

DVT drivestats

User Manual



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https://github.com/AxelInd/COS301\_DriveStats/

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# System Overview

DriveStats is a simple road application for Android devices. Its primary purpose is to help users regulate their driving patterns by providing simple feedback on their speed, acceleration, GPS location, and several other key features.

The purpose of this guide is to aid users in their attempts to setup, navigate, and appropriately use the DriveStats Android application.

The DriveStats application provides a range of features for all motorists: from simplistic user-based scoring to tell you exactly how well you are driving, to a fully-featured graphical overview of your driving-patterns, neatly described with graphs.

Collaboration to improve general road safety is a major goal of this product, and, as such, it features a Friend system to allow drivers to share their driving information and compare their safety with friends.

# System Configuration

## Minimal Requirements

To use the DriveStats application a user should possess an Android device with the following features:

1. Android 4.1: JellyBean operating system
2. Wi-fi enabled or 3G enabled
3. GPS capabilities
4. Accelerometer capabilities
5. Google Play Certified[[1]](#footnote-1)

As further requirements for using the DriveStats application a user should have the following:

1. A working Gmail account (required for the initial login)
2. Access to a wi-fi hotspot or other affordable means of internet access
3. A proper dash-mount in their car[[2]](#footnote-2)

## Graphical Illustrations

@william we need a diagram of the device, properly mounted in a car. This illustration should show that the device can work via 3G or wifi.

@william we also need an image of a computer with graphs on the screen. The computer should have a cable coming out of it, saying INTERNET CONNECTION

# Installation

Image showing opening app store

Image showing selecting our app and clicking install

Getting Started

Image showing app open requiring google login

Image showing selecting desired settings (visa vi data usage, autosleep times, etc)

Explain that user IDs do not change

Explain how to set display name

Explain no passwords required

Layout of system (how screens are connected, explain where shown in more detail in the manual. Need screenshots)

Show how to exit system

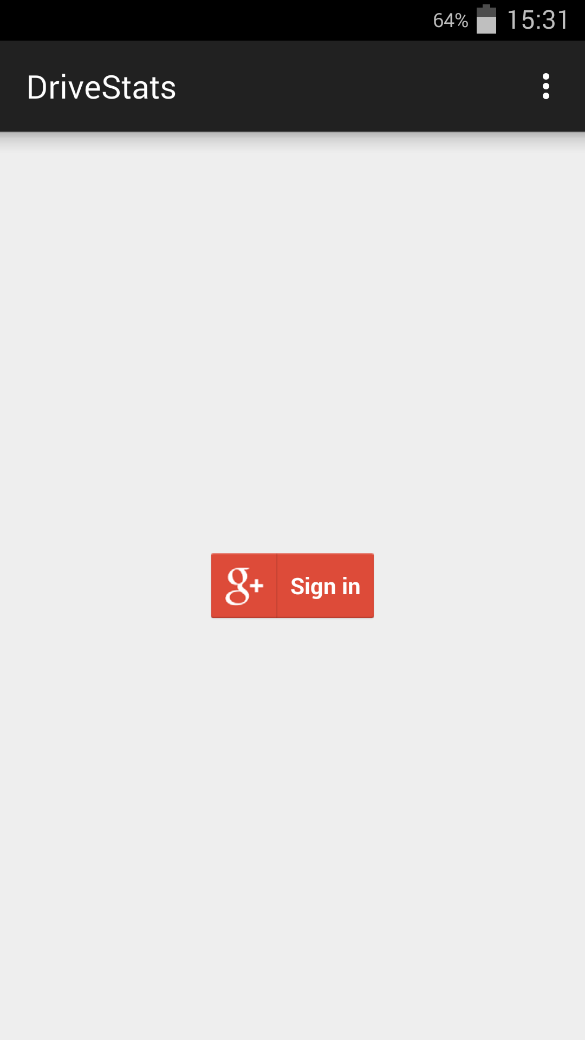
# Using the System

## Android Functionality

### Login/Signup

Signing up to the DriveStats service is simple. It requires a single sign-on to your Gmail account (see the Minimal Requirements section for details) and the application will remember your user ID whenever the application is opened.

