Application Fundamentals
Paweł Włodarczyk

Android applications are mostly runned as own virtual machine, it means that every process is separated from the other apps and cannot influence other with their presents. Each of those process has a unique indicator that points how much application have access to a system device like: camera or Bluetooth. App have serval fundamentals that I will shortly describe:

1. Activities – It is a simple user interface with some functions like: reading e-mails. It tracks what user is doing on screen right now, one activity is like one part of the app that shows some info to user. Application is built from many activities to work as a whole team.
2. Services – Second component is responsible for providing an application function to be switched on when you put your application to the background. Best example for this is a music player, you can use this service even when you are using another application like reading news or something.
3. Broadcast receivers – Third component is providing data from application even when it is switched off to a system such as notification to our bar or giving some kind of alerts. Simplest example is a battery status, when your phone has 20% or less battery you got a notification that you should plug your smartphone to power supply.
4. Content providers – the Last component manages stored data by our application, it can store it in local database like sqllite3 or it have access to remote databases on servers like mysql. It manages what files should be kept on device memory or maybe the data will be fetched from web API – online services that provides data from our applications from random images to map coordinates depending what we need in that moment.