

# Fullstack Home Assignment

Thank you for taking the time to complete this assignment. It's designed to gauge your Fullstack skills, with an emphasis on **React**, and give us an idea of how you approach tasks.

*Make sure to read the entire document before you begin designing and implementing your solution. Whenever assumptions are taken, we ask you to be as explicit as possible.*

**General:** Our platform is designed to serve and visualize data in various ways. We put emphasis on speedy and efficient queries along with intuitive UI/UX.

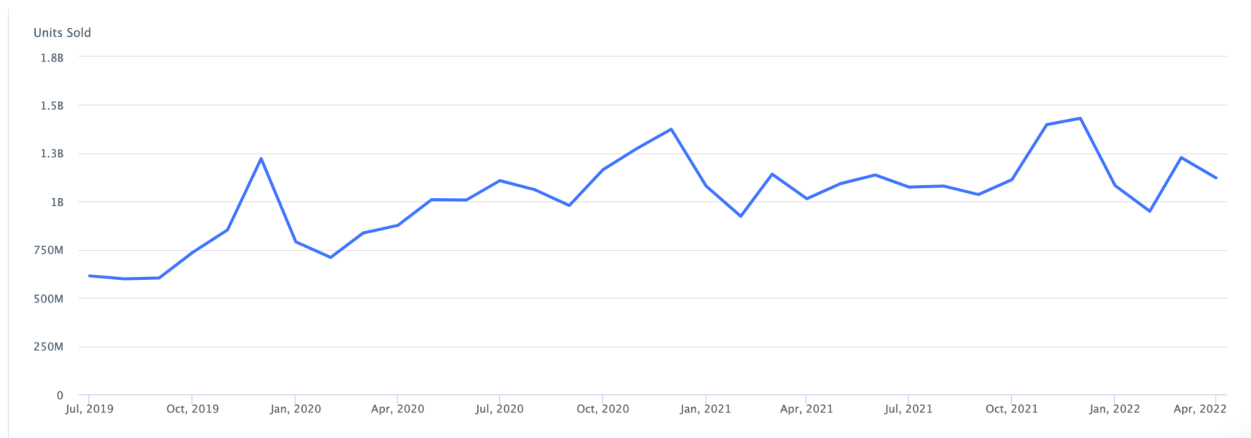
**Task:** In this assignment you are asked to produce a web application that visualizes data in 2 elements: time-series chart and table

**Data:** You will be provided with mock data in a csv file together with this instructions document. The data consists of several performance metrics, broken down by several categories, on a 6 months time frame

## User Interface

### Chart:

- Present summed data as a time-series trend chart. Y-axis can be any of the metrics in the csv file (revenue, units\_sold, or product\_views)
- Recommendation: use [highcharts](#) package
- **Bonus:** draw 2 trend lines, each for a different metric



### Table:

- Present a table with summed metrics over categories (see basic structure below).
- Add a CVR column which is calculated by:  $cvr = \text{units\_sold} / \text{product\_views}$
- **Bonus:** add change ratio per category throughout the time frame. I.e change from first sample to the last

Category	Product Views	Revenue	Units Sold	CVR
Category A	100	1000	5	5%

## Server

- You should consider creating a data access layer, specifically in memory SQL server like sqlite.
- **Bonus:** how would you handle a query of a very large table for the needed data (say 100M rows)? Which tool and technique would you suggest using?