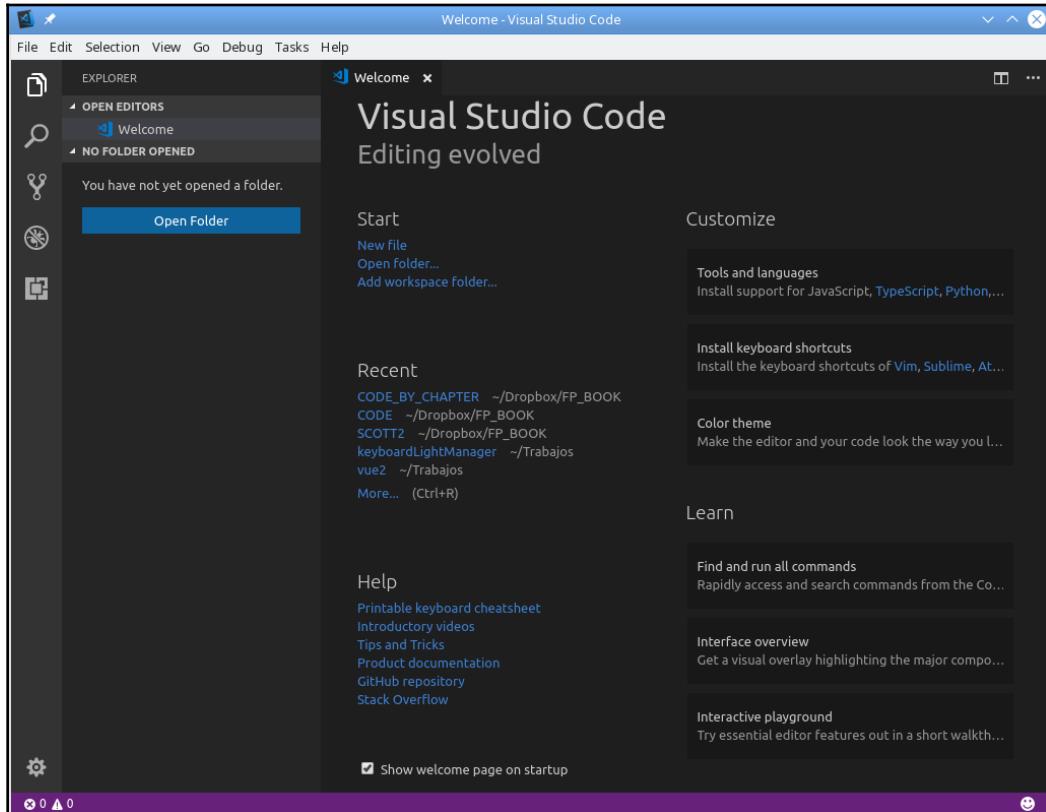


Chapter 1: Working with JavaScript Development Tools



The screenshot shows the Visual Studio Code interface with the title bar "• settings.json - Visual Studio Code". The menu bar includes File, Edit, Selection, View, Go, Debug, Tasks, Help. The left sidebar has icons for Welcome, User Settings, Search Settings (with a count of 463), and Default Settings. The main area shows the "User Settings" tab with the heading "Place your settings here to overwrite the Default Setting:". Below this is a code editor containing the contents of the settings.json file:

```
// Controls auto save of dirty files. Accepted values: 'off', 'afterDelay', 'onFocusChange' (editor loses focus), 'onWindowChange' (window loses focus). If set to 'afterDelay', you can configure the delay in 'files.autoSaveDelay'.
"files.autoSave": "off",

// Controls the font size in pixels.
"editor.fontSize": 14,

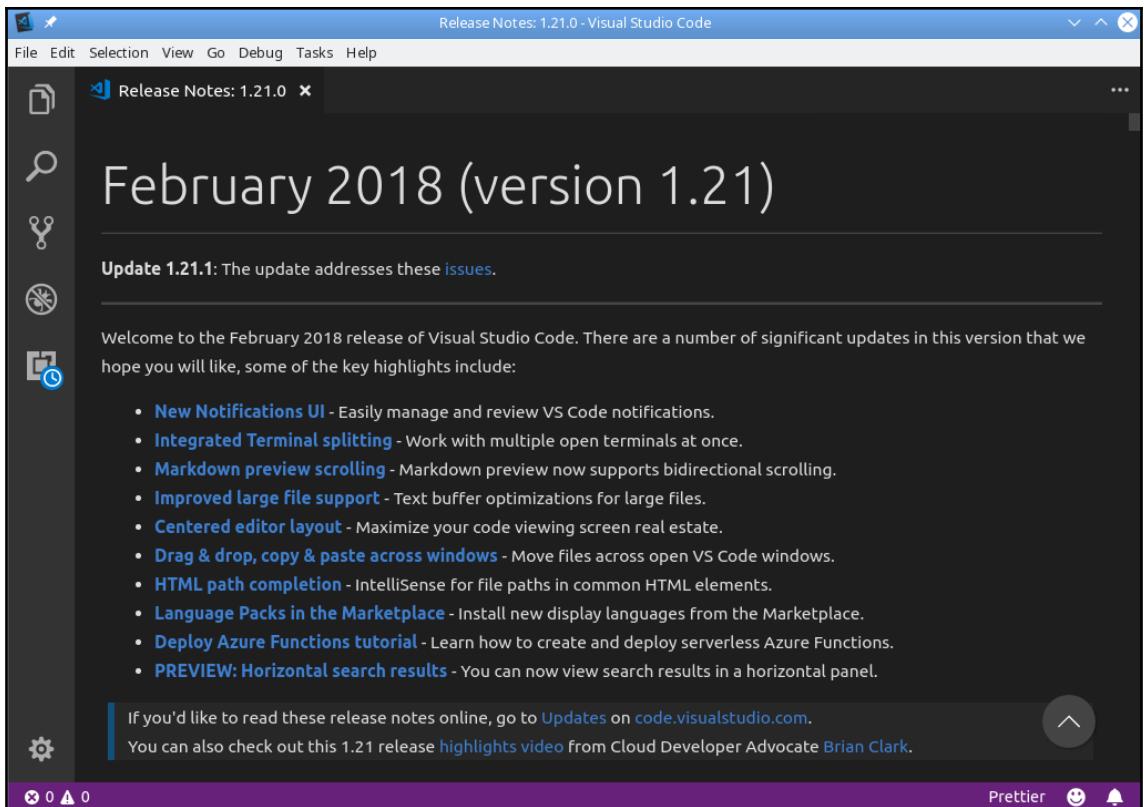
// Controls the font family.
"editor.fontFamily": "'Droid Sans Mono',
'monospace', monospace, 'Droid Sans Fallback', 

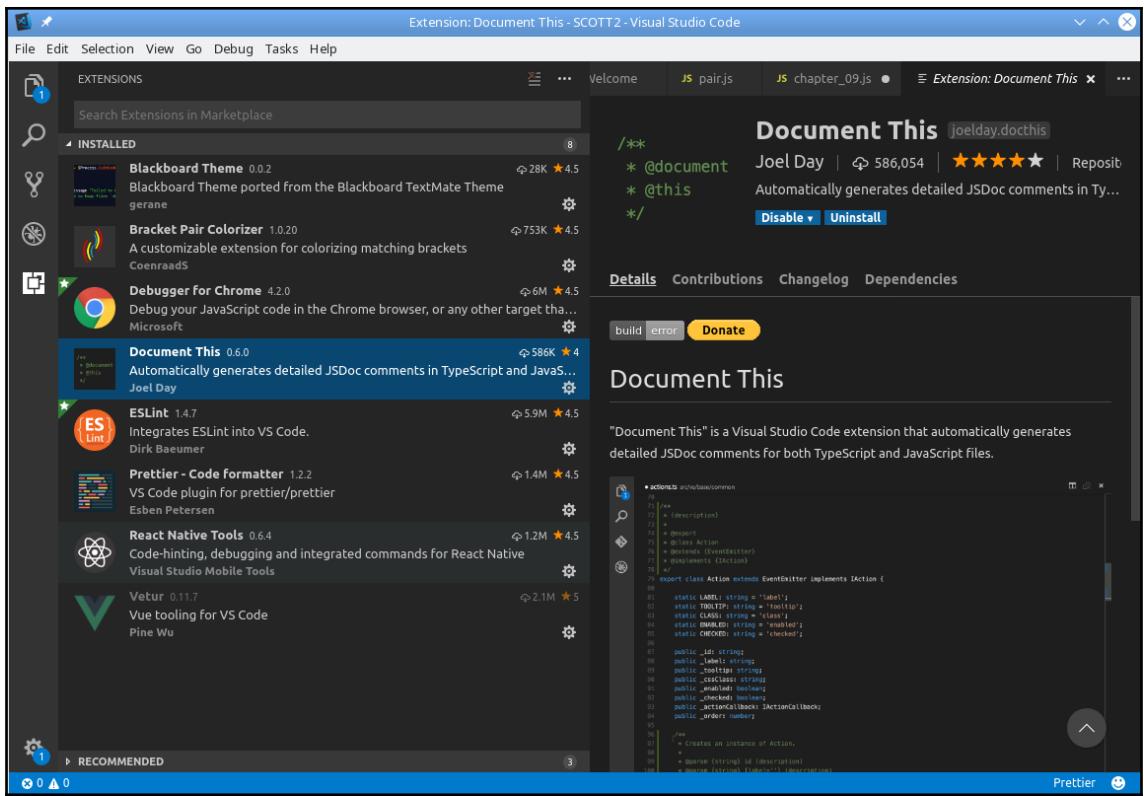
// The number of spaces a tab is equal to. This setting is overridden based on the file contents when 'editor.detectIndentation' is on.
"editor.tabSize": 4,

// Controls how the editor should render whitespace characters, possibilities are 'none', 'boundary', and 'all'. The 'boundary' option does not render single spaces between words.
"editor.renderWhitespace": "none",

// Controls the cursor style, accepted values are 'block', 'block-outline', 'line', 'line-thin',
```

The status bar at the bottom shows Ln 1, Col 1, Spaces: 4, UTF-8, LF, JSON with Comments, Prettier, and a smiley face icon.





