Android Instant Apps, a latest from Google on Android Apps development
INTRODUCTION

Why do we install mobile applications on our devices although we can still land to any link shared with us directly without getting any particular app installed? Google in the last I/O event held on May 2016, teased out this new feature and named it as the Android Instant Apps.

CHALLENGES

- With the growing number of mobile applications, it is difficult to have all the applications on the same device. Also, few applications made for shopping, which are not usually used in daily, might be used once in a month or in a bi-month. Hence, the chance of unwanted apps on end-users’ devices is high and the chance of deleting them also increases.

- When an end-user wants to share any specific page on the app to his/her friends, he/she needs to install the complete app to check the shared page.
Google has addressed the challenge in its unique way by introducing the new feature called Android Instant Apps.

In Google's 2016 I/O event (Google's yearly developer event usually happens in the month of May) highlighted this Android feature called Android Instant Apps and announced its availability from late 2016 or early 2017.

To understand the instant apps better, let us take an example where we’ll consider the B&H Photo Video App


Since the B&H app is a photography shopping application, the app-users may not be using this application frequently. Let us consider that I don't have B&H app installed on my Android phone, my friend finds a good offer for a camera on B&H which I wanted to buy. He shares the product link from B&H app to me through WhatsApp, SMS or some other means and by clicking that link on my Android device I open the particular product page on the B&H app without having it installed on my device. From here I can simply check the product, add it to the cart and purchase it without having the B&H app resident on my Android device. This is what is called the Instant app. Apart from using this feature; I also have an option to install the app on my mobile device.

Check this link, which is a GIF file showcasing the Instant app as demo. Google started rolling out this feature slowly from last week of January 2017. Since for this test roll-out Google four of the applications like Buzz feed, Wish, Periscope, and Viki for testing the Instant App.
MAKING INSTANT APPS A REALITY

To make this happen, Google requires help from the App developers. Google recommends the app developers to make the app as modular as possible. Android will install a play service manager for these instant apps using which it will load the particular module of the app dynamically. In the example of B&H, it needs to split the app for product page and cart pages etc., which helps Android to open the particular page just by using the parameters.

Following are the list of best practices provided by google

- Remove any unneeded bulk from your app
- Support Android App Links
- Refactor your app, if necessary
- Implement runtime permissions from Android 6.0
- Implement Smart Lock for Passwords if your app authenticates users
- Identify unsupported features

For more details on this best practices refer to

Interested developers can register in this link
https://developer.android.com/topic/instant-apps/index.html to get into the early access.

CONCLUSION

With the help of Android Instant Apps, the end-user can directly go to the app pages and use the app without the need of having the app installed on their device.

REFERENCES


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