

Dr. Car Quotes

Dr. Car Quotes is a tool that allows car owners to quickly learn price ranges for needed repairs and maintenance, and compare prices at different auto shops.

Spec Status: **Draft** / Peer Review / Mentor Review / Complete

Team Name: Dr. Car Quotes

Team Members: Innocent, Sanah, Timothy, Zadok, musdhaliph

Last Updated: 1/2/23

Summary

Dr. Car Quotes is a web tool that allows car owners to quickly determine the average cost for vehicle repairs and maintenance. Users can compare prices from nearby auto shops to make an informed decision about where to have their vehicle serviced.

Problem Background

Dr. Car Quotes customers are car owners who are either on a budget or are conservative spenders. The problem they face is that there is no easy way to compare prices. Sixty-one percent of Americans do not have enough savings to pay for an unexpected \$1,000 expense in cash.¹ User Research confirmed that people in our target demographic [do not have several hundred dollars in cash](#) to spend on costly car repairs, or they are generally concerned about and critical of any major expense, particularly during a time of economic inflation. These customers need a quick, convenient way to determine if repairs and service are necessary and fairly priced so that they can save money and/or stay on budget.

¹ [Just 39% of Americans could pay for a \\$1,000 emergency expense](#)

Currently, [KBB](#) and [CARFAX](#) have a tool on their respective websites that allow you to input your vehicle info and see an estimated range for repairs based on your zip code. On the side of the screen they also display advertisements for auto shops. While this feature does add some clarity to the process of getting your car fixed, it is impersonal and does not help the person in need of repairs to find the cheapest option. There are a few similar tools available, but none of them help consumers save money.

After launching a survey and conducting 9 exploratory interviews, we were able to identify three key shopper insights (see [User Interviews](#) for reference):

1. Car owners have no frame of reference on the cost to repair and maintain their vehicle.
 - a. *"I don't know anything about cars."*
 - b. *"The bill is almost always double what I expect it to be."*
2. Car owners are unsure if a repair is necessary or if the mechanic is just trying to make a sale.
 - a. *"Even when I go to get an oil change, where I expect the bill to be \$40, they tell me I need to get 3-4 things done. It is hard to figure out quickly if those repairs are actually needed."*
3. Comparing prices ahead of time was impossible.
 - a. 4 of the 6 users mentioned, unprompted, that they wanted an easy way to compare local prices.
 - b. Auto shops do not post prices online.
 - c. Because quotes are only given after a diagnosis, shoppers were unlikely to take the car to another shop, even if they knew there was a cheaper option.

Car owners need a suitable tool that will help them compare the cost of car-related fixes and maintenance. Right now, car owners are spending a fortune on gasoline. And with inflation increasing prices across all categories of consumer spending, now is the opportune time to create a tool that is convenient, transparent, and saves people money.

Goals

- Help car owners who are ignorant of cars and parts quickly determine a fair price for needed repairs in their area
- Reduce the time and energy people spend comparing quotes from different mechanics.
 - The tool is best used to identify a shop but it could also be used after a diagnosis has been completed and a quote has been given.
- Both lead to the same outcome of saving money on car repairs.

- People will be able to either gain peace of mind (the price is fair) or they will have the ability to find budget-friendly options nearby.
- Users should feel confident and empowered because they have pricing for multiple mechanics.

User Stories

- As a car owner on a tight budget, I don't want to waste time doing price comparisons online. I need a standard resource to quickly find the cheapest option for car repairs near me so I can go about my day.
- As a car owner on a tight budget, I want to know general price ranges for common repairs in my area so I can save the most money.
- As a frustrated car owner who is in need of repairs, I want to feel confident that I am not overspending on repairs.

Proposed Solution

We propose building a web app that will allow our customers to search, in their zip code, for a specific car repair or maintenance. Because repairs are based on the type of car and the parts needed, we will ask our users to select their vehicle make, model, and year. Once the three inputs have been given (Zip Code, Issue, Vehicle) the tool will return the average range to fix the issue selected. Below this range, three affordable options in the customer's area will be displayed.

The user visits the website and is greeted with a landing page that explains the purpose of the web app and how it can help them find affordable car repair options. The user begins by entering their zip code. Then they are taken to a page where they input their vehicle information. Finally, a list of maintenance and repair items are displayed.

The user submits the form and is taken to a results page that displays the average range to fix the issue they selected.

Below the average range, the user sees a list of three affordable repair options in their area. Each option includes the name and contact information of the repair shop, as well as a short description of the services they offer.