Extensions for Visual Studio family of products | Visual Studio Marketplace - Chromium

Secure | https://marketplace.visualstudio.com

Visual Studio | Marketplace

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Featured

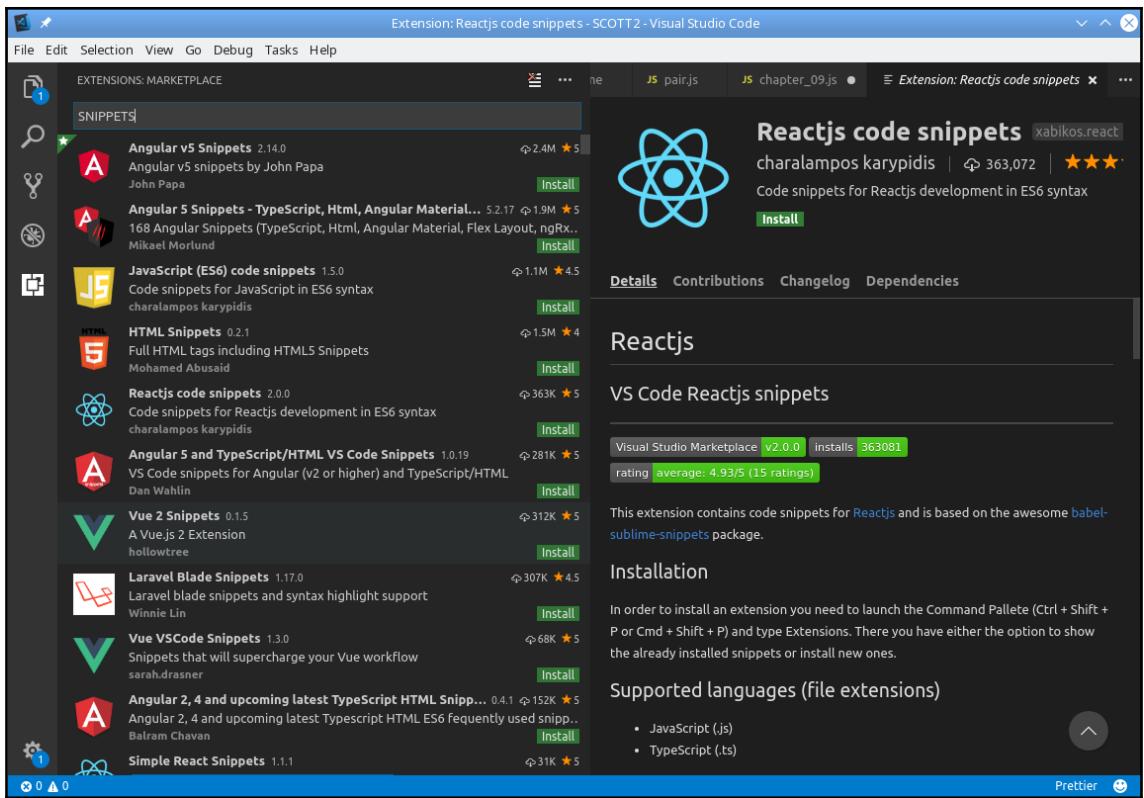
 Prettier - Code formatter Esben Petersen 1.5M FREE ★★★★★	 REST Client Huachao Mao 760K FREE ★★★★★	 Java Extension Pack Microsoft 558K FREE ★★★★★	 Jupyter Don Jayaraman 126K FREE ★★★★★	 vscode-styled-components Julien Poissonnier 101K FREE ★★★★★	 Azure Functions Microsoft 83K FREE ★★★★★
--	---	---	---	--	--

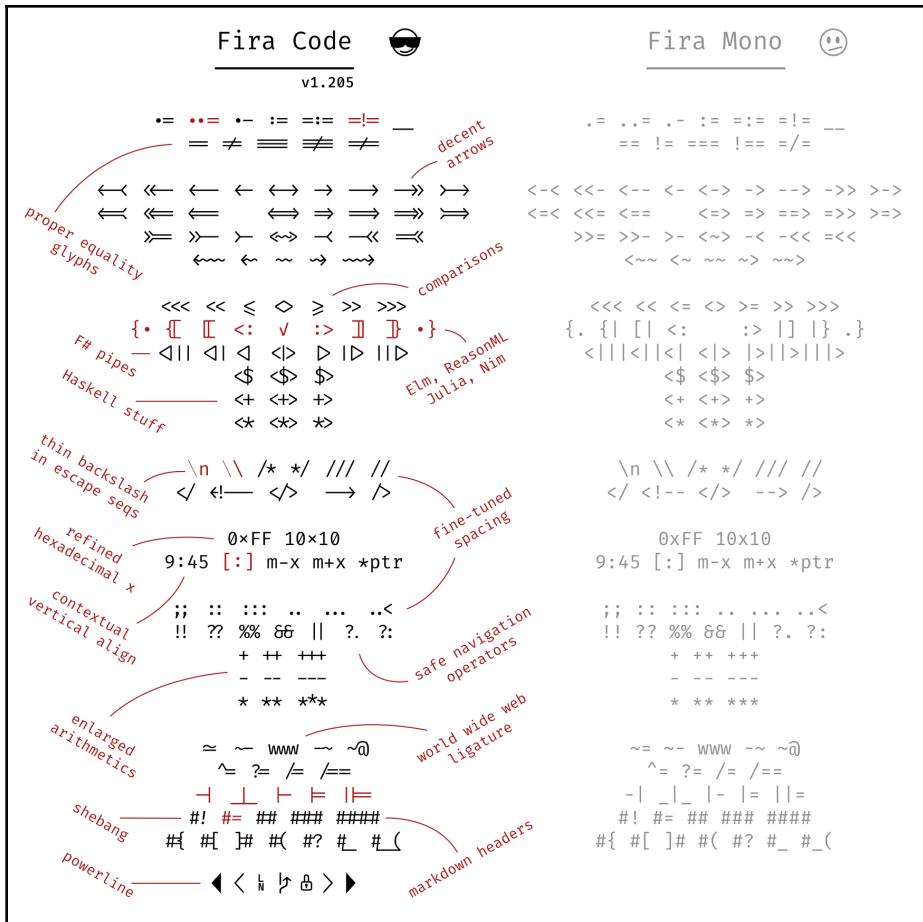
Trending this week ▾

 HTML Format Mohamed Akram 516 FREE ★★★★★	 Search crates.io belfz 251 FREE ★★★★★	 cpp-compile tchojnacki 299 FREE ★★★★★	 Portuguese (Brazil) Language Pack Microsoft 534 FREE ★★★★★	 Bootstrap 4 CDN Snippets Simen Daehlin 1.1K FREE ★★★★★	 minapp Mora Qu 757 FREE ★★★★★
--	---	---	--	---	---

