

GPS info for Dolphin Tracker app

This class uses a Google API Client and Location Services to access the user's location using GPS. This class will not run in an emulator due to GPS and Google Services not working in emulators. In order for this class to work, you must put the following line of code in the build.gradle(Module: app) file - **compile 'com.google.android.gms:play-services-location:8.4.0'** It should be the last line in the dependencies section. The version number may be higher

To use this class in an app, create a new instance of this class. Then call the restartGPS() method when you want to turn the GPS on. All checks for turning the GPS on and off are handled by this class. The GPS will run until it gets a "lock" within the distance defined by the ACCURACY variable. To stop the GPS immediately (such as in the onPause or onStop methods of your MainActivity class for when the app closes), then call the forceStop() method.

The restartGPS() method will build the GPS if has not been built yet. If it has, it will reconnect the GPS if it is not already connected. It also starts a timer that will run for 10 minutes (this number can be changed by altering the TIMER_MILLISECONDS variable)

If the class the created the instance of the GPS, usually the MainActivity, turns the GPS on while the timer is running, the timer is canceled and restarted. If the timer runs through to the end, the GPS is reconnected and runs until it gets a reading with an accuracy 25 feet or less. This number can be changed by altering the ACCURACY variable.

The first time an instance of this class is created and the GPS tries to connect, a dialog with a spinning wheel will appear. This can be canceled by touching anywhere on the screen. If the user does not cancel the dialog, it will run for 2 minutes. If the GPS does not find a location with an accuracy of less than the value of the ACCURACY variable, another dialog will appear. This dialog says that the GPS could not find a good location and that the GPS will continue to run.