

Objective:

To build a serverless, progressive web application (PWA) with React using a test-driven development (TDD) technique. The application uses the Google Calendar API to fetch upcoming events.

FEATURE 1: FILTER EVENTS BY CITY

SCENARIO 1: WHEN USER HASN'T SEARCHED FOR A CITY, SHOW UPCOMING EVENTS FROM ALL CITIES.

Given user hasn't searched for any city

When the user opens the app

Then the user should see a list of all upcoming events

SCENARIO 2: USER SHOULD SEE A LIST OF SUGGESTIONS WHEN THEY SEARCH FOR A CITY.

Given the main page is open

When user starts typing in the city textbox

Then the user should see a list of cities (suggestions) that match what they've typed

SCENARIO 3: USER CAN SELECT A CITY FROM THE SUGGESTED LIST.

Given the user was typing "Berlin" in the city textbox

And the list of suggested cities is showing

When the user selects a city (e.g., "Berlin, Germany") from the list

Then their city should be changed to that city (i.e., "Berlin, Germany")

And the user should receive a list of upcoming events in that city

FEATURE 2: SHOW/HIDE AN EVENT'S DETAILS

As a user, I should be able to expand/collapse an event element to see more/less information about it.

Scenario 1: An event element is collapsed by default

Given user hasn't clicked on the element

When the user opens the app

Then the event elements should be collapsed

Scenario 2: User can expand an event to see its details

Given the main page is open

When the user clicks on an event

Then the element should expand

Scenario 3: User can collapse an event to hide its details

Given the event is expanded

When the user clicks on the event

Then the event should be collapsed

FEATURE 3: SPECIFY NUMBER OF EVENTS

As the user, I should be able to specify the number of events that I would like displaying on my screen.

Scenario 1: When user hasn't specified a number, 32 is the default number

Given the user hasn't specified a number

When the user searches

Then 32 should be the default number of events.

Scenario 2: User can change the number of events they want to see

Given the user opens the app

When the user specifies the number of events

Then that same amount of events should display

FEATURE 4: USE THE APP WHEN OFFLINE

As a user, I should be able to use the app without internet connection using cached data.

Scenario 1: Show cached data when there's no internet connection

Given the user has no internet connection.

When the user opens the app

Then show cached data

Scenario 2: Show error when user changes the settings (city, time range)

Given the user changes the settings

When the user doesn't have an internet connection

Then display error message

FEATURE 5: DATA VISUALIZATION

As a user, I should be able to see all of the upcoming events for every city

Scenario 1: Show a chart with the number of upcoming events in each city

Given the user opens the app

When clicks on an event

Then A chart showing upcoming events for each city should display