Most Popular

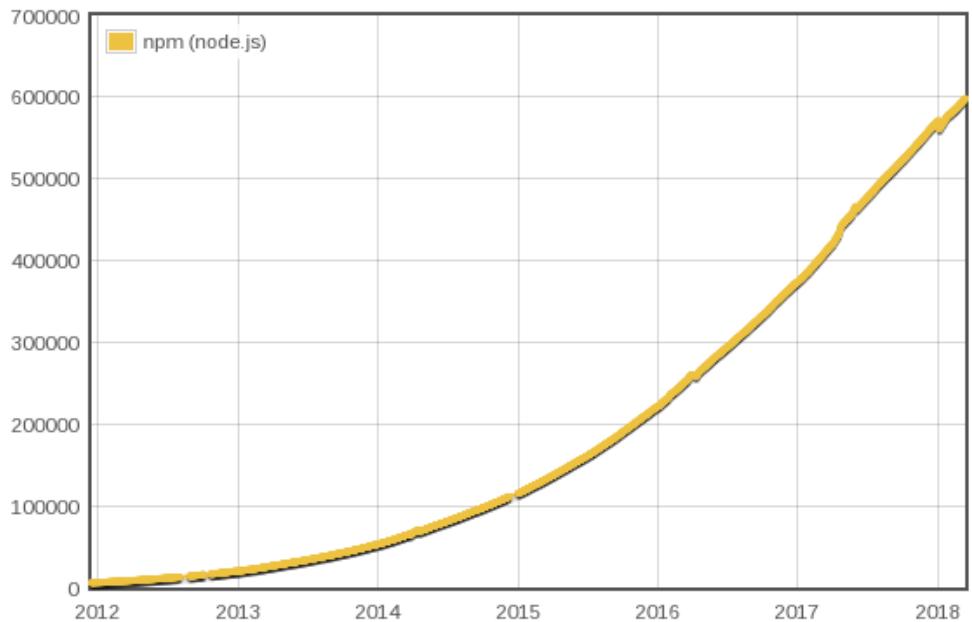
See more ↗

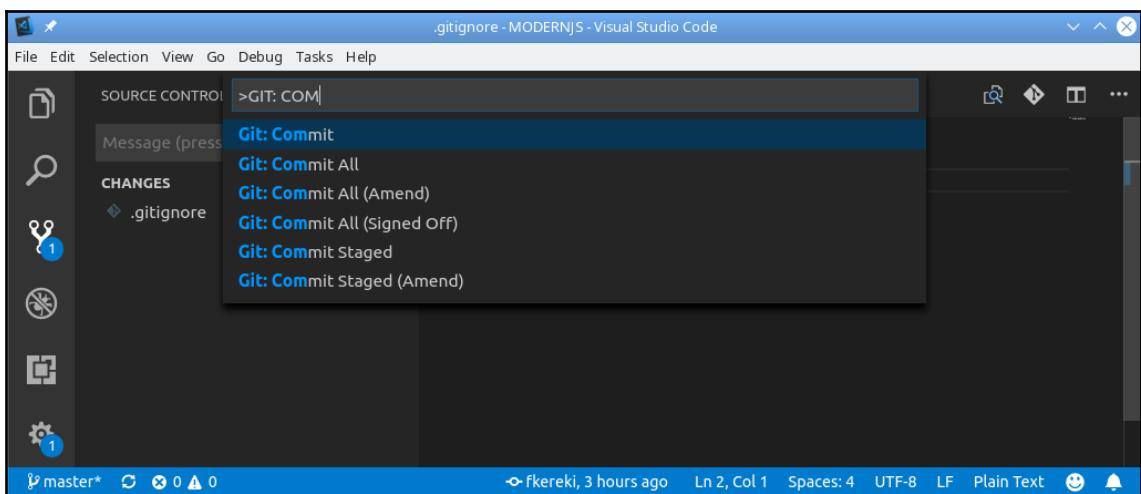


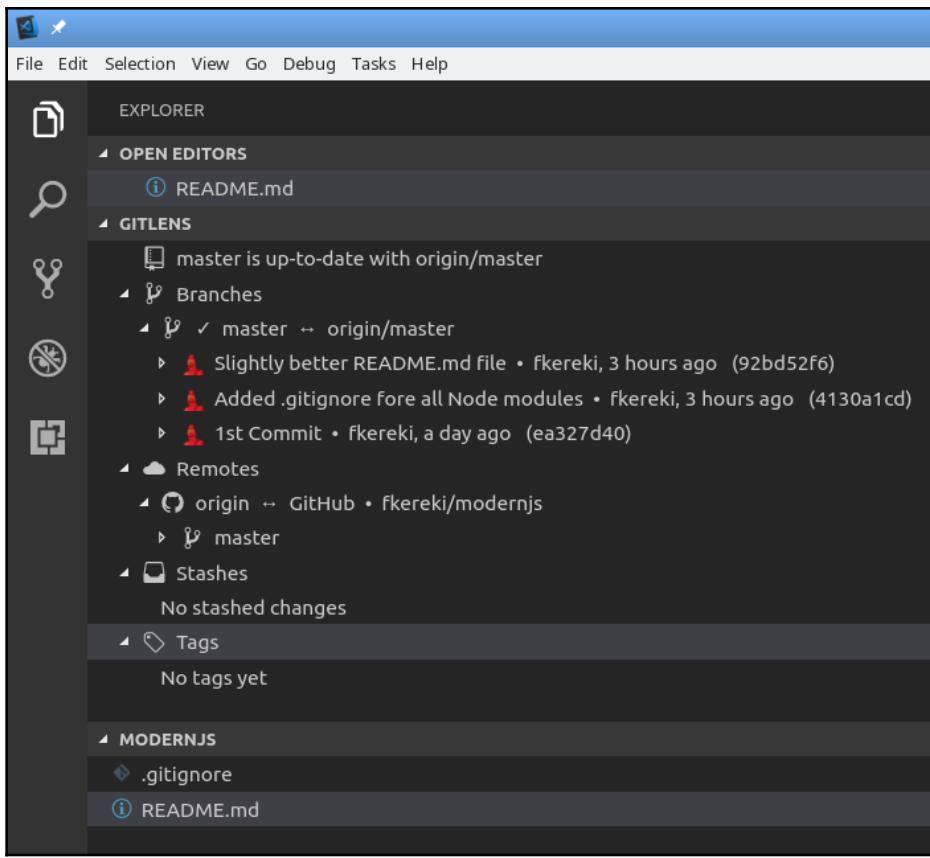


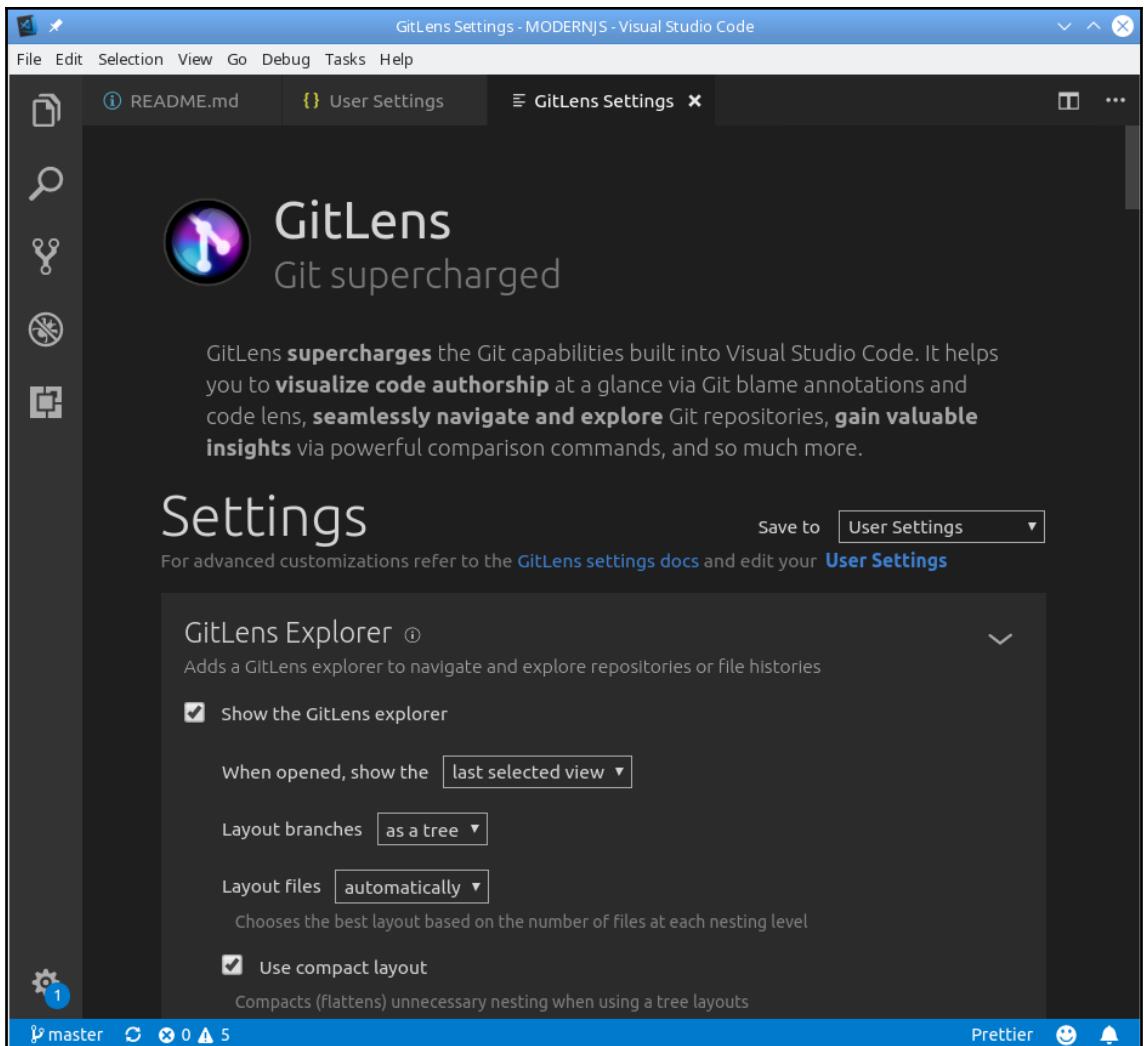
```
• binary_search_tree.js - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
JS binary_search_tree.js ●
59
60 const treeSearch = (tree, findValue) =>
61   tree(
62     (value, left, right) =>
63       findValue === value ||
64       treeSearch(findValue < value ? left : right, findValue),
65     () => false
66   );
67
68 const treeInsert = (tree, newValue) =>
69   tree(
70     (value, left, right) =>
71       newValue <= value
72         ? Tree(value, treeInsert(left, newValue), right)
73         : Tree(value, left, treeInsert(right, newValue)),
74     () => Tree(newValue, EmptyTree(), EmptyTree())
75   );
76
Ln 67, Col 1  Spaces: 4  UTF-8  LF  JavaScript  Prettier  ☺
☒ 0 ▲ 0
```