The ideal end state is described below. Due to the time constraints and the desire to test our MVP, these features did not fit the scope of the initial MVP

The user can click on each option to view more detailed information about the repair shop, such as their location, hours of operation, and customer reviews.

The user can also use a filter tool to narrow down the list of repair options based on factors such as price, location, or ratings.

Once the user has found a repair shop that meets their needs and budget, they can click on a "Contact" button to initiate communication with the shop and book an appointment.

After their car has been repaired, the user can return to the website to leave a review and rate their experience with the repair shop. This feedback can help other users make informed decisions about their car repair needs.

Scenarios

Scenario 1

Customers can quickly input their location, vehicle info, and issue to find a needed repair.

- Acceptance Criteria
 - The Zip Code input field is clearly visible
 - Vehicle year/make/model drop downs are visible and working
 - The six issues selected for the MVP are clearly listed

Scenario 2

Customers can quickly find the average cost for repairs in their area.

- Acceptance Criteria
 - Repairs are clearly displayed and identifiable
 - Repair costs are specific to the zip code entered
 - An average range is displayed

Scenario 3

Customers can compare three nearby mechanics' prices.

- Acceptance Criteria
 - Three recent bills showing the cost to repair brake pads are displayed next to each other for comparison

Measuring Success

Co.Lab Success Metrics

What would you consider success to look like by Demo Day for your team? What would be the definition of done for your product by that point? Note: This should be finalized as a team.

Users are able to navigate to the site and use the search parameters to select a basic repair and receive 3 affordable options in their area.

Product Success Metrics

Consider metrics you'd want to measure to consider the product a success. How would we know if we've solved the problem? What are the things we'd want to measure?

- Track site traffic - Track locations
- Provide a way for users to contact a mechanic?
- Feedback form: Customer satisfaction measured through surveys or ratings left by users.
- User drop off
 - if/when they leave the site.
 - Under 15% leave the site before the quotes
- % of visitors that click on a shop to get info/contact.
 - 75% of visitors click to view the contact information

Milestones & Timeline

- Ideation - PM - Timothy
- Research/Validation - PM - Timothy
 - Interviews
 - Survey
 - User stories, scenarios, and pain points
- MVP determination - All members of the team
 - Prioritized list of features
 - Create roadmap & backlog
- Design - Designer - Sanah
 - User flows
 - Annotated wireframes
 - Mock-ups
 - Prototype
 - User/usability test
- Development
 - Research
 - Scoping
 - Backend - Zadok
 - Frontend - Innocent
 - Iterative cycles
- Beta testing - All members of the team
 - Have users pilot MVP
 - Get feedback
 - Make changes based on feedback
- Rollout - All members of the team
 - Record Pitch
 - Make Product Live

Open Questions

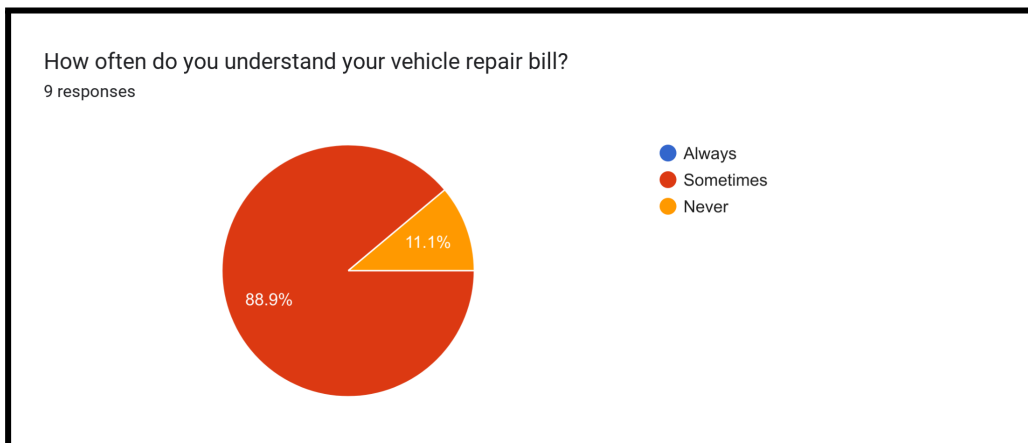
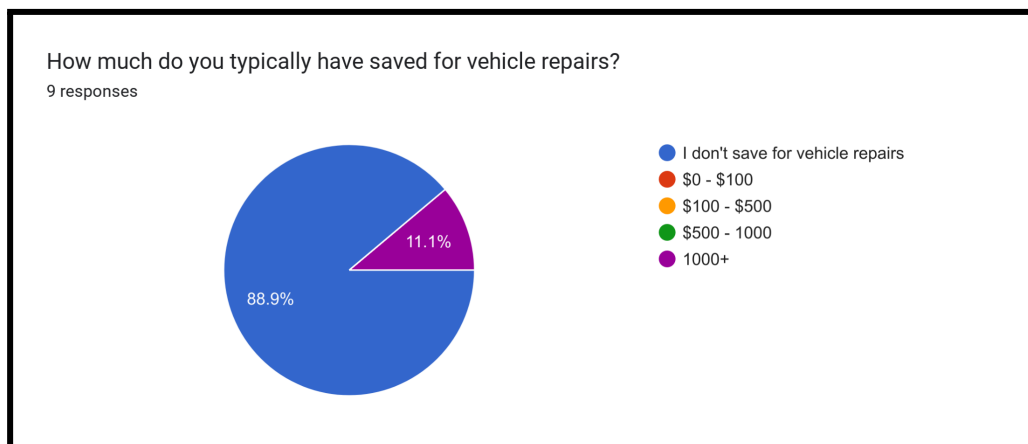
- User Research indicated a number of pain points in the car repair process, particularly surrounding recommended versus needed repairs.
 - While this is out of scope for the current MVP, further research could be conducted to determine what customers need to understand which repairs are actually necessary.
- Due to the time and monetary constraints of the project, we opted to use static data in order to test the MVP. We recognize that in a business environment a long term solution to the repair data is needed. Some things we would have tested and considered are:
 - Crowdsourcing the data: Allowing customers and Mechanics/Auto Shops to submit bills or quotes to build our database.
 - APIs to active databases
 - Solving the problem in a specific city, etc., in order to test the MVP

