The Process of Developing a Mobile App

The mobile market is expanding rapidly and has become the driving power of Internet usage over the recent decade. Nowadays, more people browse the web with their mobile phones than on other devices. Therefore, every business must consider developing a mobile app to reach customers or even automate work within the company.

In support of that statement is that more businesses decide to follow the "mobile-first design", focusing on mobile platforms first.

While developing the mobile app, the following stages must be fulfilled: research, design, analysis, and finally, implementation.

RESEARCH

First, research must be done to find a niche for your product or fit into the market gap. It is worth reviewing previous work towards the problem your app will address. Looking at similar apps, whether on Google Play Store or Apple's App Store, might also give some valuable insight and help identify their potential limitations that could be addressed in a brand-new app. Examine the existing solution and do not forget to review the comment section on the mobile app store to figure out what users like or what is not appealing to them. After that is done, prepare your own questionnaire to gather feedback on the very first idea that comes to mind from the potential target audience of the mobile app.
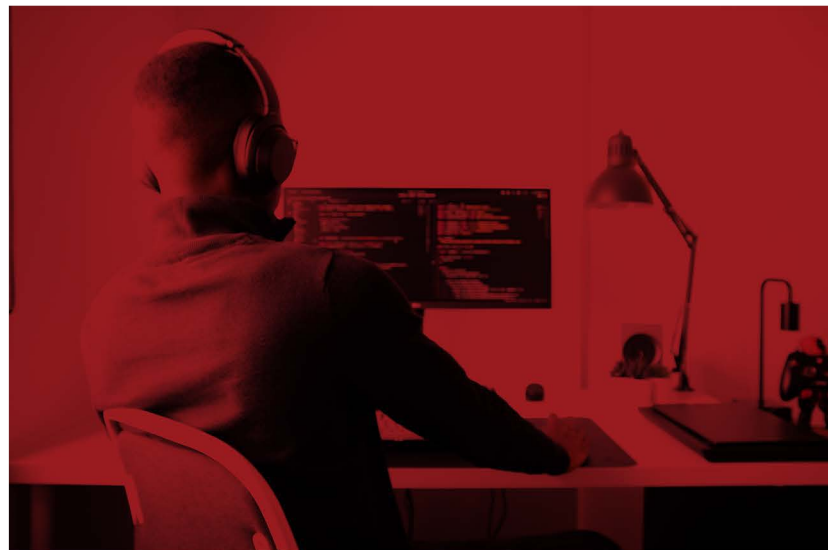
DESIGN

The second step is to prepare some mockups that will help to visualise the app's idea and decide on core functionalities with the other stakeholders. Often this starts with high-level wireframes (pen and paper mockups of the app). Once the basic design of the application has been decided on a more detailed prototype is prepared using dedicated software such as Balsamiq. Gathering feedback during the design phase is also priceless as it helps to make changes that are not as costly as those done during the implementation stage (modifying mockups is always easier than revising the code). Once all that is done, writing all the app's requirements down is good practice as it provides reference for the implementation stage.

IMPLEMENTATION

Finally, the implementation stage is the one that produces the actual software. Development of the mobile app can be done in many ways. Although the development tools or external libraries used are very app-specific, the decision about the app's target platform must be made regardless of the specifications. Android and iOS are the most popular operating systems and choosing one of them is a 'must have' for reaching a broad audience. Developing two application instances simultaneously for both systems might cost a significant amount of effort; therefore, creating a multi-platform app using Flutter would be of great benefit.
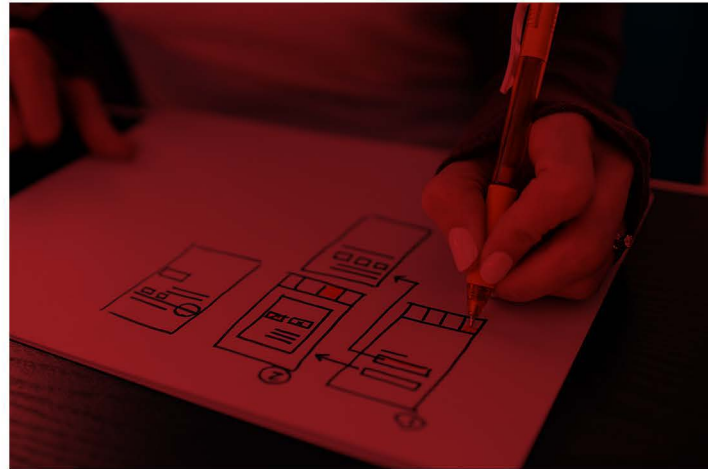
SUMMARY

Developing a mobile application is a complex process; however, once the problem area is addressed and market gaps are identified, the software is already halfway done. Listening to the needs of the application's audience is also a significant part that needs to be done iteratively throughout the entire process. Implementation is often considered a minor part of the entire process and followed by an extensive testing phase finally leads to deploying error-free software.

ABOUT THE AUTHOR

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Kamil Florowski is a software engineer, pursuing their final year of a master's degree in Computer Science. They are passionate about innovative technologies and the development of software that can be used to improve everyone's daily lives