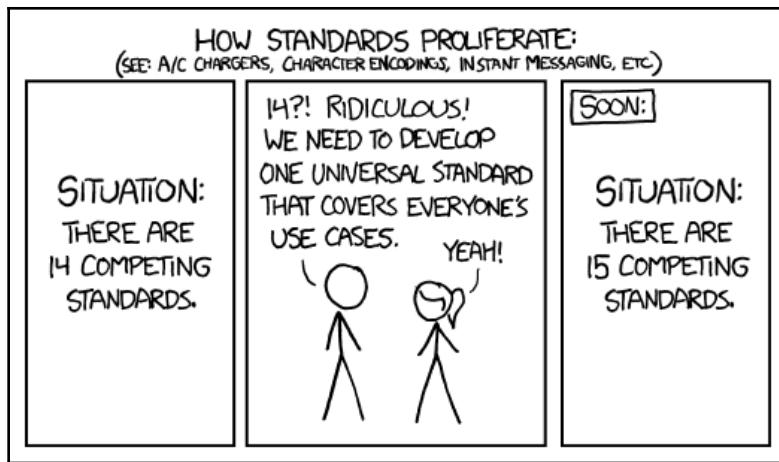
Module Counts











The screenshot shows the Prettier playground interface with two code snippets. The left snippet is a complex tree traversal function, and the right snippet is its simplified, prettier version. The GitHub icon in the top right corner indicates the right code is 22,269 characters long.

```
const Tree = (value, left, right) =>
  (f, __) => f(value, left, right);

const EmptyTree = () =>
  (__, g) => g();

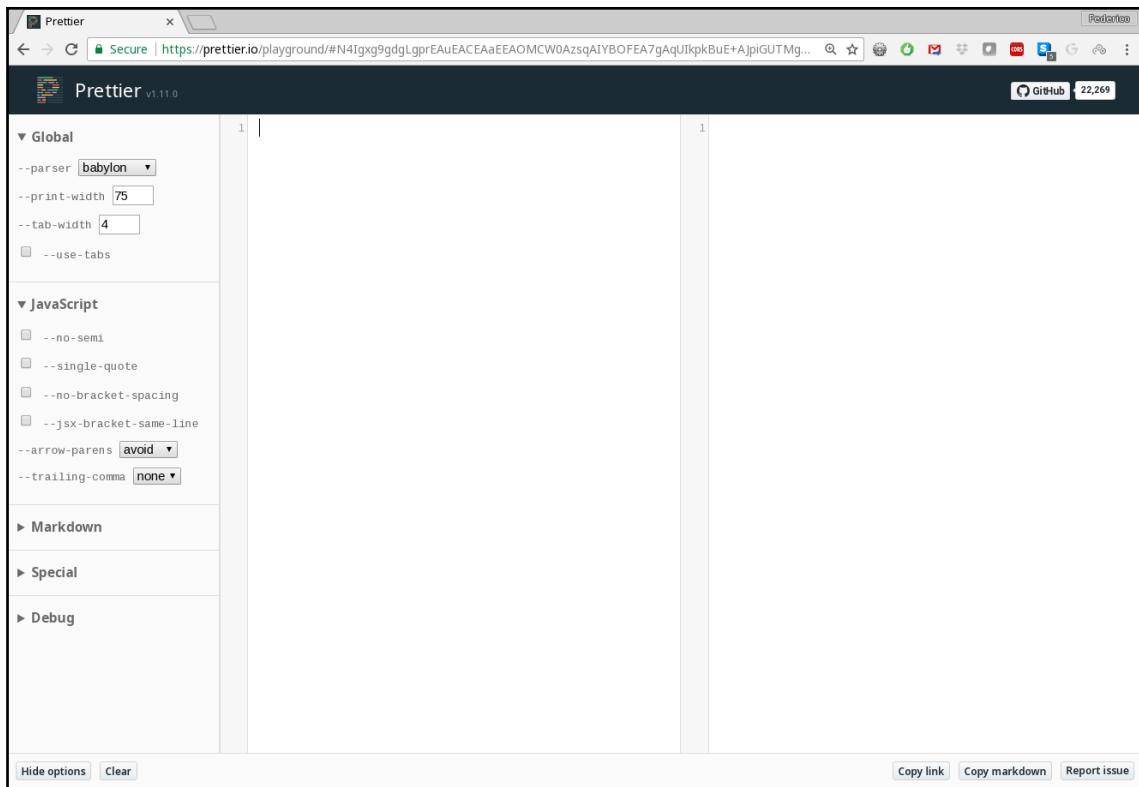
const treeRoot = (tree) => tree((value, left, right)) => value, () => null;
const treeLeft = (tree) => tree((value, left, right)) => left, () => null;
const treeRight = (tree) => tree((value, left, right)) => right, () => null;
const treeIsEmpty = tree => tree(() => false, () => true);
const treeToObject = (tree) =>
  tree((value, left, right)) => {
    const result = {value};
    const leftBranch = treeToObject(left);
    if (leftBranch) { result.left = leftBranch; }
    const rightBranch = treeToObject(right);
    if (rightBranch) { result.right = rightBranch; }
    return result;
  }, () => null;

const treeNodesCount = tree => tree((val, left, right)) =>
  1 + treeNodesCount(left) + treeNodesCount(right), () => 0;

const treeHeight = tree => tree((val, left, right)) =>
  1 + Math.max(treeHeight(left), treeHeight(right)), () => 0;

const treeSearch1 = (tree, findValue) =>
  tree(
    (value, left, right) =>
      findValue === value
        ? true
        : findValue < value ? treeSearch1(left, findValue) : treeSearch1(right, findValue)
  ), () => null;

const Tree = (value, left, right) => (f, __) => f(value, left, right);
const EmptyTree = () => (__, g) => g();
const treeRoot = tree => tree((value, left, right)) => value, () => null;
const treeLeft = tree => tree((value, left, right)) => left, () => null;
const treeRight = tree => tree((value, left, right)) => right, () => null;
const treeIsEmpty = tree => tree(() => false, () => true);
const treeToObject = tree =>
  tree((value, left, right)) => {
    const result = {value};
    const leftBranch = treeToObject(left);
    if (leftBranch) { result.left = leftBranch; }
    const rightBranch = treeToObject(right);
    if (rightBranch) { result.right = rightBranch; }
    return result;
  }, () => null;
const treeNodesCount = tree =>
  tree((val, left, right)) =>
    1 + treeNodesCount(left) + treeNodesCount(right),
    () => 0
  );
const treeHeight = tree =>
  tree((val, left, right)) =>
```



JSDoc: Global - Chromium

JSDoc: Global Federico

file:///tmp/jsdoc/out/global.html#hanoi

Global

Methods

hanoi(disks, from, to, extra)

Solves the Hanoi Towers puzzle, for any number of disks

Parameters:

Name	Type	Description
disks	number	How many disks to move
from	string	The starting pole's name
to	string	The destination pole's name
extra	string	The other pole's name

Source: [hanoi.js, line 9](#)

Documentation generated by [JSDoc 3.5.5](#) on Sat Mar 10 2018 15:09:10 GMT-0300 (-03)

```
9
10 const finder = (column = 0) => {
11     if (column === SIZE) {
12         [eslint] Unary operator '++' used. (no-plusplus)
13         solutions++; // count it
14     } else {
15         const testRowsInColumn = j => {
16             if (j < SIZE) {
17                 if (checkPlace(column, j)) {
18                     places[column] = j;
19                     finder(column + 1);
20                 }
21                 testRowsInColumn(j + 1);
22             }
23         };
24         testRowsInColumn(0);
25     }
26 };
```

The screenshot shows a code editor interface with a dark theme. The top bar includes a file icon, a close button, a title bar with 'eight_queens.js', and a menu bar with File, Edit, Selection, View, Go, Debug, Tasks, Help.

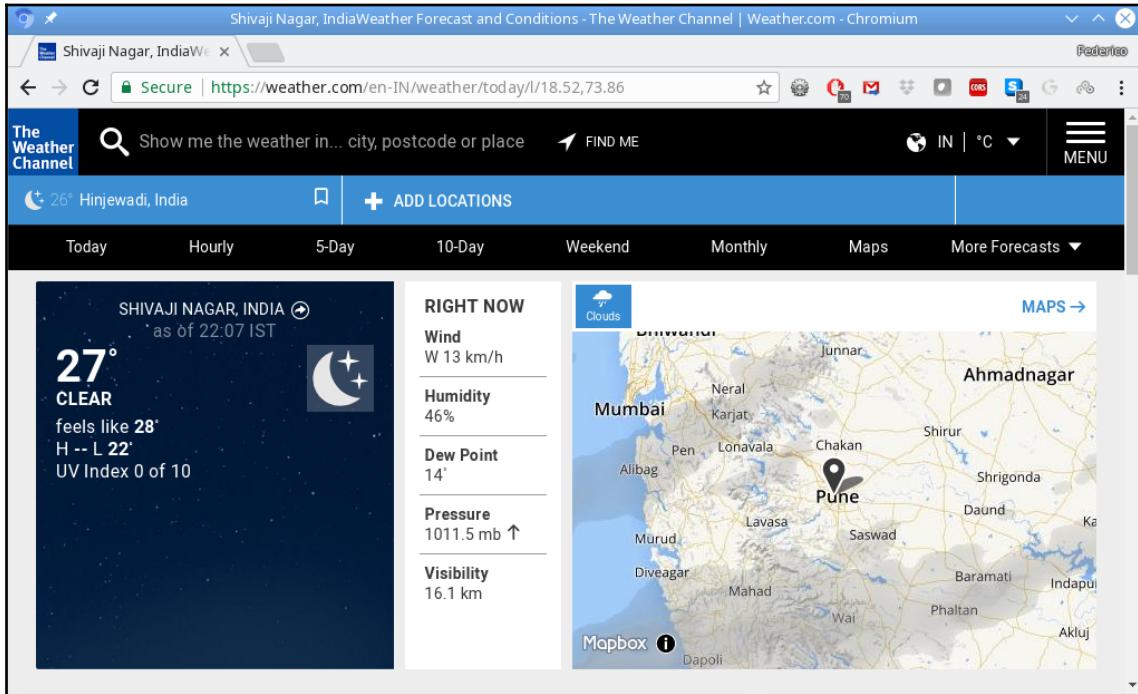
The left sidebar contains icons for package.json, User Settings, and eight_queens.js. The main editor area displays the following code:

```
// @flow
const SIZE = 8;
let places = Array(SIZE);
let solutions /* :number */ = 0;
solutions = "0";
const checkPlace = (column, row) =>
    places
        .slice(0, column)
        .every((v, i) => v !== row && Math.abs(v - row) !== column - i);
```

An ESLint annotation is shown at line 13: [eslint] Unary operator '++' used. (no-plusplus)

A Flow annotation is shown at line 10: [flow] Cannot assign `''0''` to `solutions` because string [1] is incompatible with number [2]. (References: [1] [2])

Chapter 2: Using Modern JavaScript Features



Compatibility table																		
ES		ECMAScript		5		6		2016+		next		Intl		non-standard		compatibility table		
Sort by	Engine types	Show obsolete platforms	Show unstable platforms	V8	SpiderMonkey	JavaScriptCore	Chakra	Other	Flatten	Open	by klangx & webbedspace & dlocock	Fork	578					
				. Minor difference (1 point)	. Small feature (2 points)	. Medium feature (4 points)	. Large feature (8 points)											
93%			Compilers/polyfills						Desktop browsers									
Feature name			Current browser	Tracer	Babel 6 + core-js ^[2]	Closure	Type-Script + core-js	es7-shim	IE 11	Edge 15	Edge 16	FF 52 ESR	FF 58	FF 59	CH 64, OP 51 ^[1]	CH 65, OP 52 ^[1]	SF 10.1 SF 11	
2016 features				6%	58%	27%	46%	10%	2%	50%	60%	52%	77%	77%	93%	62%	64%	
<ul style="list-style-type: none"> exponentiation (**).operator Array.prototype.includes 				3/3	2/3	3/3	2/3	0/3	0/3	3/3	3/3	3/3	3/3	3/3	3/3	3/3	3/3	
2016 misc				3/3	0/3	3/3	1/3	3/3	2/3	0/3	3/3	3/3	3/3	3/3	3/3	3/3	3/3	
<ul style="list-style-type: none"> generator functions can't be used with "new" generator throw().caught by inner generator strict fn w/ non-strict non-simple params is error nested rest destructuring_declarations nested rest destructuring_parameters Proxy "enumerate" handler removed Proxy internal calls, Array.prototype.includes 				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
2017 features				4/4	0/4	4/4	3/4	4/4	3/4	0/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	
<ul style="list-style-type: none"> Object static methods String padding trailing commas in function syntax async functions shared memory and atomics 				2/2	0/2	2/2	2/2	2/2	0/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	
				2/2	0/2	2/2	2/2	2/2	0/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	
				15/15	3/15	9/15	2/15	0/15	0/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15	
				0/17	0/17	0/17	0/17	0/17	0/17	0/17	17/17	0/17	0/17	0/17	0/17	0/17	16/17	12/17

Can I use... Support tables for HTML5, CSS3, etc - Chromium

Can I use... Support tables for HTML5, CSS3, etc - Chromium

Secure | https://caniuse.com/#search=proxy

Home News March 12, 2018 - New feature: Array.prototype.includes Compare browsers About

Can I use proxy ? Settings

2 results found

Proxy object OTHER

The Proxy object allows custom behavior to be defined for fundamental operations. Useful for logging, profiling, object visualization, etc.

