Client Brief Project: Earthquake Detection Program

Project Description:

The Extraordinary Collective of Superheroes has contracted you to help them monitor earthquakes, so they can send the right superheroes to each event. If the quake has a magnitude of under 3.5, it's a great PR opportunity for General Geology-Teacher and we want to make sure they get a chance to do what they're best at. If the quake has a magnitude between 3.5 and 6, we want to send Rich Mortal to reassure the people with their flashy technology. With a magnitude between 6 and 7, we want to send StrongGood to help out with their unnatural lifting abilities, and anything above 7 we want to send the whole crew. Of course, we need to keep track of how many incidents each superhero is sent to, to make sure they accrue the right amount of vacation.

Requirements:

- Use the USGS API, a maps library (i.e. mapquest or leaflet), and Firebase.
- Mark the earthquakes over the past 24hrs as markers on a map.
- Colour-code the markers to the superhero (severity) of the quakes. Make sure you include a legend.
- Accurately store the number of incidents each superhero has been sent to in Firebase. Start keeping track from the day you set up your Firebase database for this project.
- Keep a tally under the map of the events attended to by each superhero.
- Proper error handling. For example:
  - If a user types in a query that yields no result - they should be provided feedback (e.g there were no items found)
  - Common error responses should be handled
  - API loading states

Stretch Goals:

- Implement a “Get Latest Data” button to re-query the API for its absolute latest data.
- After implementing “Get Latest Data”, if the button is clicked and a new quake between 3.5 and 6is detected, play a fun visual effect to let us know that Rich Mortal should be dispatched. Do the same for StrongGood and the whole crew at the specified quake levels.
- Create a new tab with a map that displays Tsunamis over the last year.
- Allow the user to select which superhero they’d like to see the totals for, and calculate the number of vacation days they’ve accrued. (You can decide on your own way to calculate this, it can be as simple as dividing their total incidents by 10).