



# Weather & Hike Trails Web App

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# Weather Dashboard

- Check weather of any location.
- Get 5 days forecast of any location
- Check weather and check for a hike.



# Features

- Search weather by City Name.
- Geo location
- Get 5 days weather forecast
- Get 24 hours weather information of given location.
- Link to home page and hike page
- Changing background image according to weather condition.



# Stack

- FRONT END → HTML5, CSS3, JAVASCRIPT, ReactJS
- BACK END → Node.js, REST API's
- API used: OpenWeatherMap API



# Major problem encountered

- Difficulty with displaying background image according to weather condition.
- Tried using getElementById to display background image but didn't work.
- Difficulty displaying forecast.



# Solution

- Used style attribute to set background image according to weather condition.
- Used props to display forecast data.



# Future work

- More information about weather like UV index, humidity, pressure etc.
- National weather alert message.
- Weather map



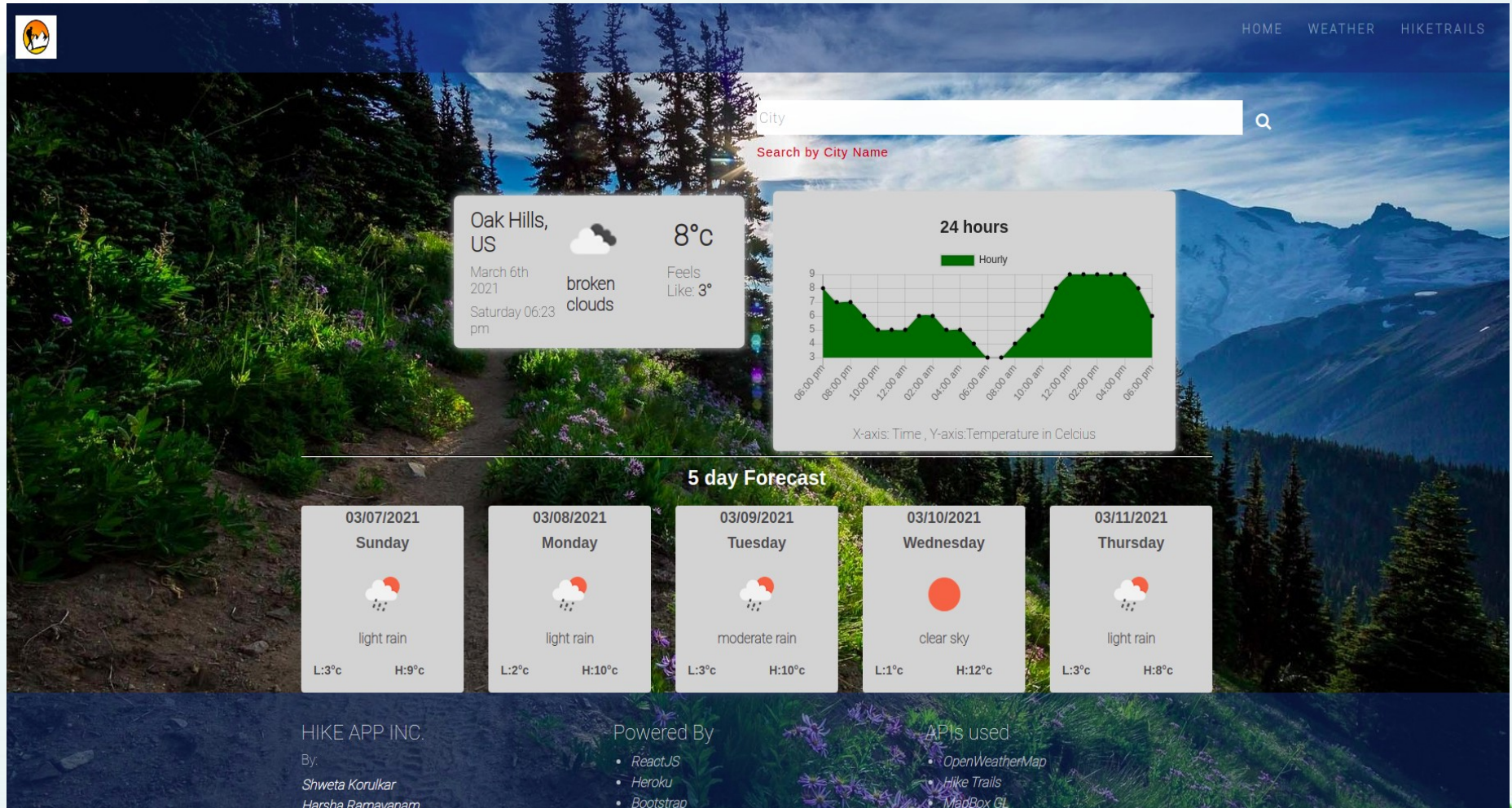


# Demo- Home page

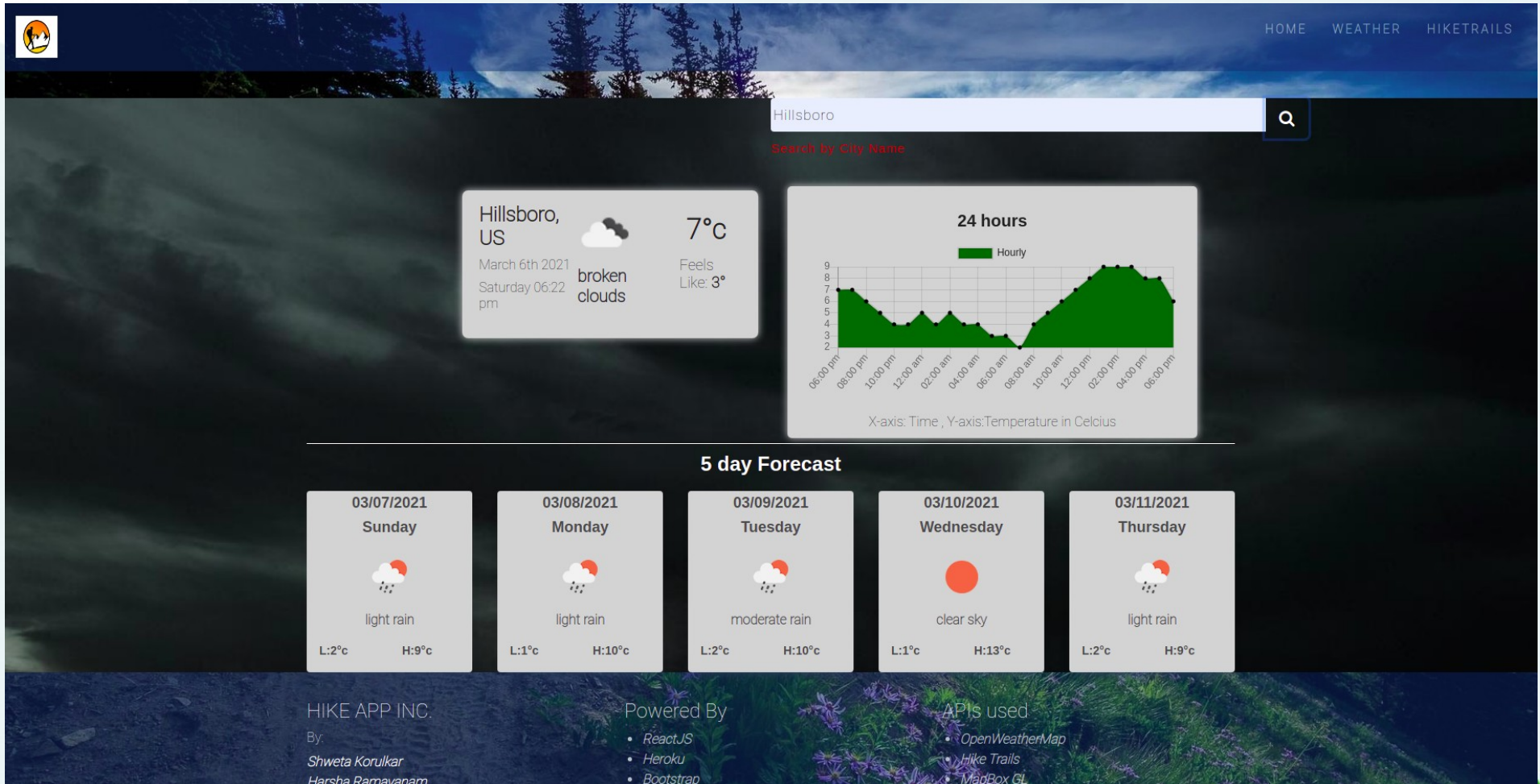




# Demo - geolocation feature



# Demo – Search by City Name





# Hiking

- Search for various hikes present in the US.
- More narrowed searched available.



# Features

- Various search options.
- Results filtered by user input.
- Various stats displayed with good UI.
- Get Directions based on geolocation.
- Check weather at that hike location.