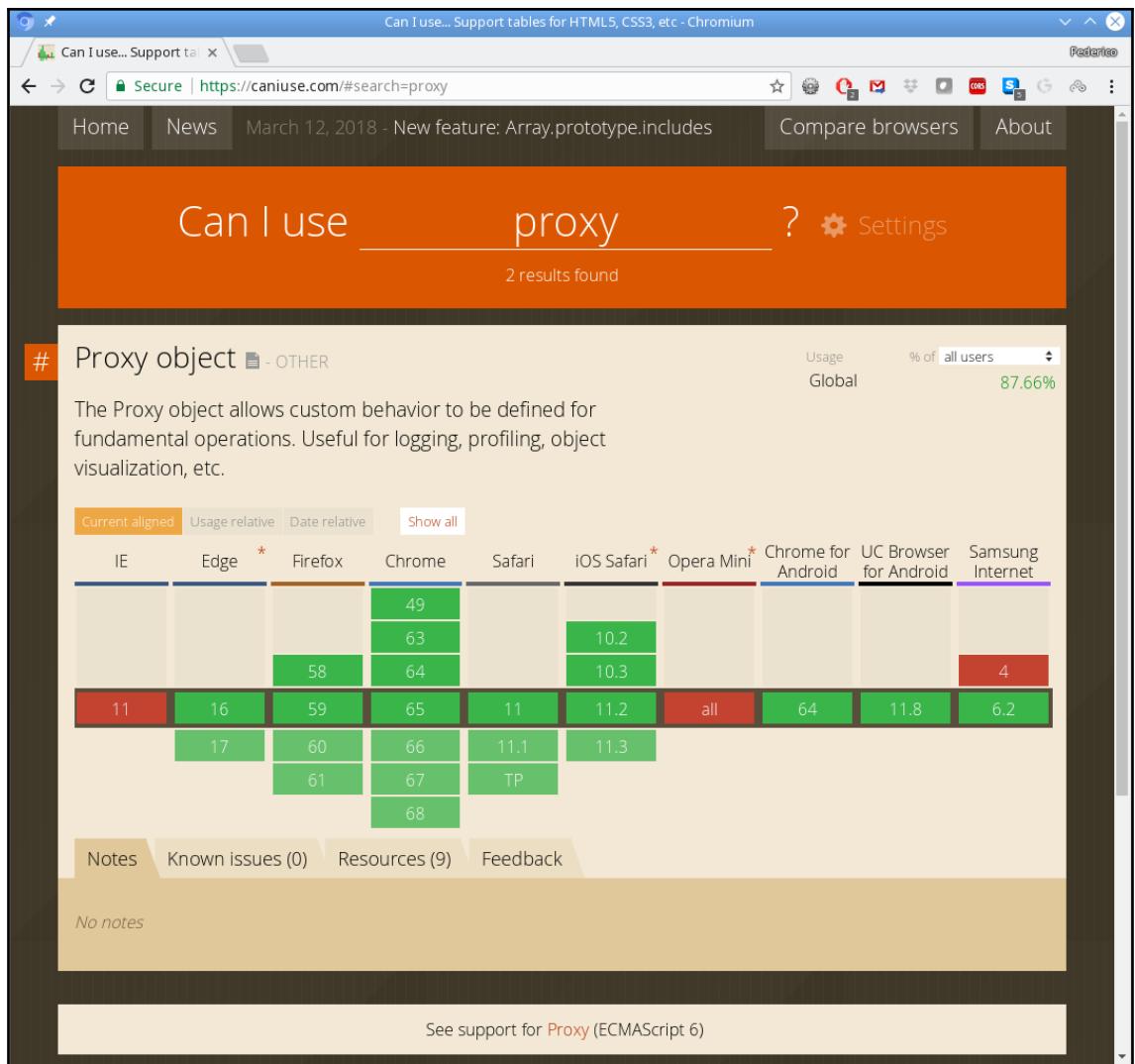
Usage Global % of all users 87.66%

IE	Edge *	Firefox	Chrome	Safari	iOS Safari *	Opera Mini *	Chrome for Android	UC Browser for Android	Samsung Internet
			49		10.2				
			63		10.3				
		58	64						
11	16	59	65	11	11.2	all	64	11.8	6.2
	17	60	66	11.1	11.3				
		61	67	TP					
			68						

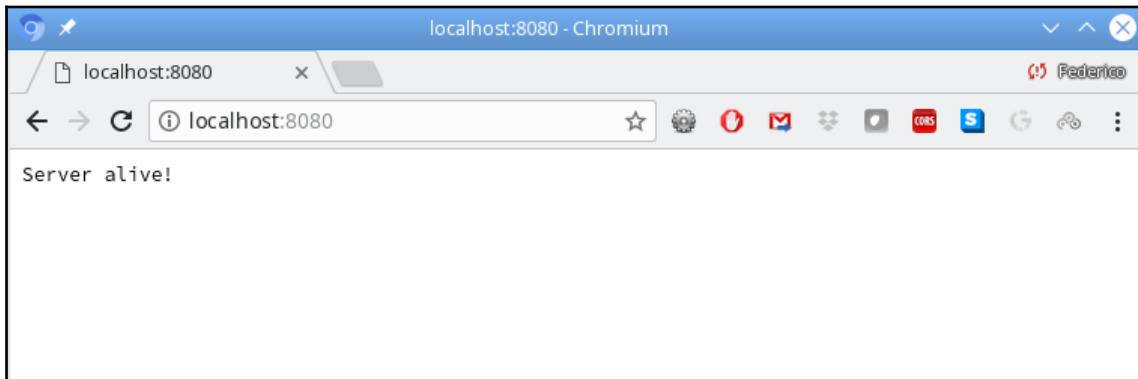
Notes Known issues (0) Resources (9) Feedback

No notes

See support for [Proxy](#) (ECMAScript 6)



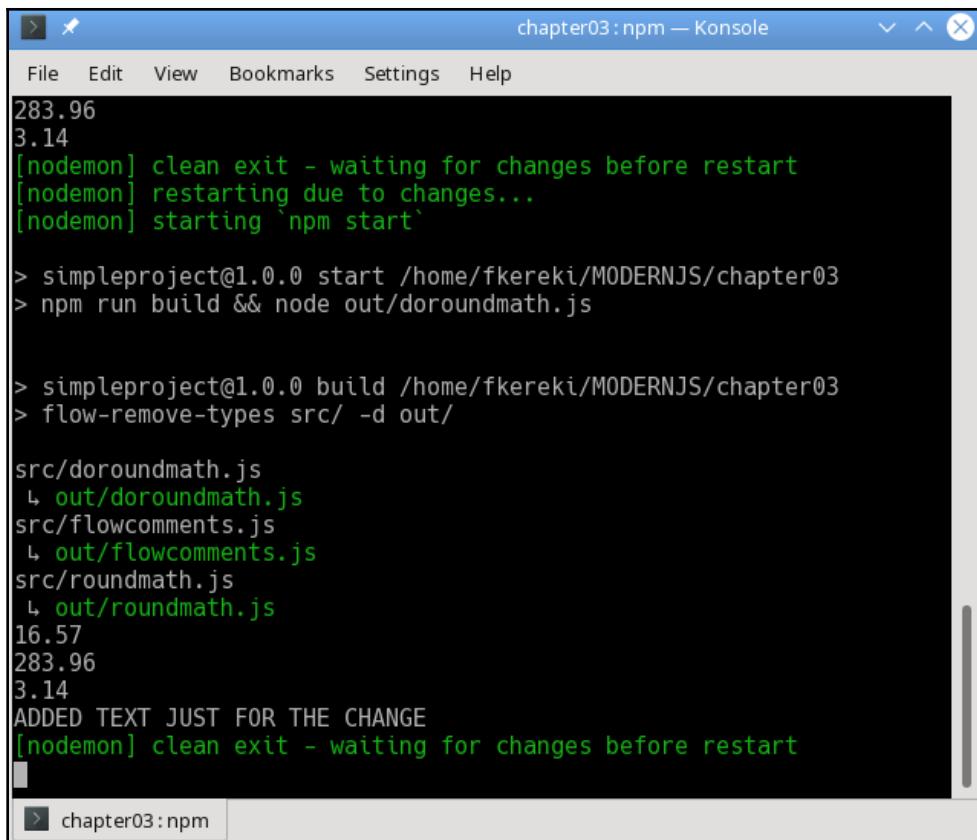
Chapter 3: Developing with Node



```
File Edit View Bookmarks Settings Help
> nodemon --watch src --delay 1 --exec npm start
[nodemon] 1.17.3
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: /home/fkereki/MODERNJS/chapter03/src/**/*
[nodemon] starting `npm start'

> simpleproject@1.0.0 start /home/fkereki/MODERNJS/chapter03
> npm run build && node out/doroundmath.js

> simpleproject@1.0.0 build /home/fkereki/MODERNJS/chapter03
> flow-remove-types src/ -d out/
src/doroundmath.js
↳ out/doroundmath.js
src/flowcomments.js
↳ out/flowcomments.js
src/roundmath.js
↳ out/roundmath.js
16.57
283.96
3.14
[nodemon] clean exit - waiting for changes before restart
```