Appendix

Product Discovery

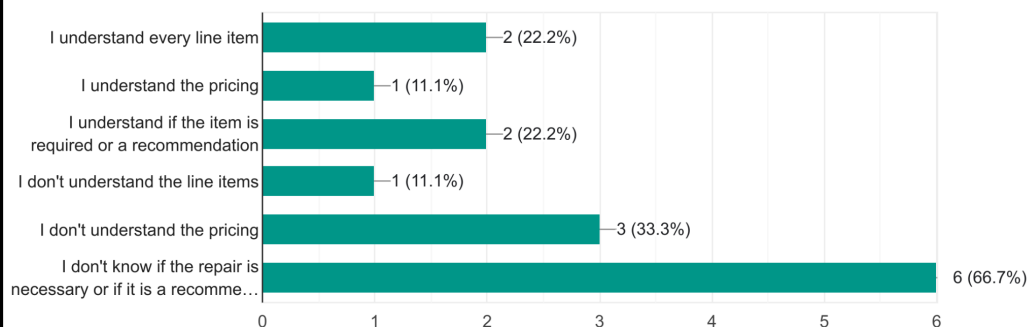
Survey

Due to time constraints the survey data is not representative of the population as a whole. All survey respondents are millennials who match the target demographic: car owners who are on a budget or who are conservative spenders.



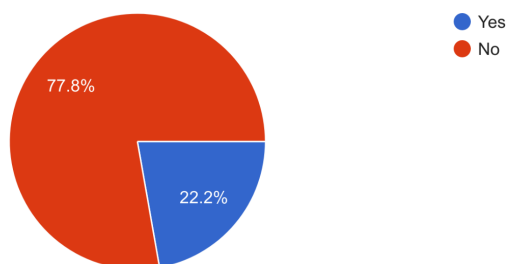
Which of the following best describes your experience reading your vehicle repair bill? Please select all that apply.

9 responses



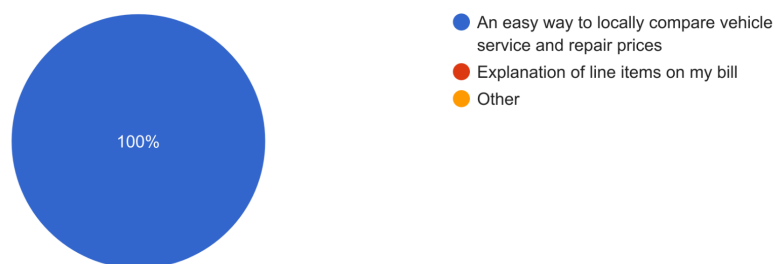
Do you compare prices before taking your vehicle in for service?

9 responses



Which of these services would provide more value to you in terms of vehicle service and repairs?

