

WorldEarthQuakes

12th August 2022

OVERVIEW

Create a React application that provides a way to view the recent earthquakes around the world. The app must be user friendly and responsive. The app must have a visual representation of the earthquakes, the magnitude, and the location (interactive map)

GOALS

1. Have a way to view the earthquakes via a **map**
2. Have a way to view the earthquakes via a **list**
3. Possibility to view details of each earthquake separately
4. Present a personal info section
5. Provide a way to send a contact message using a form

SPECIFICATIONS

- The app shall be created using the latest React framework. Follow the best practices for implementing each page and corresponding components (suggestion: functional components + hooks).
- For map location visualization use MapboxGL library. Feel free to customize it as you please.
- The earthquake data will be provided by The USGS Earthquake Hazards Program, part of the National Earthquake Hazards Reduction Program (NEHRP), and the USGS Advanced National Seismic System (ANSS) documentation available at:
<https://earthquake.usgs.gov/earthquakes/feed/v1.0/geojson.php>

- Earthquake color level:

Magnitude 1.0+	Magnitude 2.5+	Magnitude 4.5+


DESIGN

The design is composed of 4 pages: “Home”, “About”, “Contact” and an “Earthquake details” Page. Each one will be detailed below.

WorldEarthQuakes

HomeAboutContact

About



Name: YOUR_NAME

Age: YOUR AGE

Contact: YOUR_CONTACT

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful. Nor again is there anyone who loves or pursues or desires to obtain pain of itself, because it is pain, but because occasionally circumstances occur in which toil and pain can procure him some great pleasure. To take a trivial example, which of us ever undertakes laborious physical exercise, except to obtain some advantage from it? But who has any right to find fault with a man who chooses to enjoy a pleasure that has no annoying consequences, or one who avoids a pain that produces no resultant pleasure?

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DATA Source: The USGS Earthquake Hazards Program of the U.S. Geological Survey (USGS), part of the National Earthquake Hazards Reduction Program (NEHRP) led by the National Institute of Standards and Technology (NIST).

WorldEarthQuakes

HomeAboutContact

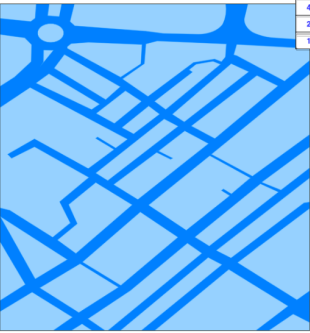
Search

Search

Past HourPast DayPast 7 DaysPast 30 Days

Magnitude

Any4.5+2.5+1+



M 4.5 - 84 km S of White City, New Mexico

View details

M 2.6 - 8km NNE of Whittier, CA

View details

M 2.0 - 5 km SSE of Pāhala, Hawaii

View details

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WorldEarthQuakes

HomeAboutContact

Go back

Earthquake Details:

Title:

M 2.0 - 5 km SSE of Pāhala, Hawaii

Place:

5 km SSE of Pāhala, Hawaii

Time:

Thursday, August 11, 2022 5:18:00 8:10 PM


Status:

automatic

Tsunami risk:

no risk

Magnitude: 2.0



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WorldEarthQuakes

HomeAboutContact

Contact

Send us a message

Your email:

@mdo

Name:

Message:

