Executive Summary – Vehicle Mileage Tracker

Many Americans drive vehicles as a major part of their occupation. The Internal Revenue Service (IRS) offers incentives for businesses or individuals to report the mileage they have driven throughout the year in order to receive a reduction in their taxes based on that mileage.

However, most vehicles do not offer a way to track individual trips, so we often have to manually fill out trip records on a physical sheet of paper. The current solutions in the market are often subscription based mileage tracking devices that ask for monthly fees. These are some hurdles for people who want to report their business mileage.

Our team is therefore tasked to help lower these hurdles and create a cost-effective mileage tracking device for users. We ask no subscription fees from the user. We offer a companion mobile application to access the recorded trip info via Bluetooth, as well as an onboard SD card storage for users to access the recorded trip data on PC.

Our team originally approached the project with the priority of finding lowest component cost and the most widely used components. Later we re-evaluated our priorities, and decided that we are going to look for components manufactured in countries that have decent labor rights.

Some key lessons we learned throughout the project is the importance of starting early. For the first system verification, we had a shorter preparation time and therefore felt more rushed. We started earlier for the second system verification. We were able to run the verification smoother than the first. Other benefits of starting early includes the ability to help the team debug any challenges that they face.

Project Development Timeline:

