

Executive Summary:

In this short report, I present my progress on the application monitoring service to track apps not published on the Google Play Store. Section 1 covers my general solution, Section 2 goes into implementation details, and Section 3 covers future work.

The code can be accessed at: <https://github.com/sctsui/awareApp>

I. Solution

To allow users the functionality of managing their apps and versions without a traditional play store, the best solution is to replicate the existing play store functionality as well as possible, while allowing developers the flexibility of uploading apps. (i.e. the backend is abstracted from the user). Therefore, the API I created has similar features as the playstore, such as getting apps/versions, and their changelogs.

II. Implementation

The backend is created using Flask and a json database. The backend functionality is separated into 2 different APIs, developer and client. The developer API is meant to be used by users who upload their applications to the 'play store'. This includes adding new entries to the database of new apps, and updating their changelogs. On the other hand, the client API has functionality of retrieving the specified data that would have been inserted via the developer API.

A. Changelog:

1. Create developer API to post new app versions
2. Create developer API to update app changelogs
3. Create client API to get notification message/link of new app versions
4. Create client API to get changelog updates for an app
5. Create client API to get all versions of an app

III. Future Work

While the backend is in place for a minimum viable product, we can extend functionality in terms of allowing users the option of auto-update their apps as soon as a new version is available (instead of the notification based system currently).