## The Challenge

PartCycle was founded by two entrepreneurs with shared passions for automobiles, DIY repair and cutting-edge technology. However, when it came time to put the idea into practice, the company did not yet have a development team. Rather than waiting to hire an entire internal team to launch the project, they decided to partner with Big Nerd Ranch to complete the application while they formed their web team.

Client Goals

- Build an entirely custom e-commerce platform to enable online purchasing of recycled and remanufactured automobile parts in a way that is simple and transparent.

- Develop a minimum viable product to gather and analyze data for rapid iteration in a lean startup environment.

- Simplify the process of listing used auto part inventory from any location in the United States by leveraging highly distributed automation.

- Integrate payment processing, merchant services and shipping calculation by leveraging third-party solutions.
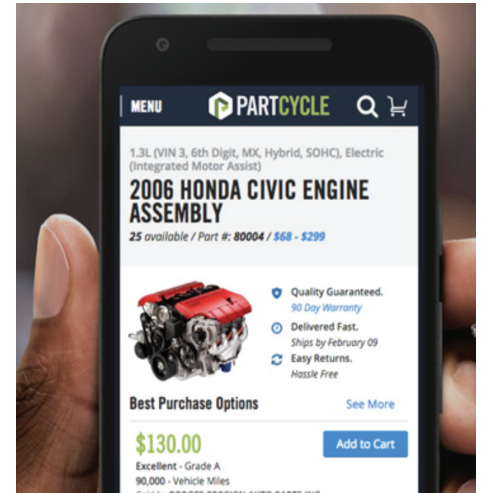
Our Approach

The Big Nerd Ranch front-end, back-end and design team partnered closely with the client to bring the app to market. The back-end team built an import solution for the massive part inventories from each seller and delivered the web API to run the application while the front-end team created a scalable single-page application that interacted with the back-end database.

Our designers matched PartCycle's unique brand and built a user interface, with a delightful user experience, that stands out against other competitors in the space.

The Results

Working collaboratively with the PartCycle founders, the team at Big Nerd Ranch delivered a web app that is pioneering many industry-first technical innovations, including:

- The ability to purchase used automobile parts online, directly from professional automobile recyclers.
- An entirely scalable, cloud-based architecture with daily feature delivery.
- A mobile-first, analytics-based automotive parts search interface.

In addition to the technical achievement, the web application helped PartCycle accomplish its business goals. There is now a quicker and more simple supplier onboarding process in which suppliers can sign up and update inventory in less than 15 minutes. Furthermore, every interaction on the site is being driven by data and analytics, which has allowed the company to improve the conversion rate by 100% in the six months following the completion of the project.