9 responses



User Interviews

Interview 1

- What is your experience of determining pricing at an auto shop/mechanic like?
 - Confusing, don't know where to start
 - People say mechanics will rip you off
 - I always feel like I'm over charged
 - I don't trust them
 - It's always expensive, results in anxiety around vehicle
- What are the challenges you experience with the bill?
 - Not knowing what things are (on an itemized bill)
 - Don't know about cars, don't know if the repair is necessary
 - Valvoline is the only place I haven't felt that way - I didn't feel like they were trying to upsell me.
 - Always recommend fixes because they don't want to be liable. Use fear to sell.
- What tools do you use to solve this problem?
 - None
 - Reach out to my dad
- Why don't you use tools?
 - There is no tool to help me solve my problem (problem = cost and not knowing if it is necessary)
- What would make this better?
 - A way of checking the cost for common repairs and maintenance (bill comparison etc.)
 - A schedule of how and when to take care of my car: when to get the oil changed, when to check levels of XYZ, when to get wheels rotated, etc. Essentially, an easy way to know when to do things and how.

Interview 2

- What is your experience of determining pricing at an auto shop/mechanic like?
 - Prices are almost always double what I expected
 - Even when I go to get an oil change, where I expect the bill to be \$40, they tell me I need to get 3-4 things done. It is hard to figure out quickly if those repairs are actually needed.
- What are the challenges you experience with the bill?
 - Not knowing if the extra items need to be done, or if they can wait
- What tools do you use to solve this problem?
 - Google what parts cost
 - Coupons to offset costs
 - Ask if it would fail inspection with the issue
 - Don't feel like you can negotiate

- What is lacking when it comes to these tools/solutions?
 - Once the car is there, I feel stuck
 - They charge me for looking at it and that cost wouldn't transfer
- What would make this better?
 - A tool that compared prices at each location
 - Knowing cost of certain things ahead of time

Interview 3

- What is your experience of determining pricing at an auto shop/mechanic like?
 - I'll do a google search to try to find the best deal, but outside of that - whatever they quote me, that's what it is.
 - Though, when I find an auto shop where I like the people and it SEEMS like their prices are fair - I stick with them until the end of time.
- What are the challenges you experience with the bill?
 - I'm paying for it, but did they overcharge me?
 - Did I NEED to get their suggestions done or were those upsells that were more of "nice to haves"?
 - If it's a big fix like replacing my muffler, why do I feel like I need to take out a loan to get it fixed? Break down that cost for me!
- What tools do you use to solve this problem?
 - Nothing. I usually just pay it and go about my day.
 - And then, of course, I grumble about it to my friends and family and then THEY tell me where I could've gotten it cheaper OR they'll say, "Yeah, that's about right..."
- What is lacking when it comes to these tools/solutions?
 - I talk to my friends and family after the fact which obviously doesn't work for me since I need their advice AT THAT MOMENT. Sometimes I don't have the luxury of time to research.
- What would make this better?
 - Beforehand
 - Describe to the shop what you need
 - Find nearby shops with quotes for x repairs
 - Knowing that part of the price was for quality service would be helpful

Interview 4

- What is your experience of determining pricing at an auto shop/mechanic like?
 - It's always a bit intimidating
 - I was getting an oil change and I felt like they tried to add on more "needed services"

- What are the challenges you experience with the bill?
 - I don't have a lot of knowledge about cars/auto maintenance
- What tools do you use to solve this problem?
 - Google(while at the Auto shop)
- What is lacking when it comes to these tools/solutions?
 - It can be a bit time-consuming when you need a quick answer
- What would make this better?
 - Central location for general maintenance
 - Don't take the time ahead of time
 - Average range
 - Reduce user error
 - What are recommendations that mechanics make that aren't needed

Interview 5

- What is your experience of determining pricing at an auto shop/mechanic like?
 - It is confusing and convoluted
- What are the challenges you experience with the bill?
 - It's hard to know in advance what you will be charged and difficult to negotiate (especially as a female)
- What tools do you use to solve this problem?
 - Google to take a look at reviews and see if there are notes about what others have paid for certain services
- What is lacking when it comes to these tools/solutions?
 - The information is very incomplete and not verified
- What would make this better?
 - Not knowing what to expect (problem), not knowing what to expect (bill)
 - Transparency of cost
 - Price comparison

Interview 6

- What is your experience of determining pricing at an auto shop/mechanic like?
 - Sometimes stressful. I do some research ahead of time to understand how much is normal.
- What are the challenges you experience with the bill?
 - Not knowing what to expect or not understanding the items.
- What tools do you use to solve this problem?
 - Google

- What is lacking when it comes to these tools/solutions?
 - No standard resource of what to expect
- What would make this better?
 - Clearer breakdown of the bill
 - Understanding price ranges ahead of time

Interview 7

- Can you tell me about your experience going to an auto shop and getting a price for a repair?
 - Yes, I have gone to an auto shop before to get a price for a repair. I usually call the shop beforehand to describe the issue and ask for an estimate on the cost. When I arrive at the shop, the mechanic checks the car and provides a more detailed quote, including the cost of parts and labor.
- How did you decide which shop to go to?
 - I research online looking for shops in my area with good ratings and reviews. I also asked friends and family for recommendations. I end up choosing a shop that has a good reputation and reasonable prices.

