



# **Maximum Useful Value Challenge**

# **Background**

Whether it is a car, truck, or SUV, vehicles are often the second most expensive asset people invest in behind houses. Automakers are always trying to keep prices affordable for customers as they improve the packaged quality, safety and technology suites of their new vehicles. Some customers opt for used cars instead, which have their own unique costs. Buying a car is an investment in your future mobility, so it should deliver as much value as possible over the time you own it.

## **Challenge**

Build a data-driven application that enables individual car owners to maximize the useful value of their mobility investment.

Keep in mind that "value" is deliberately left up to your team to define. It could mean extending the lifetime of a vehicle so you can drive it hundreds of thousands of miles. Cars often sit in parking lots, so perhaps your team will choose to deal with fully utilizing the transportation potential of your vehicle. Maybe you can use driving data to predict the inflection point in maintenance costs in order to trade in your vehicle for a brand-new one. There are plenty of other options to explore. Spend some time brainstorming "why" you want to maximize a particular value before you implement "how" you will do so!

#### **Prizes**

Winning Team: up to 4 team members will each receive a 10.1" Samsung Galaxy Tablet!

# **Judging Criteria**

- Solution Completeness Does it work? Is there a roadmap for future implementation at 99P Labs or factory?
- Cost Friendliness How does the solution address the cost needed to scale to track many resources?
- Innovation & Creativity Does the solution bring new ideas and approaches to the problem?
- Design & Build Quality Is it easy to navigate, user-friendly, and visually appealing?
- Design your application so that impact (value enhancement) can be measured continuously and incrementally, focusing on outcomes, not just outputs.
- Make effective use of existing data, including connected vehicle datasets provided and open datasets.
- Present data to app users in formats that are easy to interpret and act on, such as data visualizations.

## **Additional Resources**

Check out 99P Labs' website if your team is looking for additional inspiration or tools. On our blog, there are numerous articles on how 99P Labs is tackling mobility challenges. Some of those may spark that next genius idea of yours.

Our challenge asks for a data-driven application. You may be wondering where you can find a trove of vehicle data. Our 99P partners have got that covered as well. By signing up at the <u>99P Developer Portal</u>, your team will gain access to high quality data products that you can use via simple APIs. Additionally, you can take advantage of the Portal's built-in Jupyter Hub environment to develop your app. **Using the Developer Portal is not necessary to compete in this challenge**.

For every part of the Developer Portal, there are learning resources available. If you should have any questions, please do not hesitate to contact us:

- Eric Bauer eric bauer@oh.hra.com
- Tony Fontana <u>tfontana@oh.hra.com</u>