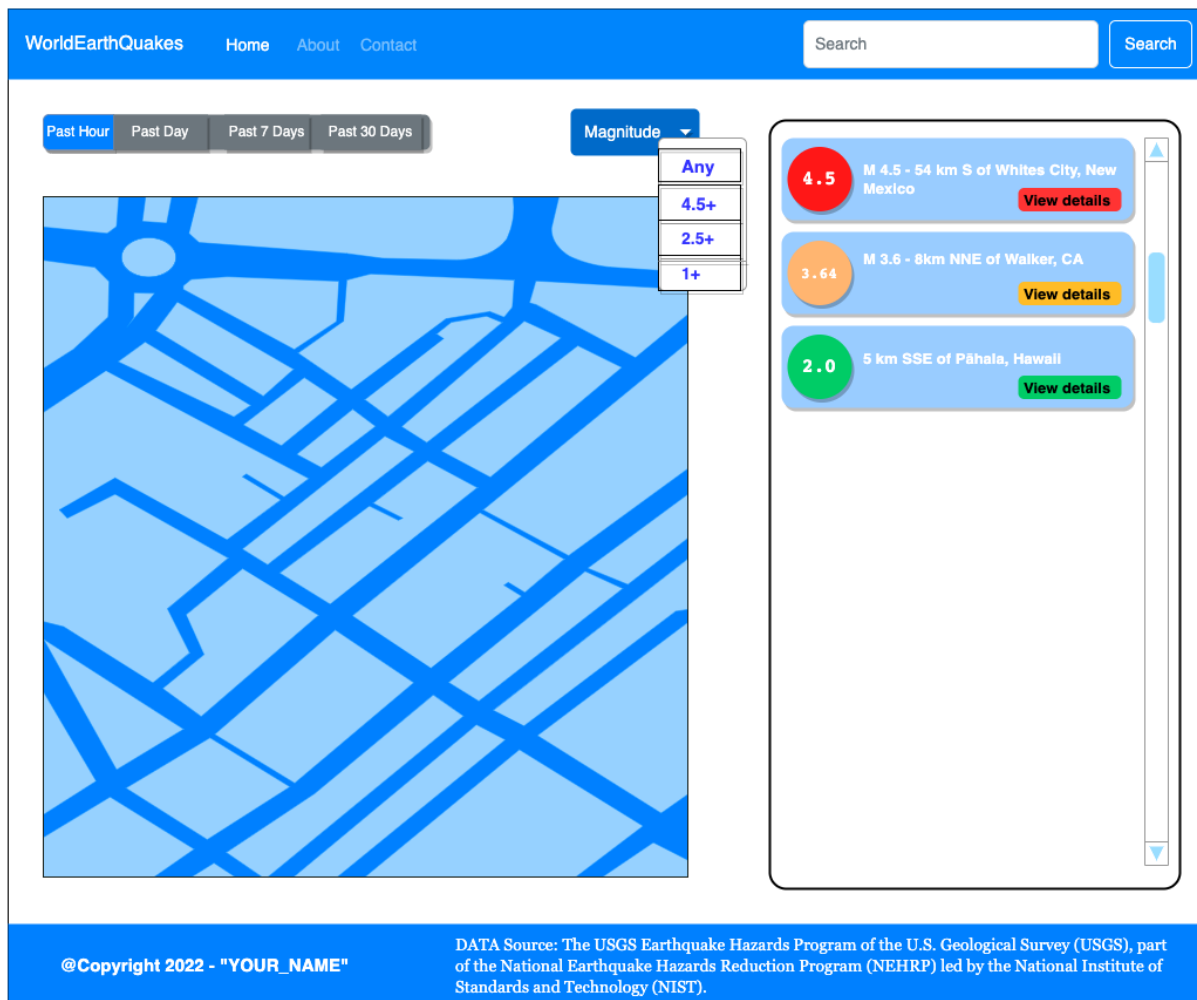
Reset form

Send message

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Home page:



Users are able to view the loaded earthquakes via a map and a list.

Different time intervals can be selected using a buttons group section ("Past hour, Past day, Past 7 days and Past 30 days).

- https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/all_hour.geojson
- https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/all_day.geojson
- https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/all_week.geojson
- https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/all_month.geojson

There should be available an option to filter the earthquakes by magnitude levels via a **dropdown**. Default values should be any, but when changing to another option a new API call should be executed to fetch the new data (example: for earthquakes in the past day that have a

magnitude greater than 2.5 the endpoint is:

https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/2.5_day.geojson)

PS: all endpoints are available at: <https://earthquake.usgs.gov/earthquakes/feed/v1.0/geojson.php>

Each item in the earthquake list has a badge showing the severity of the earthquake using a designated color. (red for earthquakes with magnitude greater or equal to 4.5; orange for magnitude greater or equal to 2.5 and lower than 4.5, and green for magnitudes greater or equal to 1.0 and lower than 2.5).

When the view details button is clicked, a details screen is presented for the selected earthquake. (more info in the following section)

Nice to have: when a user types something in the search box and clicks on the search button, earthquake options are filtered based on the search term typed.