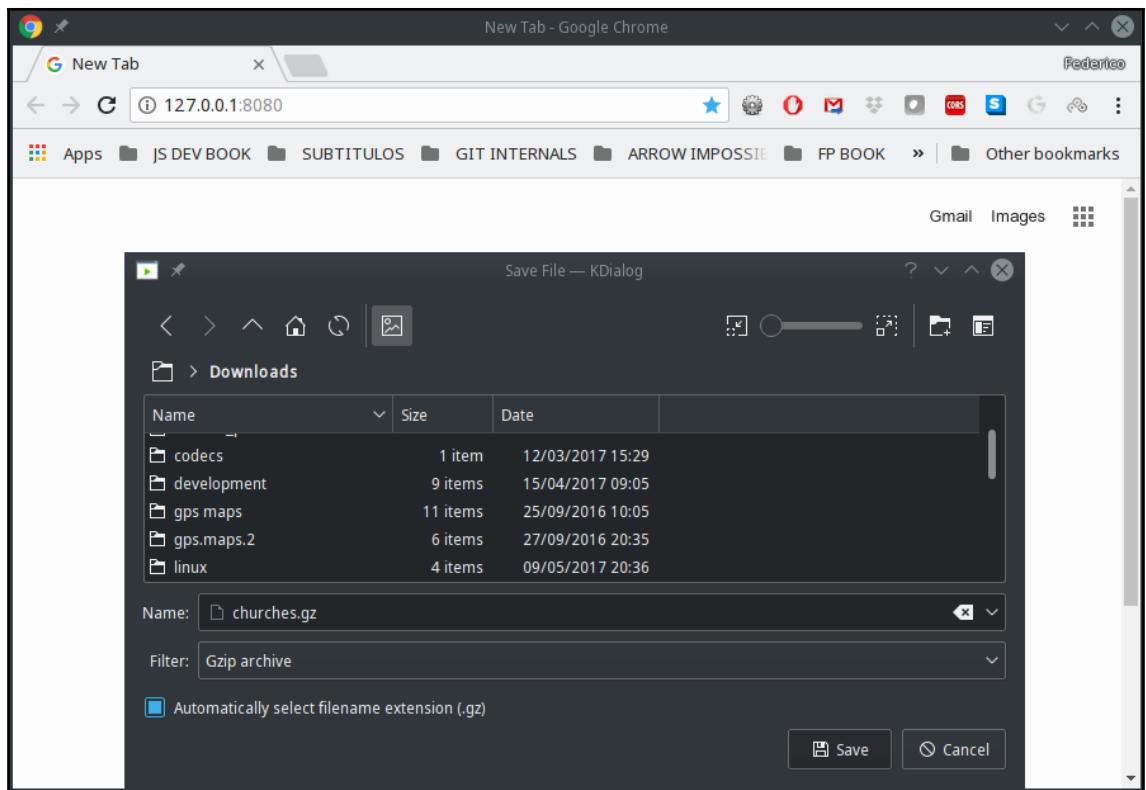
```
chapter03: npm — Konsole
File Edit View Bookmarks Settings Help
283.96
3.14
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting `npm start`

> simpleproject@1.0.0 start /home/fkereki/MODERNJS/chapter03
> npm run build && node out/doroundmath.js

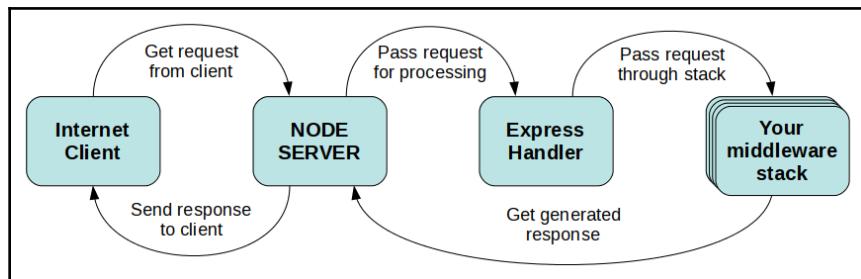
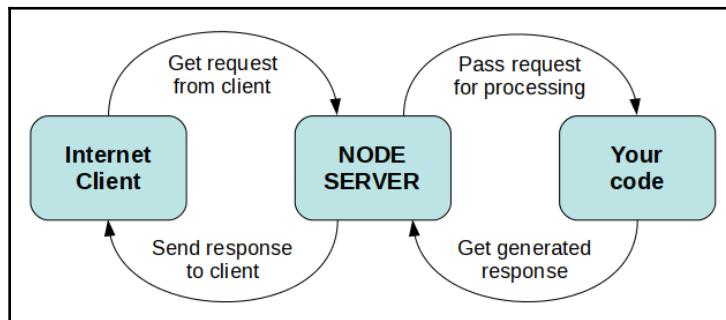
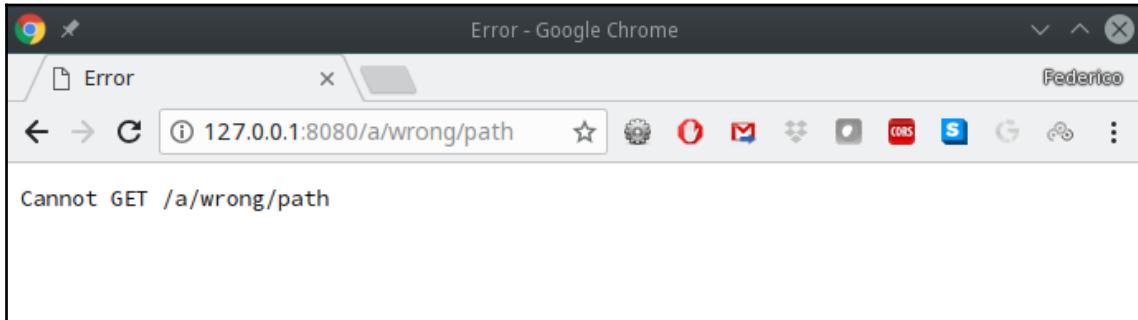
> simpleproject@1.0.0 build /home/fkereki/MODERNJS/chapter03
> flow-remove-types src/ -d out/

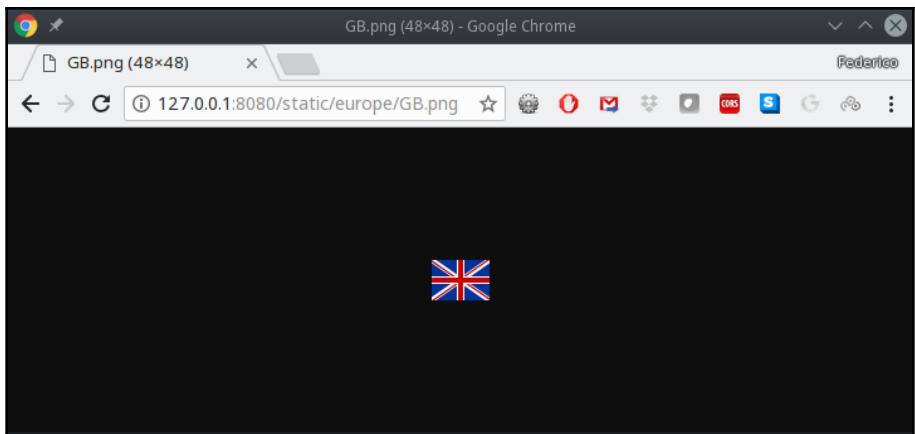
src/doroundmath.js
↳ out/doroundmath.js
src/flowcomments.js
↳ out/flowcomments.js
src/roundmath.js
↳ out/roundmath.js
16.57
283.96
3.14
ADDED TEXT JUST FOR THE CHANGE
[nodemon] clean exit - waiting for changes before restart
```

chapter03: npm



Chapter 4: Implementing RESTful Services with Node



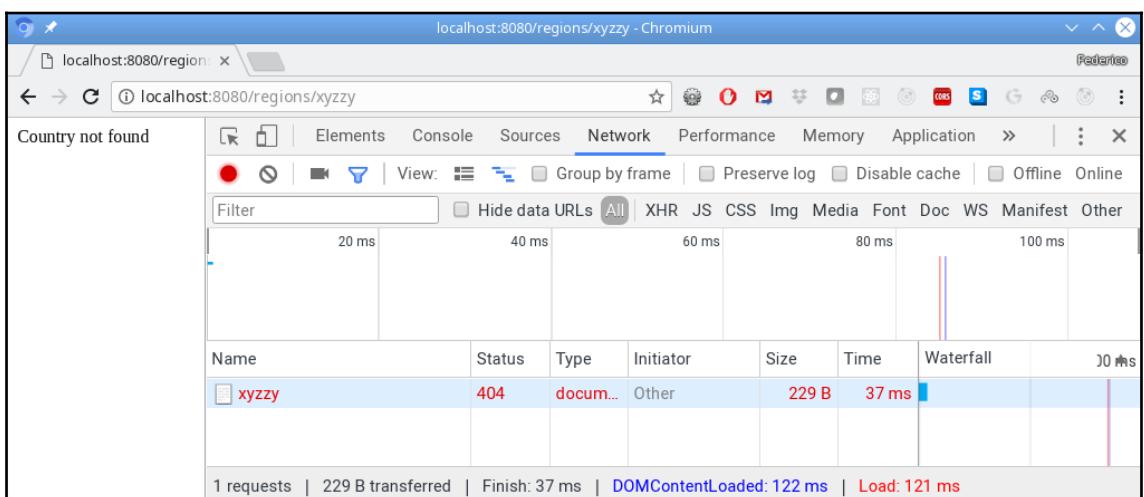
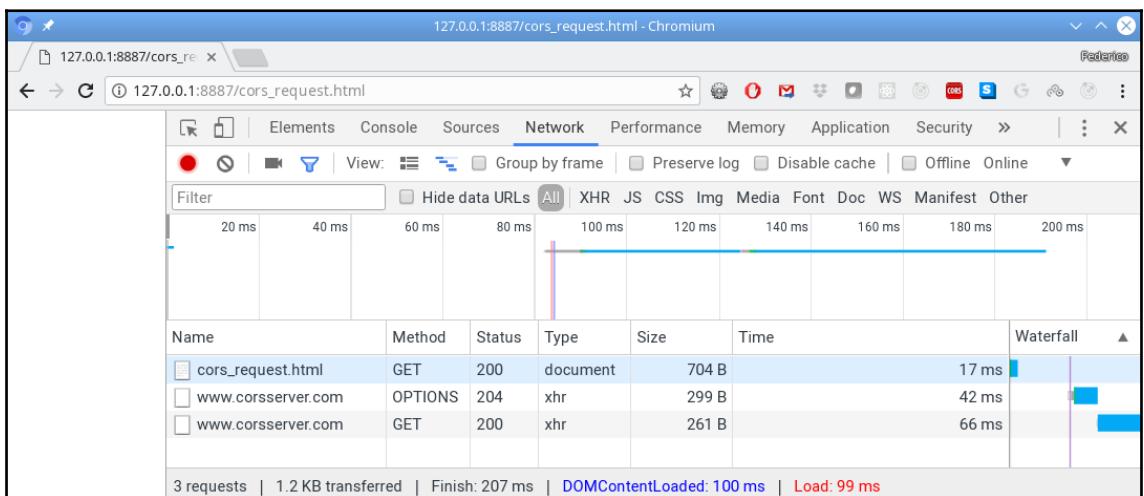
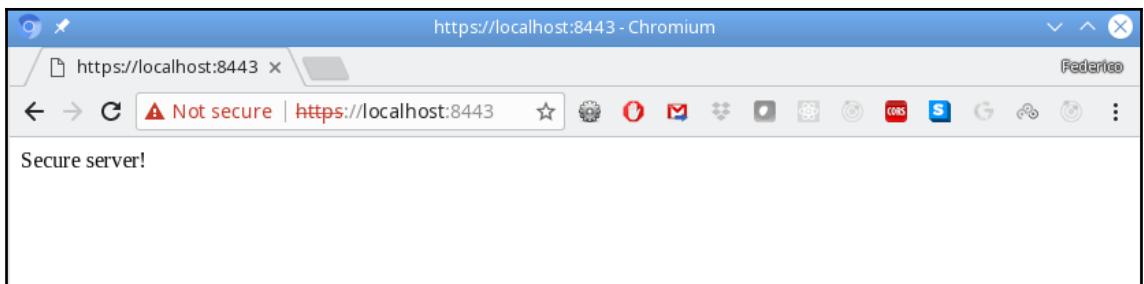
A screenshot of a Google Chrome browser window. The title bar says "127.0.0.1:8080/license - Google Chrome". The address bar shows "127.0.0.1:8080/license". The main content area displays the following text:

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Chapter 5: Testing and Debugging Your Server

```
2018-05-28T00:28:54.869Z [serv] info Ready at http://localhost:8080
2018-05-28T00:29:00.816Z [serv] info GET request for /
2018-05-28T00:29:00.817Z [serv] info Doing some processing...
2018-05-28T00:29:04.844Z [serv] info GET request for /
2018-05-28T00:29:04.844Z [serv] info Doing some processing...
2018-05-28T00:29:06.650Z [serv] info GET request for /invented
2018-05-28T00:29:06.651Z [serv] warn UNKNOWN ROUTE /invented
2018-05-28T00:29:08.130Z [serv] info GET request for /
2018-05-28T00:29:08.130Z [serv] info Doing some processing...
2018-05-28T00:29:11.214Z [serv] info GET request for /xyzzy
2018-05-28T00:29:11.214Z [serv] info Adventurer says 'XYZZY'
2018-05-28T00:29:11.214Z [serv] error GENERAL ERROR res.say_xyzzy is not a function
TypeError: res.say_xyzzy is not a function
    at app.get (/home/fkereki/MODERNJS/chapter05/out/winston_server.js:60:9)
    at Layer.handle [as handle_request] (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/layer.js:95:5)
    at next (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/route.js:137:13)
    at Route.dispatch (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/route.js:112:3)
    at Layer.handle [as handle_request] (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/layer.js:95:5)
    at /home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/index.js:281:22
    at Function.process_params (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/index.js:335:12)
    at next (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/index.js:275:10)
    at app.use (/home/fkereki/MODERNJS/chapter05/out/winston_server.js:47:5)
    at Layer.handle [as handle_request] (/home/fkereki/MODERNJS/chapter05/node_modules/express/lib/router/layer.js:95:5)
2018-05-28T00:29:13.061Z [serv] info GET request for /
2018-05-28T00:29:13.061Z [serv] info Doing some processing...
2018-05-28T00:29:14.158Z [serv] info GET request for /
2018-05-28T00:29:14.158Z [serv] info Doing some processing...
```

```
> npm test

> simpleproject@1.0.0 test /home/fkereki/MODERNJS/chapter05
> jest out/

PASS  out/restful_regions.test.js
PASS  out/validate_user.test.js
PASS  out/roundmath.test.js

Test Suites: 3 passed, 3 total
Tests:       10 passed, 10 total
Snapshots:  0 total
Time:        0.647s, estimated 1s
Ran all test suites matching /out\//i.
> █
```

```
> npm test

> simpleproject@1.0.0 test /home/fkereki/MODERNJS/chapter05
> jest out/

FAIL out/restful_regions.test.js
  ● deleteRegion > should produce a 404 for non-existing region

    expect(received).toBe(expected) // Object.is equality

      Expected: 204
      Received: 404

        41 |           );
        42 |           await deleteRegion(mRes, mDb, "IP", "24");
        > 43 |           expect(mRes.statusCode).toBe(204);^
        |
        44 |       });
        45 |   );
        46 |

      at _callee3$ (out/restful_regions.test.js:43:33)
      at tryCatch (node_modules/regenerator-runtime/runtime.js:62
:40)
      at Generator.invoke [as _invoke] (node_modules/regenerator-
runtime/runtime.js:296:22)
      at Generator.prototype.(anonymous function) [as next] (node
_modules/regenerator-runtime/runtime.js:114:21)
      at step (out/restful_regions.test.js:4:191)
      at out/restful_regions.test.js:4:361

PASS out/validate_user.test.js
PASS out/roundmath.test.js

Test Suites: 1 failed, 2 passed, 3 total
Tests:       1 failed, 9 passed, 10 total
Snapshots:  0 total
Time:        1.11s
Ran all test suites matching /out//i.
npm ERR! Test failed. See above for more details.
> []
```

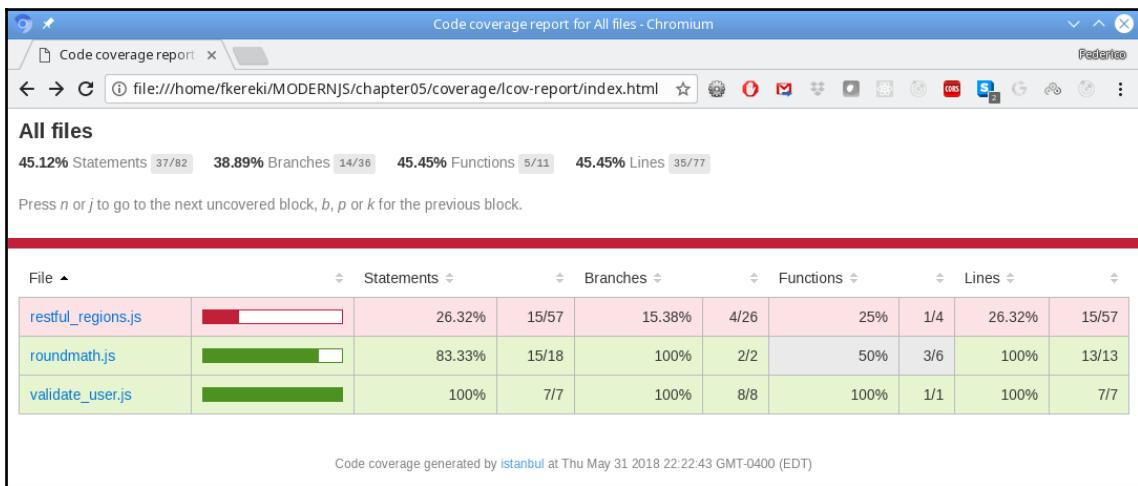
```

> npm test

> simpleproject@1.0.0 test /home/fkereki/MODERNJS/chapter05
> jest out/ --coverage --no-cache

PASS  out/validate_user.test.js
PASS  out/roundmath.test.js
PASS  out/restful_regions.test.js
-----|-----|-----|-----|-----|-----|-----|
File      | %Stmts | %Branch | %Funcs | %Lines | Uncovered Line #s |
-----|-----|-----|-----|-----|-----|-----|
All files | 45.12 | 38.89 | 45.45 | 45.45 | ... 72,173,175,178 |
restful_regions.js | 26.32 | 15.38 | 25 | 26.32 | ... 72,173,175,178 |
roundmath.js | 83.33 | 100 | 50 | 100 | 100 |
validate_user.js | 100 | 100 | 100 | 100 | 100 |
-----|-----|-----|-----|-----|-----|-----|
Test Suites: 3 passed, 3 total
Tests:       10 passed, 10 total
Snapshots:   0 total
Time:        1.869s
Ran all test suites matching /out\//i.
> █

```



Code coverage report for restful_regions.js - Chromium

Federico

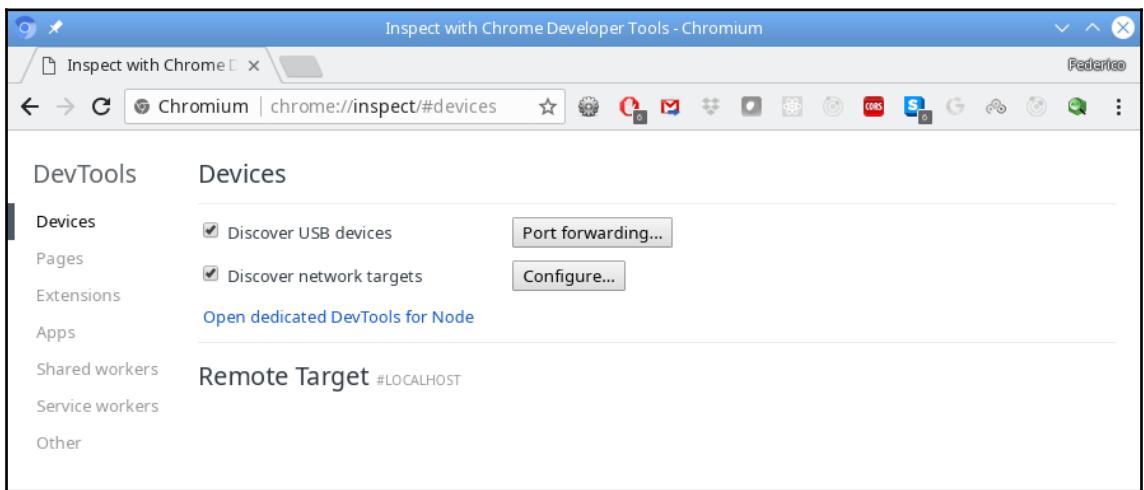
Code coverage report

file:///home/fkereki/MODERNJS/...

```
64
65 1x const deleteRegion = async (
66    res ,
67    dbConn ,
68    country ,
69    region
70  ) => {
71 3x   try {
72 3x     const sqlCities = `
73         SELECT 1 FROM cities
74         WHERE countryCode="${country}"
75         AND regionCode="${region}"
76         LIMIT 1
77     `;
78 3x     const cities = await dbConn.query(sqlCities);
79 3x     if (cities.length > 0) {
80 1x       res.status(405).send("Cannot delete a region with cities");
81     } else {
82 2x       const deleteRegion = `
83           DELETE FROM regions
84           WHERE countryCode="${country}"
85           AND regionCode="${region}"
86       `;
87
88 2x       const result = await dbConn.query(deleteRegion);
89 2x       if (result.info.affectedRows > 0) {
90 1x         res.status(204).send();
91     } else {
92 1x       res.status(404).send("Region not found");
93     }
94   }
95 } catch (e) {
96 1x   res.status(500).send("Server error");
97 }
98 };
99 
```

