

Test-driven React.js Development: React.js Unit Testing with Enzyme and Jest

Using Jest to Create Unit Tests

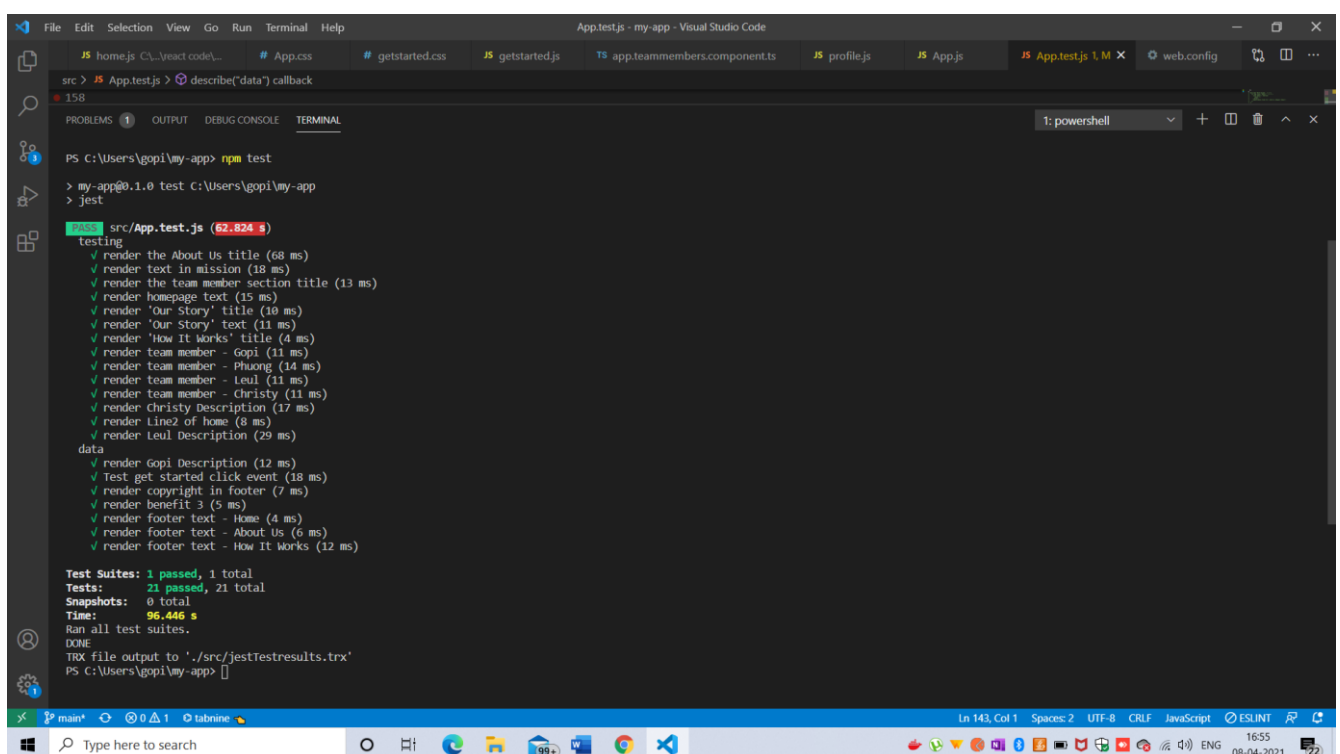
Jest is an open-source test framework created by Facebook that has a great integration with React.js. It includes a command line tool for test execution similar to what Jasmine and Mocha offer. It also allows us to create mock functions with almost zero configuration and provides a really nice set of matchers that makes assertions easier to read.

Using Enzyme to Mount React.js Components

Enzyme provides a mechanism to mount and traverse React.js component trees. This will help us get access to its own properties and state as well as its children props in order to run our assertions.

Test Cases

Total we have 21 Test Cases. And we are creating Test Results file with .trx extension



The screenshot shows a Visual Studio Code window with a terminal running Jest tests. The terminal output displays a list of 21 test cases, all of which passed. The tests are grouped into two categories: 'rendering' and 'data'. The 'rendering' category includes tests for the About Us title, mission text, team member section title, homepage text, 'Our Story' title and text, 'How It Works' title, and team member details (Gopi, Phuong, Leul, Christy). The 'data' category includes tests for Gopi's description, a click event, footer copyright, benefit, and footer text for Home, About Us, and How It Works. The final summary shows 1 passed test suite, 21 passed tests, and a total time of 96.446 seconds. The test results are saved to a file named 'jestTestresults.trx'.

```
PS C:\Users\gopi\my-app> npm test
> my-app@0.1.0 test c:\Users\gopi\my-app
> jest

src/App.test.js (62.824 s)
Testing
  ✓ render the About Us title (68 ms)
  ✓ render text in mission (18 ms)
  ✓ render the team member section title (13 ms)
  ✓ render homepage text (15 ms)
  ✓ render 'Our Story' title (10 ms)
  ✓ render 'Our Story' text (11 ms)
  ✓ render 'How It Works' title (4 ms)
  ✓ render team member - Gopi (11 ms)
  ✓ render team member - Phuong (14 ms)
  ✓ render team member - Leul (11 ms)
  ✓ render team member - Christy (11 ms)
  ✓ render Christy Description (17 ms)
  ✓ render Line2 of home (8 ms)
  ✓ render Leul Description (29 ms)
data
  ✓ render Gopi Description (12 ms)
  ✓ Test get started click event (18 ms)
  ✓ render copyright in footer (7 ms)
  ✓ render benefit 3 (5 ms)
  ✓ render footer text - Home (4 ms)
  ✓ render footer text - About Us (6 ms)
  ✓ render footer text - How It Works (12 ms)

Test Suites: 1 passed, 1 total
Tests: 21 passed, 21 total
Snapshots: 0 total
Time: 96.446 s
Ran all test suites.
DONE
TRX file output to './src/jestTestresults.trx'
PS C:\Users\gopi\my-app>
```

