

## Job Title: Front-End Developer (React, Material UI)

To assess the candidate's skills, we have devised the following assessment. Successful completion of this task will result in a \$150 USD reward, irrespective of whether the candidate is ultimately hired. To be able to claim your reward, the web app no only needs to satisfy all requirements below but also to be fast and sleek looking. You have 24 hours to complete this assessment. Faster completion time will be taken into consideration.

### Background & Data:

The Federal Motor Carrier Safety Administration is an agency in the United States Department of Transportation that regulates the trucking industry in the United States, it shows multiple parameters for a trucking company, such as MC, DOT, Carrier/Broker/Shipper, Inspections etc.. (Check picture).

USDOT INFORMATION			
Entity Type:	CARRIER		
USDOT Status:	ACTIVE	Out of Service Date:	None
USDOT Number:	3972563	State Carrier ID Number:	
MCS-150 Form Date:	07/16/2024	MCS-150 Mileage (Year):	14,625,000 (2024)
OPERATING AUTHORITY INFORMATION			
Operating Authority Status:	AUTHORIZED FOR Property For Licensing and Insurance details <a href="#">click here</a> .		
MC/MX/FF Number(s):	MC-1484918		
COMPANY INFORMATION			
Legal Name:	SMJ FREIGHT LLC		
DBA Name:			
Physical Address:	7333 GRAND AVE UNIT 103 DOWNERS GROVE, IL 60516		
Phone:	(217) 481-8818		
Mailing Address:	7333 GRAND AVE UNIT 103 DOWNERS GROVE, IL 60516		
DUNS Number:	--		
Power Units:	300	Drivers:	300
Operation Classification:			

[For data file click here](#)

## **Requirement:**

Create a hosted web app using React and Material UI with two views using the data provided above. One view is a table and chart that updates as the table changes. The second view is a pivot table with a corresponding pivot chart that updates in sync as well.

- Include all data from the data file
- Table view needs to have:
  - Pagination
  - Column filters
  - Sorting
  - Search
  - Format data fields as appropriate
  - Ability to customize the columns size displayed and their order
- Data in the chart should be editable and saved after closing the browser
  - Cells should have data validation e.g. datetime fields can only accept date-time inputs
- Corresponding chart should be a bar graph that displays all the companies that went "Out of Service" per month
  - Note: Bar graph must be table filters aware. E.g if user filters for entity\_type="CARRIER", the chart should only account for entity\_type="CARRIER" records
- App should remember the user's table setup until cache is cleared
  - Extra modal that allows saving and loading views/templates
  - Ability to reset table setup settings to default
- Pivot table version of the table
  - Datetime groupable by year/month/week
  - Pivot chart should sync with the pivot table
- Allow generating share links where if another user clicks the share link, they see the same table format and data as you
- Host it somewhere and show us the link
- Make loom presenting their dashboard and code

Please ensure all required information and documentation are accurately compiled and submitted for review to my email [mario@spotter.ai](mailto:mario@spotter.ai)

Good Luck!



**Mario LopezVital**  
Hiring Manager



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