Interview 8

- Can you tell me about your experience going to an auto shop and getting a price for a repair?
 - Yes, I have gone to an auto shop a few times for car repairs. When I need to get a price for a repair, I usually call the shop and explain the issue with my car. The mechanic will usually ask some questions and give me a rough estimate over the phone. When I bring the car in, they do a more thorough diagnosis and provide a more accurate price.
- How do you feel about the price you receive at the auto shop?
 - I have been fine with the prices I have received at the auto shop. However, I know there have been a few instances where I felt the price was too high and I didn't need a repair. In those cases, I asked for a breakdown of the cost or sought a second opinion to see if the price was fair.

Interview 9

- Can you tell me about your experience finding a good mechanic and getting a fair price for car repairs?
 - Yes, I have had to find a mechanic a few times for various car repairs. When I need to find a mechanic, I start by doing some research online and looking for mechanics in my area with good ratings and reviews. I also ask friends and family for recommendations. However, I have had a few instances where I was not happy with the service I received. In one case, I took my car to a mechanic to get a faulty muffler replaced. The mechanic ended up charging me for additional work that I didn't need, such as replacing the exhaust pipe and catalytic converter. It was a frustrating and costly experience, and it made me lose confidence in the mechanic.
- How do you feel about the process of finding a good mechanic and getting a fair price?
 - I feel like the process of finding a good mechanic and getting a fair price can be challenging and stressful. It can be difficult to know who to trust and whether you are getting a fair price. I have had a few negative experiences in the past, and it has made me more cautious about choosing a mechanic. I always make sure to do my research and ask for a detailed breakdown of the cost before agreeing to any repairs, but it can still be difficult to know if you are getting a good deal. It would be helpful if there was a more transparent and trustworthy system for finding mechanics and getting fair prices for car repairs.

Iterative Testing

Research Plan

- Goal 1
 - To understand if the purpose of DCQ is clear to users
- Goal 2
 - To test the prototype and understand if the UX/UI is intuitive and works
- Survey
 - Will act as a screener for our live testing
 - Will test goal 1
 - Who & How - friends, family, share on Co.Lab discord
- Live Prototype Testing
 - Who & How - opt ins from the survey, friends and family as a backup
 - Research Method - open ended testing
 - Video call, video on and screen shared. Give high level scenario and then let the user navigate through the prototype with no questions and little to no prompting
 - Questions asked at the end based on observations
 - How did x make you feel?
 - I noticed y, can tell me what you were thinking?

Survey 1: DCQ Purpose

After a series of screening questions, the splash page for DCQ was displayed. We asked: What do you think is the purpose of this website?

- Car maintenance repair quote comparison; checking for the most affordable vendor in the area.
- The word deals makes me think of coupons. Otherwise, I think it gets the point across that it's about comparing prices. That may be worth saying explicitly, though. I left a website this week because I wasn't sure what it was for.
- To find the best auto repair deals in your area
- A site to survey car repair shops for repair quotes.

User Testing

Test 1

 UX | Luke.mp4

 DCQ User Interview - Luke Corona

Test 2

 UX | Dan.mp4

 DCQ User Interview - Dan

Test 3

 UX | Adam.mp4

 DCQ User Interview - Adam

Test 4

 DCQ User Interview Azhar Ahmad

Synthesis: Action Items

- Page 1: Splash & Zip input
 - Adjust proportions to ensure input field for the zip code is visible on mobile without scrolling
 - Adjust the language to make it clear what DCQ can do and what the first step should be
- Page 3:
 - Later iterations should include a search to find more maintenance/repair options
- Page 4: Confirmation page
 - Cut this page
- Page 5: Price comparisons
 - No “user action” which was confusing for people. Want contact info or a way to book an appt.
 - The picture of the map made people expect a map - should consider removing this to eliminate confusion
- All Pages
 - Navigation
 - Remove arrows
 - Either
 - Next and back buttons
 - Bread crumb nav at the top (to go back) and a “next” button to move forward
 - Either have the Logo or the words “Dr. Car Quotes”
 - Both present confused people as they tried to find a way to click to the home page