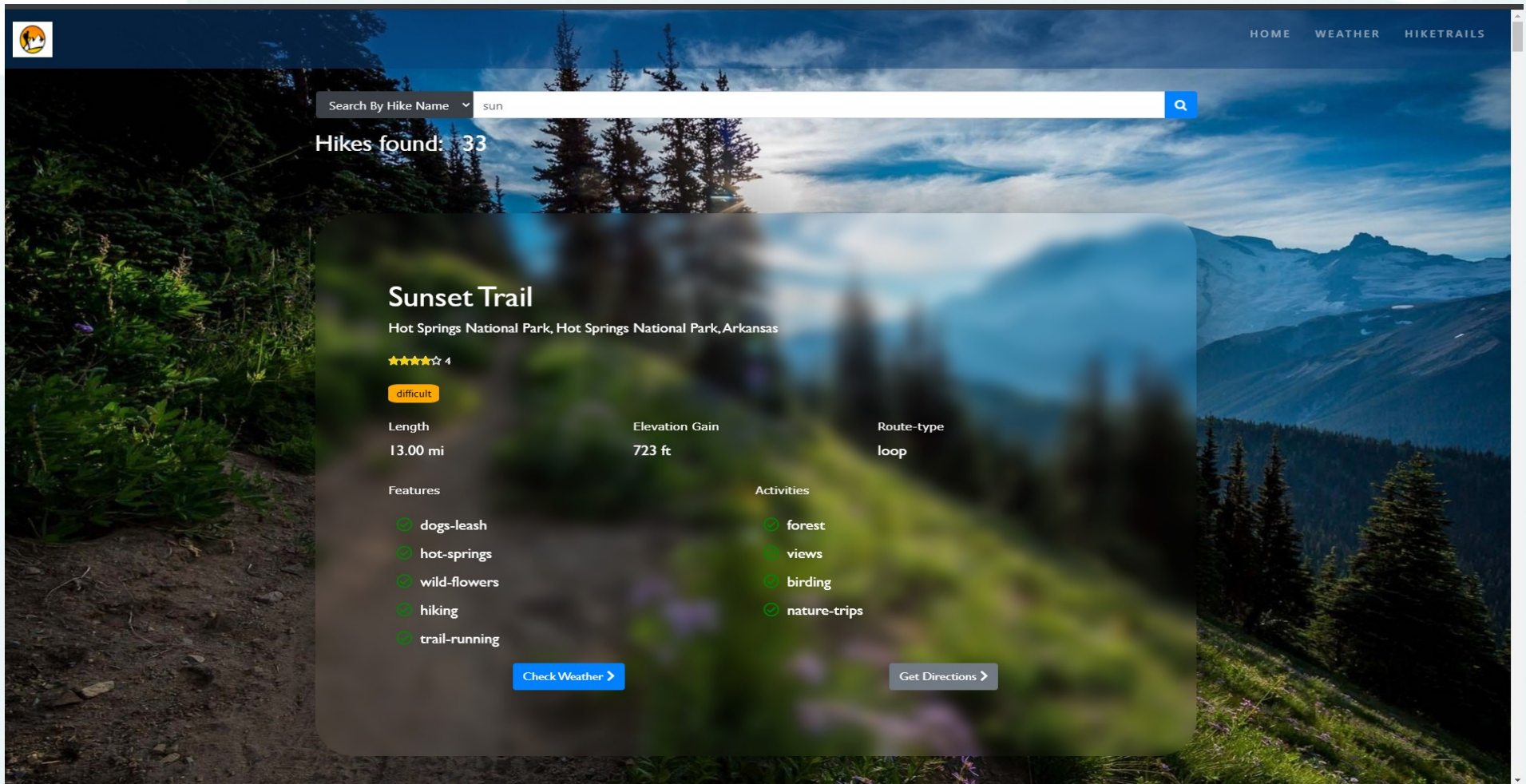
# Stack

- FRONT END → HTML5, CSS3, JAVASCRIPT, ReactJS
- BACK END → Node.js, REST API's
- API used: MapBoxGL API, All Hike-trails dataset.





# Demo – Search by hike name



The screenshot shows a website interface for finding hikes. At the top, there's a navigation bar with links for HOME, WEATHER, and HIKETRAILS. A search bar is prominently displayed with the text 'Search By Hike Name' and a dropdown menu showing 'sun'. Below the search bar, it says 'Hikes found: 33'. The main content area features a detailed view of the 'Sunset Trail' in Hot Springs National Park, Arkansas. The trail is rated 4 stars and is labeled as 'difficult'. It provides key statistics: a length of 13.00 miles, an elevation gain of 723 feet, and a loop route type. A list of features and activities is provided, including dogs-leash, hot-springs, wild-flowers, hiking, trail-running, forest, views, birding, and nature-trips. At the bottom of the trail card, there are buttons for 'Check Weather' and 'Get Directions'.

