

■ Demo Developer Test

The goal of this exercise is two-fold. First it is to see how you make use of a variety of technical tools and components of the CARTO stack. The second, is to see how you can tell a story with the application you developed and the choices that went into telling that story. Almost every time, the story a demo can tell is just as, if not more important than, showcasing the technology itself.

Your challenge is to build a demo app using past home sales data from Los Angeles County in the US, and to make a demo that can tell a compelling story to a customer as well. Imagine that the customer is an investor in homes and properties in LA and want to know more about properties and investments in this area.

You will have access to a CARTO account and the past home sales data to build the demo. The rest is up to you!

Part 1: Data Prep

The data for the past home sales can be accessed here:

https://solutionscdb.carto.com/u/mbforrcdb/dataset/la_homes

Feel free to use as much or as little of the data as you want from the original dataset. You can also add other datasets or layers that you think would be interesting to add some context to the application. You can take a look at LA County Open Data for some data: <https://data.lacounty.gov/>

Some things that you can showcase here are:

- Data Prep & Joining
- Queries in PostgreSQL
- PostGIS Skills
- Anything else you think is interesting!

Part 2: Application

The next, and most important part is the application itself! The goal here is to see:

1. How you can use the different parts of the CARTO Platform, specifically CARTO.js or CARTO VL and Airship and the SQL API.
2. What elements you will include or add to the application to help the customer find insights in the data and in the application you built (ex. widgets, pop ups, filters, map styling, interactivity, etc.)
3. How you can tell a story with the application that would be interesting for the customer.

The most important things to show are that you can use the CARTO technology to build an exciting application and have it tell a story based off the components you choose to build.

As for the technical architecture of the application, feel free to use any technical architecture or framework that you choose. You can do a pure vanilla Javascript + HTML/CSS application, use Vue or React, or you can use [Isthmus](#) to build a React app with some pre-built components.

For deliverables you can share the files with us or a GitHub repo with a simple `README.md` on how to run the app. From there, we will want to have you show us your demo and walk us through it in a short call, and to discuss how you built the application.

Below are some resources for you to get started:

- <https://carto.com/developers>
- <https://carto.com/developers/carto-js/>
- <https://carto.com/developers/carto-vl/>
- <https://carto.com/developers/airship/>

And most importantly, you can (and are encouraged) to ask questions about this process. If you have a technical question or a question on what the customer might want to see, don't be afraid to reach out and ask! A big part of this exercise is not just the technical implementation, but learning how you think through a problem.

Any questions you have you can email Jose (jmartincorral@carto.com) and Matt (matt@carto.com)!