

Case Study – AppWeigh

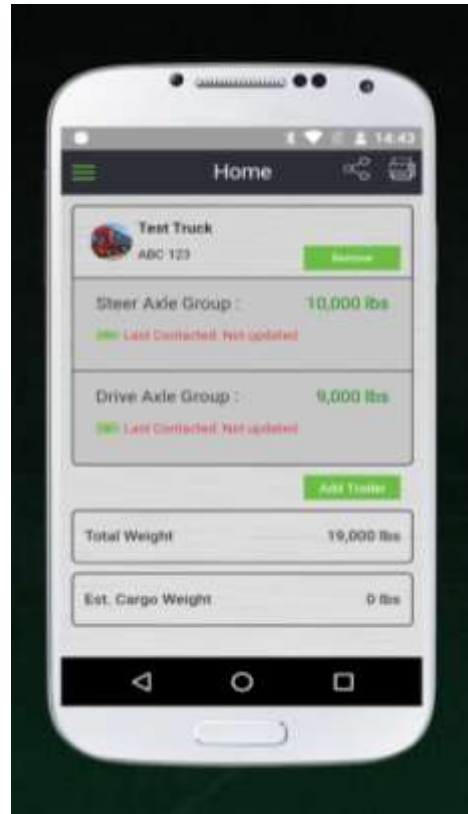
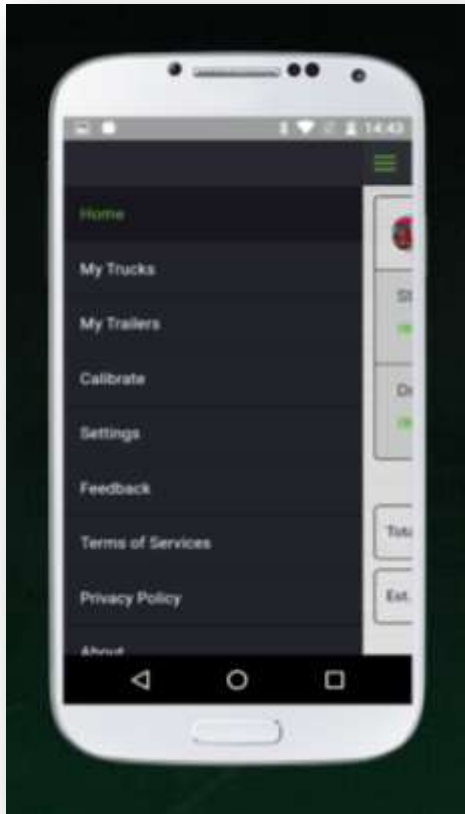


The only mobile application with
“no scale load scale”.





AppWeigh



Overview

AppWeigh – AppWeigh, the only Bluetooth enabled scale sensor app for the commercial transport industry. We have developed this app which calculates the load on truck & trailer. Users can configure the weight of the truck & trailer with the help of sensors connected to the vehicle axles. This app generates alerts which helps user to ensure that the weight of vehicle doesn't exceed beyond the preset limit. It continuously triggers the pressure values from sensor and provides the weight reading through the App.

Mission: Replacing the complex, expensive and traditional load scale measuring methods with a low energy cost effective method.

Reality: Creating a new way for transportation industry to excel in their process and save time & money therein.

The Problem

Are you a driver or trucking company who is trying to increase profits by staying in legal weight limits and without spending much on On-Board Scales?

AppWeigh is the only App with “no scale load scale” providing load details very cost effectively without use of any complex hardware expensive scale.

Challenge

- Calibrated and configured the app for almost all kinds of trucks & trailers.
- Preserve the load record data even when the app is out of network and sync with the server when network is available.
- One of the challenging part of the app is to perform the sensor pairing setup. The sensor pairing needs to be unique for the specific axle of each vehicle.
- Conversion of data received from the sensor into shareable format which can be shared through social media sharing options and also convert the data to printable format.
- Fetching of real time data through multiple sensors corresponding to each axle and the user can get the total load weight across the truck with its trailer.
- Calculate the axle sensor weight through the app and display the data in specific unit on the basis of calculations with different color codes to indicate safe weight (green), nearing max (Orange) and Over max weight (Red). This was a really challenging task due to constantly changing dynamic weights when the truck is in motion on various roads.