The log-in details will be stored on the device. You will not be required to sign in when the application is opened in future.

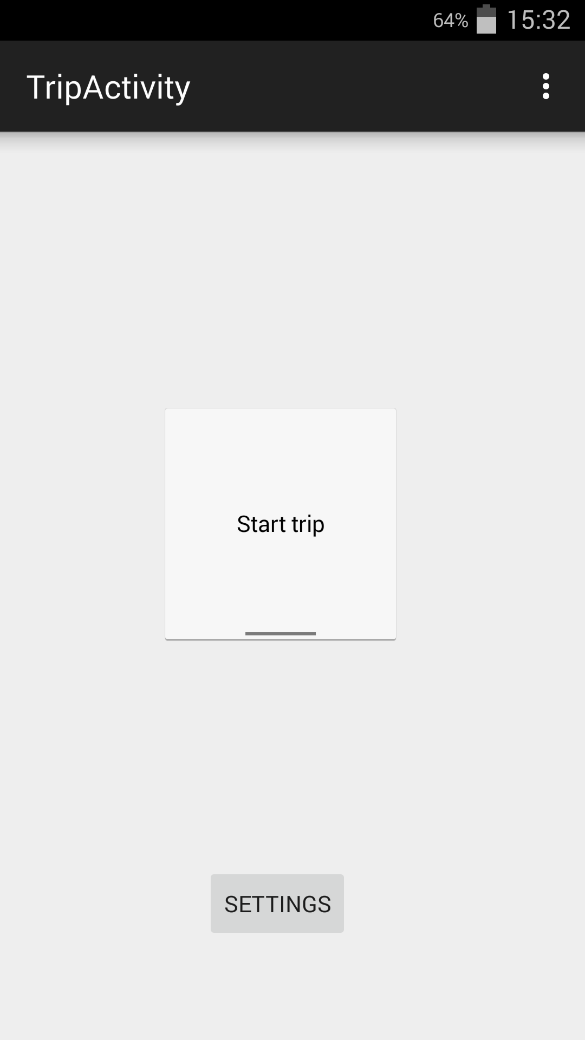


**Sign In**: When this button is pressed, the active network connection (Either a WIFI or a mobile data connection is required for this step) connects with the Google+ service. The email information linked to the phone is used to authenticate the user.

After the user’s information is verified, the email address is sent to the drive stats server to retrieve the user ID from the database of users. If this is the users first time using the application, a prompt will appear asking for permissions to register a new user.

### Start Trip

The DriveStats application requires a user to specify when a trip has started in order to begin collecting data on the driving habits on the user. Trips allow the phone to start collecting data for use in scoring.



**Start Trip**: A toggle button that will cause the application to being collecting data about the user’s movements.

End trip (sends the server all the trip information) (explain that empty trips do not get sent)

Edit Settings

View Profile (retrieve user information from server)

Add Friend (update database) (show example of how friend Bob is added)

Block/Remove Friend (update database) (show example of how Mike is unfriended)

## Computer Functionality

View Graphs (access database)

Describe all graphs created

# Troubleshooting

## Common Problems

My data is not being uploaded

(Screenshot here)

My application will not open

(screenshot of failed to open screen)

My DriveStats application keeps crashing

(screenshot)

I cannot log into the website to look at my graphs

I cannot find the application on Google play

(screenshot of search for DriveStats) – refer to minimum requirements. Ensure in list of supported countries

## List of Error Codes

Error name/Cause/Solution

## Contact the Developers

(Our contact details)

# Additional Information

## List of countries currently supported by the DVT DriveStats application

* South Africa

## Supported Languages

* English (European)

1. For further information on Google Play Certification please contact the list of certified devices provided by https://support.google.com/googleplay/answer/1727131?hl=en. [↑](#footnote-ref-1)
2. Needed to maintain accurate readings throughout the trip. [↑](#footnote-ref-2)