HOME WEATHER HIKETRAILS

Search By Hike Name sun

Hikes found: 33

## Sunset Trail

Hot Springs National Park, Hot Springs National Park, Arkansas

★★★★☆ 4

difficult

Length	Elevation Gain	Route-type
13.00 mi	723 ft	loop

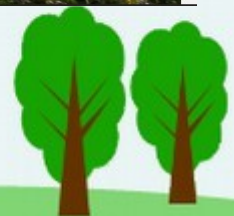
### Features

- dogs-leash
- hot-springs
- wild-flowers
- hiking
- trail-running

### Activities

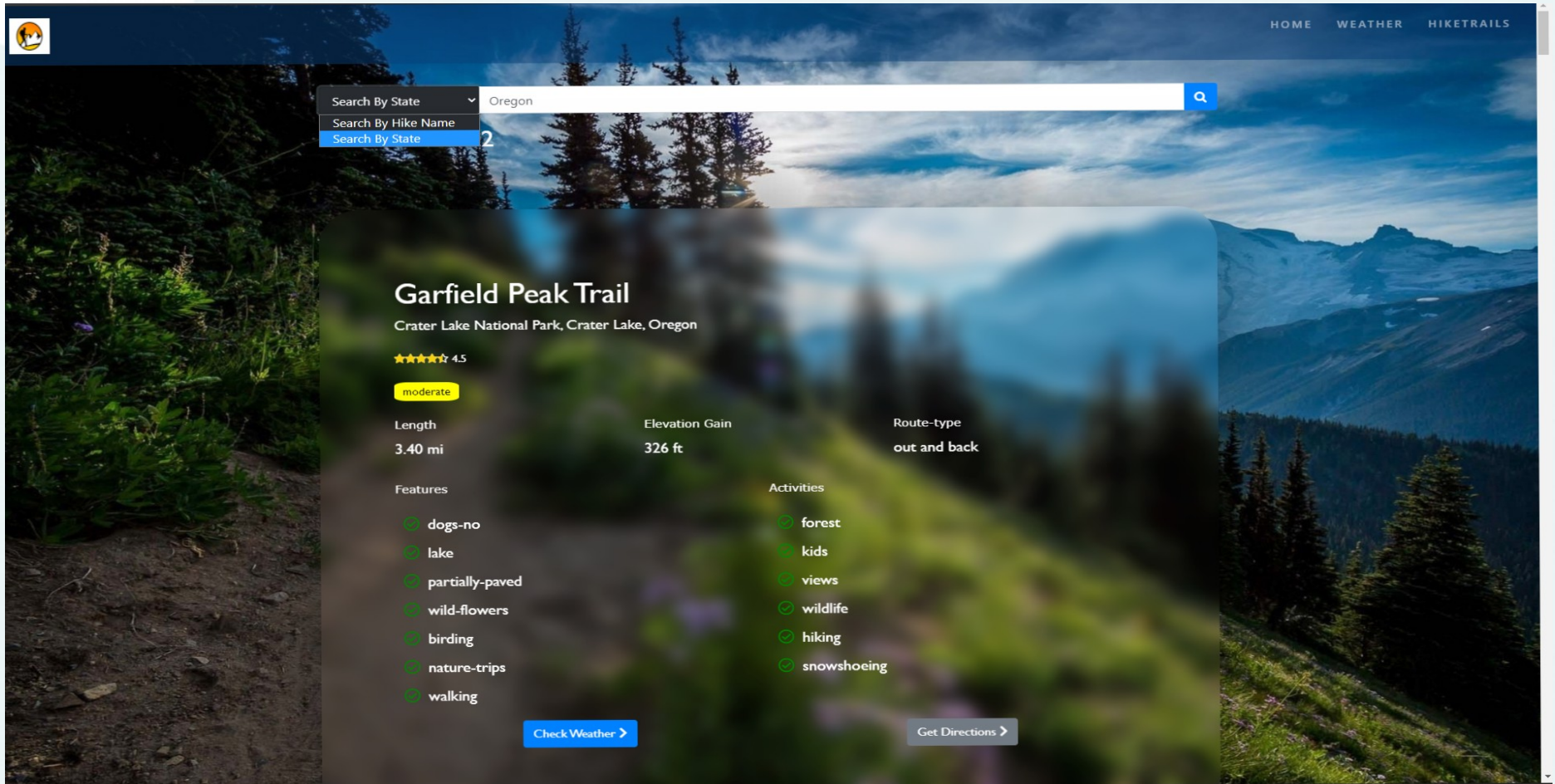
- forest
- views
- birding
- nature-trips

[Check Weather >](#) [Get Directions >](#)





# Demo – Search by State



The screenshot displays the HikeTrails website interface. At the top, a navigation bar includes links for HOME, WEATHER, and HIKETRAILS. A search bar is prominently featured, with a dropdown menu showing 'Search By State' selected, and 'Oregon' entered. Below the search bar, a card for 'Garfield Peak Trail' is displayed. The card includes the location 'Crater Lake National Park, Crater Lake, Oregon', a rating of 4.5 stars, and a 'moderate' difficulty level. Key statistics such as Length (3.40 mi), Elevation Gain (326 ft), and Route-type (out and back) are listed. Two columns of features and activities are provided, each with a green checkmark icon. At the bottom of the card, there are buttons for 'Check Weather' and 'Get Directions'.

HOME WEATHER HIKETRAILS

Search By State Oregon

Search By Hike Name

Search By State 2

## Garfield Peak Trail

Crater Lake National Park, Crater Lake, Oregon

★★★★☆ 4.5

moderate

Length 3.40 mi Elevation Gain 326 ft Route-type out and back

Features

- dogs-no
- lake
- partially-paved
- wild-flowers
- birding
- nature-trips
- walking

