Sprint-1 Artifact

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Dataset:

- US Accidents
- Link
- Size: 569.14
- Files: 1

Known Data

- Street, city, and state of accident.
- Accident occured at a traffic signal.
- Distance of road affected by accident.
- Temperature and weather conditions at time of accident.

Platform:

Web Application

Programming Languages:

- HTML
- CSS
- Javascript

Frameworks / Libraries / Other technologies:

- ReactJS
- NodeJS

Features List:

- Average length of road affected by accident.
- Average time duration for an accident.
- Number of accidents per state
- Search accidents by date and time
- Search accidents by severity
- Top 10 most accident prone cities
- Top 5 most accident prone states
- Most popular weather condition for accidents
- Most popular start time for accidents
- All accidents in a certain range of time.
- Duration of accident (search the accident description or keyword)
- Location of accident is highway or road

Backend

1) Create a react application
2) Create backend /folder inside with node js(npm init) inside react app folder
3) Install dependencies there (express)
4) Create a server file(include dependencies (express))
5) Create models folder with models for data
   Model:
   Schema
   Module.exports = schema name
   (organizes the way data is send)
6) Create routes folder with routing of http requests
7) Include routes in server file

Frontend

8) In the react application under the src folder create a components folder with your components.
9) Follow format of the component and connect the backend http requests with frontend requests using axios or fetch.

DEMO:

US_Accidents_Dec20_updated.csv

1) Create a nodejs application(npm init) and install dependencies
2) Create a server file with dependencies and use app.listen to start server
3) Add a routing file with http requests and import it into server file
4) Using above csv file , do http get request for date
5) And another http get request for trips