Earthquake details page:

[WorldEarthQuakes](#) [Home](#) [About](#) [Contact](#)

[< Go back](#) **Earthquake Details:**

Title:
M 2.0 - 5 km SSE of Pāhala, Hawaii

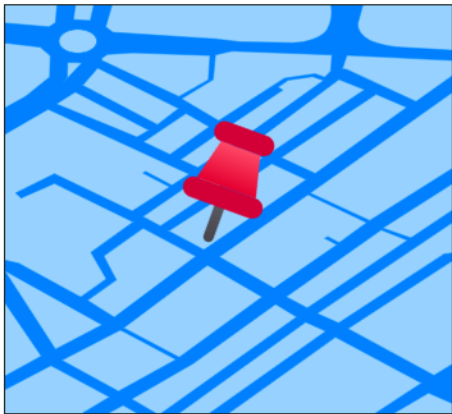
Place:
5 km SSE of Pāhala, Hawaii

Time:
Thursday, August 11, 2022 5:18:00.810 PM

Status:
automatic

Tsunami risk:
no risk

Magnitude: 2.0



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A new API call shall be made to fetch the details displayed in this screen.

```
{
  "type": "FeatureCollection",
  "metadata": {
    "generated": 1660247440000,
    "url": "https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/2.5_day.geojson",
    "title": "USGS Magnitude 2.5+ Earthquakes, Past Day",
    "status": 200,
    "api": "1.10.3",
    "count": 26
  },
  "features": [
    {
      "type": "Feature",
      "properties": { ... }, // 26 items
      "geometry": { ... }, // 2 items
      "id": "ak022a948y1q"
    },
    {
      "type": "Feature",
      "properties": {
        "mag": 5,
        "place": "Kermadec Islands, New Zealand",
        "time": 1660243579549,
        "updated": 1660246283040,
        "tz": null,
        "url": "https://earthquake.usgs.gov/earthquakes/eventpage/us6000i9zz",
        "detail": "https://earthquake.usgs.gov/earthquakes/feed/v1.0/detail/us6000i9zz.geojson",
        "felt": null,
        "cdi": null,
        "mmi": null,
        "alert": null,
        "status": "reviewed",
        "tsunami": 0,
        ...
      }
    }
  ]
}
```

Each detail must be displayed using a “label-value” component that can be reused.


Also a “go back button” is available to navigate back to the previous screen (“home” in this case).

About page:

WorldEarthQuakes

HomeAboutContact

About



Name: YOUR_NAME

Age: YOUR AGE

Contact: YOUR_CONTACT

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful. Nor again is there anyone who loves or pursues or desires to obtain pain of itself, because it is pain, but because occasionally circumstances occur in which toil and pain can procure him some great pleasure. To take a trivial example, which of us ever undertakes laborious physical exercise, except to obtain some advantage from it? But who has any right to find fault with a man who chooses to enjoy a pleasure that has no annoying consequences, or one who avoids a pain that produces no resultant pleasure?

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A simple page where your photo, name, age, contact and description is displayed. Nothing too complicated. Just try to accomplish this layout.

Contact page:

WorldEarthQuakes

Home

About

Contact

Contact

Send us a message

Your email:

@mdo

Name:

Message:

Reset form

Send message

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DATA Source: The USGS Earthquake Hazards Program of the U.S. Geological Survey (USGS), part of the National Earthquake Hazards Reduction Program (NEHRP) led by the National Institute of Standards and Technology (NIST).

On this page a contact form containing the following required fields: name, email and message. Feel free to add any extra fields if you want.

Please use Formik library for implementing this. Suggestion: use yup library for validating the required fields.

<https://formik.org/docs/overview>

<https://github.com/jquense/yup#schema-basics>

Nice to have: Add recaptcha to prevent any bots.

Ps: an endpoint where to submit the form will be provided later on.

MILESTONES

- ☐ Monday, 15.08.2022 - Have a basic structure for the app, with navigation, Header and Footer
- ☐ Tuesday, 16.08.2022 - The HomePage should be done.
- ☐ Wednesday, 17.08.2022 - Earthquake Details screen
- ☐ Thursday, 18.08.2022 - Contact Page should be working
- ☐ Friday, 19.08.2022 - About Page

A basic map component example will be provided by the start of the week.

For any questions or unclarities please ask.

If you get stuck, also ask for help.