

## User Instruction of Context Detection Application

1. Installation requirement
  - Operating system: Android 8.0 or higher
  - The smartphone GNSS module can receive GPS and GLONASS signals.
  - Please allow the application to access location information when opening the app for the first time.
2. Activity tracking
  - To start activity tracking, press the button “TRACK ACTIVITY” on the activity page.
  - The recognised user activities are provided via Google Activity Recognition API. There might be some detection time delays (~ 30 seconds) after transiting to a new activity. For details, please refer to following introduction.  
<https://developers.google.com/location-context/activity-recognition/>
3. Environment detection
  - The environment page provides environment detection results (indoor, outdoor or intermediate) and real-time display of satellite C/N0 values.
  - The satellite page provides the real-time information of all received satellites, including constellation type, C/N0, elevation and azimuth.
  - Please switch on “enable location” on environment page to allow the application to track the satellite signals and determine environments.
4. Source Code

The code source is maintained on GitHub (<https://github.com/Zidane-Han/Context-Detection-APP>), under the Apache License. The project is built on Android Studio. Welcome to any improvement suggestion or pull request.