AppWeigh

The Solution

Biz4Solutions has developed an app especially for transportation industry, which has changed the traditional complex and expensive way for measuring the truck load. The app has been specially developed to help people save money and themselves be assure of observing legal weighing limits.

This app can be useful for individual truck owner as well as transportation company. As many trucks & trailers can be configured in the app. They can Add the truck and trailer details manually and enter details like Name of the truck, Truck's license plate number, Select the number of height control valves and Axle weight limit for steer axle, drive axle & trailer axles etc.

The user can themselves pair multiple sensors through the app for each Axle group and also calibrate the sensors at axles (Steer, Drive and Trailer) for their empty load and full load. The users can see the details and date of last calibration and edit them whenever necessary.

Once paired and calibrated, the user can get the details such as lbs or kg load on all the Axles, and the weight for each axle is color coded to indicate safe weight, nearing max weight limit Or over max weight limit; The app can keep a continuous track of weight values in real time.

In case if the mobile goes out of network while the truck is on road, the data will get stored in the mobile local database and it will get synced to the server when it comes back online.

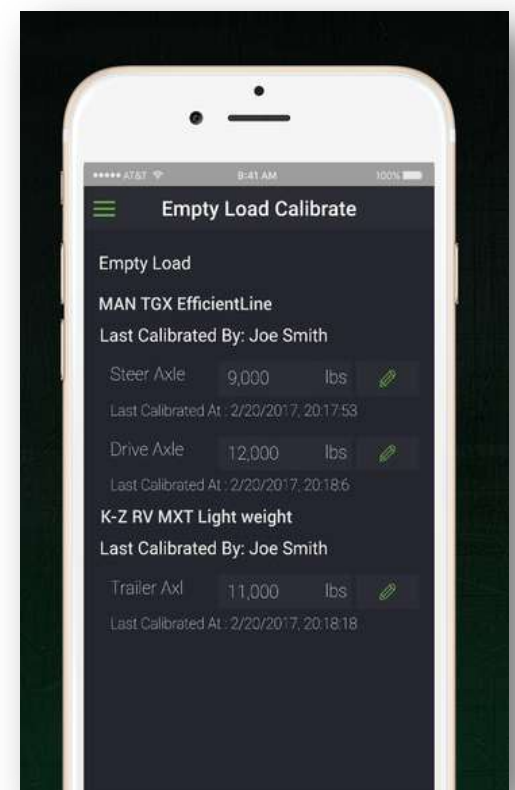
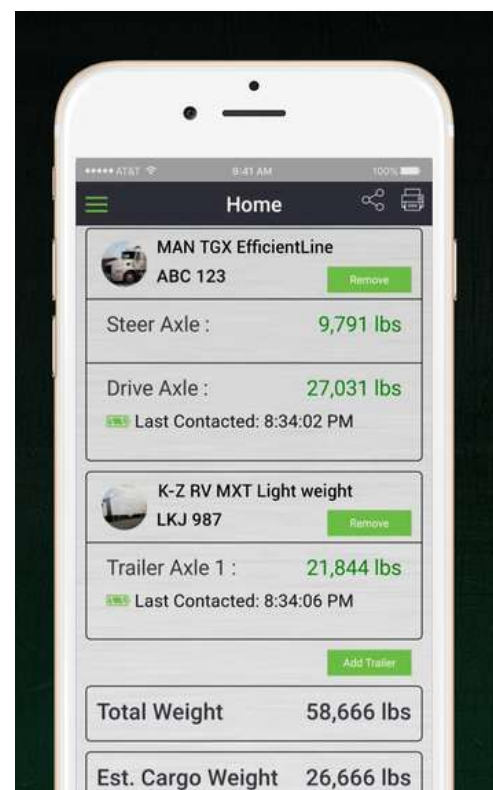
User can share the details of the truck weight records at anytime through email or other social sharing.

Benefits

- Option to add trucks with and without Air Suspension.
- Unique sensor ID is stored for each Axle associated with truck/trailer.
- User can manually set up the sensor Bluetooth with respective truck/trailer axle.
- User can manually calibrate the sensor with the truck/trailer axle through the App.
- Color changes to indicate safe weight, nearing max weight limit and over max weight limit.
- Facebook Login
- Offline local database for users to save the data whenever offline which automatically gets uploaded to the server when online.
- Option to share the truck/ trailer axle readings through social media sharing options.

Technologies

- Backend: Node JS Postgres
- Front End: Ionic



Check the app on Web, Apple Store & Google Play

