioning Profile.
- Confirm an iPhone Distribution Certificate has been created and is displayed.
- Select the App ID for the application (or suite of applications) to be distributed.
- Select up to 100 UDIDs which the application will run on.
- Submit
- Click on the name of the Distribution Provisioning Profile to download the .mobileprovision file.
- Drag the .mobileprovision on to the Xcode or iTunes icon in the dock to install.

- To submit the application to the App Store, the developer will use a web-based tool called iTunes Connect.
- The developer will use its App Store Distribution Provisioning Profile. (Apple will only accept applications if they are built with an App Store Distribution Provisioning Profile.)

- Do you have any apps that have made it to the App Store that are co-branded to show involvement in their creation? (See Example 2)
- Do you handle all aspects of development, from coding to graphical content?
- What type of warranty do you offer and what does it cover?

Choosing the Right Developer

The custom software development industry is definitely one that represents the old adage ‘You get what you pay for.’ Consider the following statistics¹:

- 58% of projects have less functionality than promised
- Over 50% cost more than 180% of the original estimate
- 31% of projects never finish

Performing due diligence regarding the developer’s experience and expertise in the area of iPhone development is critical to a project’s success. Some key questions to ask when considering a developer:

- Do you have experience in Mac OS, Objective C, Cocoa Touch, and Xcode development?
- Do you have experience with using the iPhone SDK?
- How many developers do you have dedicated to iPhone development?
- How many iPhone apps have you created? How many have made it on to the App Store?

¹ Christine Comaford-Lynch, Rules for Renegades: How to Make More Money, Rock Your Career, and Revel in Your Individuality (New York: McGraw-Hill, 2007.)



Example 2: Splash Page showing co-branding

Conclusion

The world of iPhone development is quickly growing and maturing in terms of technical feasibility. A successful application is not dependent on simply having a good idea. Additionally, expert architecture and graphic design play critical roles in creating an application that users want to download, use, and most importantly, tell others about.

After the idea is conceived, engaging a development team that can assist in any or all of these roles will increase your chances of creating and distributing a successful application through the App Store.