

1. Goal:

To create a system to keep track of app versions and their install links. When new versions are added to this system, the Android app should prompt the user to install it through a notification. There should also be a way for the user to manually check for newer versions in the app. Although this task seems shallow at first, there are many layers of complexity that can be tacked on. To get your mind thinking, I've included a number of questions below. These questions may not have to be answered, but they are something you should keep in mind as you implement this.

What if tomorrow...

1. We need to support multiple apps and their versions?
2. An app update is backwards incompatible?
3. An app update does not support a specific OS version?
4. We had to make this event driven?
5. We wanted to move this to AWS?

2. Prepare:

To solve the given problem, I decided to use android studio. Whenever a developer has launched a new version, he will update the xml file associated with the application. The application will then grab the data (most_updated_version_number and link) from this xml file and check with the database. If this does not match with the version number mentioned in the database, then the application will notify the user for an update.

3. Plan:

Requirements to execute this application:

- Android Studio
- Android Phone (apk >= 28)

For this functionality to work, make the changes in the xml file and the application will check for the updates. If found it will update the database and displays a notification regarding the update.

If I had more time, then I would have used the approach where we send an api call to the flask server from our application. The flask would get the current version in json format and check the version number with the database. If found a version number greater than the application, it would send some kind of message or a particular status code to notify that the application needs an update and take you to the Github page where released is found. Even in the current approach, I would have checked for the edge cases like support multiple apps and their versions, update that is backwards incompatible.

