# Notes

* **GPS** required in order for this application to work. With more time I could set alerts to remind the user to turn it on, but currently, it will just return a speed of zero. I had hit/miss results using network location for speed, maybe something I could look into in the future, but again, given the time constraint, this solution certainly works. GPS searching is kept to a minimal, Users shouldn’t see a big enough battery impact to notice.
* **Open the app.** Currently the app needs to be opened, and then will track location as long as the service isn’t closed (i.e., it isn’t closed using the Android Task Manager). Given more time, I could look into making it a running service without starting the application, but this allows you to turn the service off by completing exiting out of the app. **The app does not need to be on the screen for it to work.**
* **Accuracy -** In all of my tests the speed seemed to be entirely accurate. I went so far as to drive around my neighborhood with it. That being said, with more specific testing, it could be possible to improve accuracy and results by tweaking some of the GPS parameters.
* **Minimum API** is currently set to 19, but I’m pretty sure that could be lowered.
* **I’m also pretty certain** there’s some extra permissions in there that don’t need to be there, but since it was just a proof of concept, I thought it would be okay. I didn’t want to remove anything and break it before I submitted it.
* **The app is stateless.** It uses a database to store the results and when the program is terminated and reopened, the previous results will be shown.

# Instructions

* Clear List button on each tab will clear the list of results for only that tab.
* Send text button is there for testing purposes to send a quick blank text. It can easily be removed, hidden.
* The actionbar has a ‘settings’ button that doesn’t do anything. I left it there, for future development, but is easily removable.

# Installation

I’ve included an APK which just needs to be installed on an android device as well as the source code.

Please feel free to reach out to me at [ncapdevi@gmail.com](mailto:ncapdevi@gmail.com) with any questions.