Activities

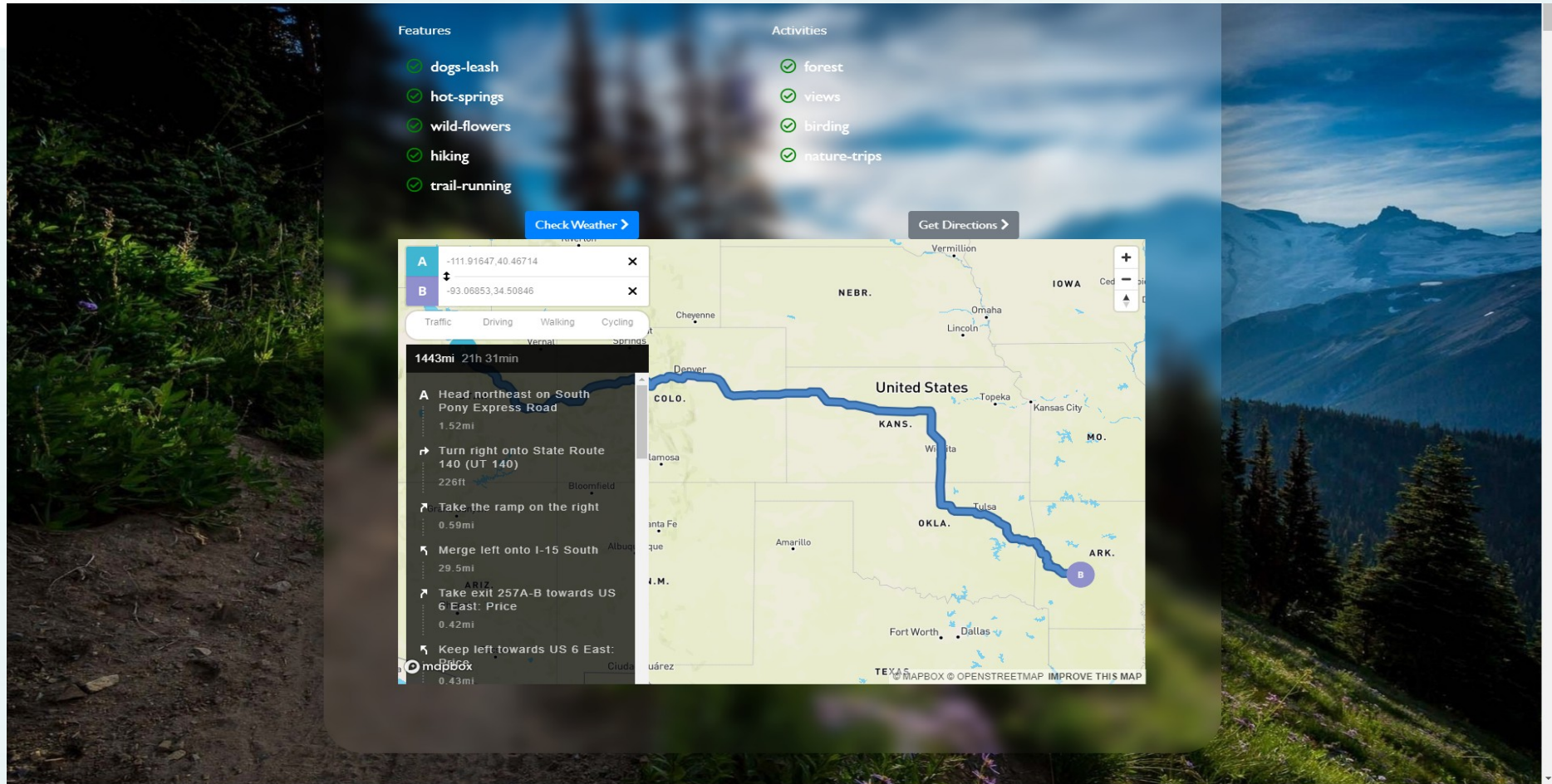
- forest
- kids
- views
- wildlife
- hiking
- snowshoeing

Check Weather >

Get Directions >



# Demo – Get directions





# Major problems encountered

- Footer not staying at the bottom if page has less content.
- Difficulty in displaying star-ratings for a hike.
- Encountered problems with passing prop variables to parent components.



# Solution

- Fixed the footer problem with a simple CSS flexbox trick.
- Fixed the calculation for star-rating and displaying styles for them as inline-styles.
- Fixed passing prop variables to any React component using useContext hook.





# Future work

- Add some more stats for hikes.
- Create User accounts.
- Display messages “open” / “closed” due to COVID situation.





Any Questions?

