Development and deployment of mobile apps on as many platforms and devices as feasible.

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**Abstract**

The requirements of building and application require a surfactant amount of effort and a step-by-step process. Understanding the requirements of the project, developing the product that meets those requirements and then testing the product to see if it all works.

**Introduction / Understanding the requirements**

To begin this process we need to have an understanding of what to do and what is expected of us for this project. There are plenty of way to figure that out, some personal things that I like to do is make a to-do list of how to approach and achieve the said requirements. “For example, suppose you are planning to build an eCommerce app. In that case, you will define your user persona by understanding your user’s age, their mobile usage habits, their preference, and specifically answering why and how they will find your mobile app users. Based on that, you can create an MVP (Minimum Viable Product).” – OpenX cell. In the quote above you can see that to make an ecommerce application they have narrowed to the requirements to a very easily understandable task and an approach to a task that is not that hard to achieve.

They have also used this term called MVP. It’s a product that is used for user feedback. Here are some examples of this product and how it’s used.

“For a MVP example:

* Test the product market using minimum resources
* Get investors to see the vision behind your app (if need budgeting)
* Quickly learn what works and what doesn’t
* Waste minimum engineering hours
* Get the product in front of early customers fast
* Use it as a base to build other products
* Test developer’s ability to build and scale product” -OpenX cell

If we keep this examples in mind, we can use them to get a better understanding of what is more user friendly and what is they would expect from this application. This will help you understand the applications design, reliability, and usability.

Next up is the design of the application. For this I believe that it should be a team and survey effort. I say that because I would like to have an understanding of what a user would like to see and what would encourage them to come back to the application to use it and even more promote the application. Since every time an application is created the most important thing to keep in mind is to have a returning customer.

Here are some examples of what to have for an design:

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* Building User Flow / Diagram for each screen
* Creating Wireframes
* Choosing Design patterns, palettes, and elements
* Creating mockups
* Creating an animated prototype and asking testable questions
* Give final touches to the mockup based on user feedback” – OpenX cell

I have personally used this website called Figma. Which helps you achieve a diagram for each screen, Create or use others design patterns, have animation, and get some final touches done without having to have a HTML or do any sort of coding. Plus, it helps you provide a way of getting the best user comments or concerns about the design. This will also help you understand some key guides to have an amazing UI.

“

* Fonts
* Colors
* Layouts
* Graphics
* Components
* Menus and Bars
* Dialogs and Alerts” – OpenXcell

The list provided above by OpenXcell helps a developer to realize that if a user comments on these things, they should have to either reconsider their design or change what the user has made a comment about.

After all of that is done, your next focus should be the actual development and deployment of the application. “Most of mobile app development projects have three integral parts:

* Mobile Backend server technologies
* Application Programming Interface (APIs)
* Frontend development” – OpenXcell

This is the main structure to consider when doing the actual development. Figma has some extensions that they offer when you are designing to create and edit that design as a HTML or for any other form you would like. I have personally used that to keep UI and development of that UI as smooth as butter. They help you with all the requirements stated above. After doing some research on OpenXcell - “It is always an important component for developers. Moreover, it is crucial for mobile development. Developers must access control mechanisms, privacy control, and secret keys before invoking web-based APIs. There was a time when APIs had their own security. However, today, there are API standards like OAuth2, TLS, and Open ID to make the API integration simpler” – OpenX cell. I realized that having an API will help you with your documentations required to help your user understand how to use the application that you have provided them.

Which takes us to the next topic of Testing the application. “These are some required testing phases to de done before deployment

* Functional Testing
* Performance Testing
* User Experience & interface Testing
* Documentation Testing
* Security Testing
* Configuration Testing
* Platform Testing
* Recovery Testing
* Beta Testing” – OpenXcell

The bullet points provided above by OpenXcell are some things to test for before you decide to deploy the application. It’s always better to test others people for testing vs using the same ones as before because people tend to not change the way they think and provide the same or similar comments as before. Using a fresh and new testing environment can help you with your chances of more successful and smooth application.

**Conclusion**

I hope after reading this article you were able to understand the importance of a step-by-step process. Understanding the requirements help you build a strong and organized foundation of how to attack your goals and meet them in a timely manner. Developing the project with the correct user information and making sure that when developing an app you need to put yourself in your own self in the users shoe. Testing the Application before deployment can also save you a bunch of times on bugs and can help you mange some future issues that may occur when a user is using the app.

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