

Android App Data Collection

Overview

The app uses an Android API called **android.app.usage** which provides various app usage data that we can use to calculate the desired data. We collect data and monitor any changes in app usage statistics every 5 seconds. The Utelem app is able to collect statistics for every app on the user's phone.

Data Collected

- App name: Actual app name
- Package name: A unique package name
- Start time: The time at which an app is opened
- End time: The time at which an app is closed
- Total time: The total time a user spent in one session (difference of start and end times)
- Launch count: How many times a user opened the app

Note: The data collection period is one year.

Organization

LoginActivity.java

- Login logic is handled within this file, most of it being in the attemptLogin() method.
- Contains logic for login persistence.

displaydata.java

- This file handles the logic for starting and stopping the data collection service with a toggle button.

MyService.java

- This file contains the logic for data collection, and buffering.

Ustats.java

- This file has functions that implement the UsageStatsManager API and allows the app to collect data.

BootReceiver.java

- This file is used to handle to on boot logic so that the phone will start collecting data when the user turns their phone back on.

Privacypolicy.java

- This file deals with the privacy policy.

Compare.java

- This file represents the app usage statistics we're collecting, and is used in MyService.java.

MySingleton.java

- This file contains methods that are called when server requests are made.