A screenshot of Visual Studio Code showing a Node.js application running in the debugger. The code editor displays a file named `restful_regions.js`. A breakpoint is set on line 52, which is highlighted in yellow. The code implements a route handler for a region search. The sidebar shows the variable and watch panes. The bottom status bar indicates the script is running at port 8080.

```
restful_regions.js - MODERNJS - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
DEBUG Launch Program
Variables
Block
this: undefined
regions: Array(22) [Object, Object, ...]
sqlQuery: "\n      SELECT rr.name AS region, rr.id AS regionId, rr.countryCode AS country, rr.parentRegionId AS parentRegionId\n      FROM regions AS rr\n      WHERE rr.countryCode = ${country}\n      AND rr.regionCode = ${region}\n    ";
SEL...
Local
Global
WATCH
CALL STACK PAUSED ON BREAKPOINT
getRegion restful_regions.js:52:21
[ async function ]
getRegion restful_regions.js:4:19
app.get restful_server.js:36:5
handle layer.js:95:5
BREAKPOINTS
All Exceptions
Uncaught Exceptions
restful_regions.js chapter04/out:52
LOADED SCRIPTS
master* 0 0 27 Launch Program (MODERNJS) Auto Attach: On Flow: 53.5% 1: bash
Ln 52, Col 21 Spaces: 4 UFT-8 LF JavaScript ESLint Prettier: ✓
node --inspect restful_server.js
Debugger listening on ws://127.0.0.1:9229/b87d91b2-5d9b-41b3-ba3a-e06d3dad7637
For help see https://nodejs.org/en/docs/inspector
Routing ready at http://localhost:8080
Debugger attached.
^C
> ^C
> ^C
> ^C
> ^C
> ^C
> []
PROBLEMS 27 OUTPUT DEBUG CONSOLE TERMINAL
```



The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer (Left):** Shows a tree view of files and folders. The root folder is 'MODERNJS'. Inside 'MODERNJS' are 'chapter04/src' and 'chapter04/out'. 'chapter04/src' contains several JavaScript files: restful_server.js, chapter04/certificates, chapter04/chapter01, chapter04/chapter02, chapter04/chapter03, chapter04/chapter04 (which has sub-folders 'flags', 'flow-typed', 'node_modules', and 'out'), cors_server.js, get_parameters.js, hello_world.js, helmet_world.js, http_server.js, https_server.js, jwt_server.js, middleware.js, restful_db.js, restful_regions.js, restful_server.js (selected), router_cities.js, router_countries.js, router_home.js, router_regions.js, routing.js, and serve_statics_alt.js.
- Code Editor (Top Right):** Two tabs are open: 'restful_server.js .../src' and 'restful_server.js .../out'. The code in the src tab is as follows:

```
1  /*          */
2  "use strict";
3
4  const express = require("express");
5  const app = express();
6  const bodyParser = require("body-parser");
7
8  const dbConn = require("./restful_db.js");
9
10 app.get("/", (req, res) => res.send("Secure server!"));
11
12 /**
13  *      Add here the logic for CORS
14 */
15 const cors = require("cors");
16 app.use(cors());
17 */
18
19 app.use(bodyParser.urlencoded({ extended: false }));
```

- Terminal (Bottom Right):** Displays the output of running the debugger:

```
> node --inspect restful_server.js
Debugger listening on ws://127.0.0.1:9229/b87d91b2-5d9b-41b3-ba3a-e06d3dad7637
For help see https://nodejs.org/en/docs/inspector
Routing ready at http://localhost:8080
Debugger attached.
```
- Status Bar (Bottom):** Shows the current branch ('master*'), file count ('0 27'), and other status indicators like 'Launch Program (MODERNJS)', 'Flow: 31.9%', 'Auto Attach: On', and code analysis results for ESLint and Prettier.

chrome-devtools://devtools/bundled/inspector.html?experiments=true&v8only=true&ws=localhost:9229/024ea748-6038-48f6-8fe0-c3b340f01c80 - Chromium

Inspect with Chrome | chrome-devtools://devtools/bundled/inspector.html?experiments=true&v8only=true... Federate

Elements Network Performance Console Sources Application Memory Security Audits HTTPS Everywhere Redux RemoteDev AdBlock

Network Filesystem > /home/fkereki/M...tful_server.js /home/fkereki/M...ful_regions.js

+ Add folder to workspace

```
35 JOIN countries cc
36 ON cc.countryCode=rr.countryCode
37 WHERE rr.countryCode="${country}" country = "uy"
38 ORDER BY rr.regionCode
39 ;
40 } else {
41     sqlQuery =
42         `SELECT rr.*
43         FROM regions rr
44         JOIN countries cc
45         ON cc.countryCode=rr.countryCode
46         WHERE rr.countryCode="${country}" country = "uy"
47         AND rr.regionCode="${region}" region = undefined
48     `;
49 }
50 const regions = await dbConn.query(sqlQuery);
51 if (regions.length > 0 || region === null) {
52     res
53         .status(200)
54         .set("Content-Type", "application/json")
55         .send(JSON.stringify(regions));
56 } else {
57     res.status(404).send("Not found");
58 }
59 } catch (e) {
60     res.status(500).send("Server error");
61 }
62 }
```

{ } Line 51, Column 25

Paused on breakpoint

Watch

Call Stack

Scope

Block

regions: undefined
sqlQuery: "" SELECT rr.*

Local

country: "uy"
dbConn: Client {_events: {}, _eventsCount: 0, region: undefined}
region: undefined
res: ServerResponse {_events: {}, _event: undefined}

Global global

Breakpoints

/home/fkereki/MODERNJS/chapter04/out/rest... const regions = await dbConn.query(sqlQuery); XHR/fetch Breakpoints

DOM Breakpoints

Global Listeners

Console

/usr/bin/node-defa... ▾ Filter Default levels ▾ Group similar

04:11:41.433 Routing ready at <http://localhost:8080>

> 19:51:01.327 sqlQuery

< 19:51:01.372 "

```
        SELECT rr.*
        FROM regions rr
        JOIN countries cc
        ON cc.countryCode=rr.countryCode
        WHERE rr.countryCode="uy"
        ORDER BY rr.regionCode
```

> |

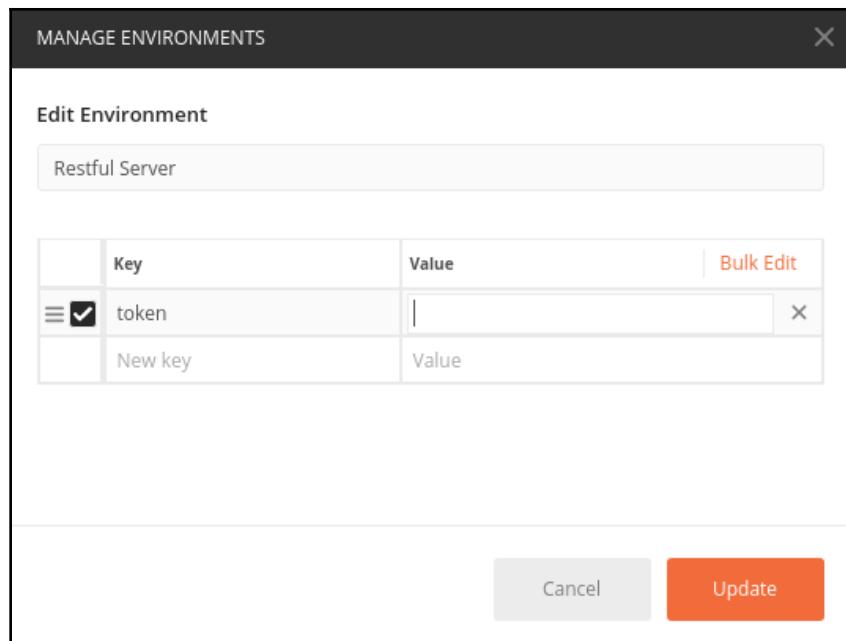
The screenshot shows the Postman application interface. At the top, there's a toolbar with 'File', 'Edit', 'View', and 'Help' menus, along with icons for 'New', 'Import', 'Runner', and 'My Workspace'. Below the toolbar is a navigation bar with links like 'Get JWT', 'Get /regions/u', 'Get /regions/u', 'Delete n...', 'Delete non-exi...', 'Get JWT', and a '+' button. To the right of the navigation bar are icons for 'Restful Server', 'Upgrade', and other settings.

The main workspace is titled 'Get JWT' and contains a POST request to 'localhost:8443/gettoken'. The 'Body' tab is selected, showing a table with three rows:

Key	Value	...	Bulk Edit
<input checked="" type="checkbox"/> user	fkereki		
<input checked="" type="checkbox"/> password	modernjsbook		
New key	Value		

Below the table, a message says 'Hit the Send button to get a response.' with a large blue 'Send' button. The bottom of the window has a toolbar with icons for 'Build', 'Browse', and others.

The screenshot shows the Postman application interface. At the top, there's a toolbar with 'File', 'Edit', 'View', 'Help' menus, and various icons like 'New', 'Import', 'Runner', 'My Workspace', 'Upgrade', and a gear icon. Below the toolbar is a navigation bar with buttons for 'Get JWT', 'Get /regions/u', 'Get /regions/u', 'Delete n...', 'Delete non-ex...', 'Get a JW...', 'Restful Server', and 'Examples (0)'. The main content area has a section titled 'Get a JWT' with a description of the GET method and its parameters. Below this is a request configuration panel for a POST request to 'localhost:8443/gettoken'. The 'Body' tab is selected, showing a table with three rows: 'user' (value: fkereki), 'password' (value: modernjsbook), and 'New key' (value: Value). The 'Headers' tab shows '(1)' header entries. The 'Params' and 'Tests' tabs are also visible. At the bottom of the request panel, there are buttons for 'Send', 'Save', and 'Cookies/Code'. The status bar at the bottom indicates 'Status: 200 OK', 'Time: 9 ms', and 'Size: 386 B'. The response body is displayed in a large text area, showing a long JSON string starting with 'eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyaWQiOiJma2VyZWtpIiwiaWF0IjoxNTI4MTU0NjI2LCJ1eHAiOjE1MjgxNTgyMjZ9.jOPRUUh3tKhiobZTqREFpdSgeLKKJxqNqm5vSJc8xhc|'. The bottom of the screen features a footer with icons for 'Build', 'Browse', 'Help', and a question mark.



Postman

File Edit View Help

New Import Runner My Workspace Restful Server

POST localhost:8443/gettoken Params Send Save

Body Cookies Headers (7) Test Results (2/2)

Status: 200 OK Time: 8 ms Size: 386 B

All Passed Skipped Failed

PASS Response is long enough

PASS Response has three parts

Collection Runner

File Edit View Help

Collection Runner Run Results My Workspace Run In Command Line Docs

Restful server testing for regions Restful Server

12 PASSED 0 FAILED Just now

Run Summary Export Results Retry New

Iteration 1

Test Case	Description	Status	Time	Size
POST Get a JWT localhost:8443/gettoken	...r regions / Test Delete / Get a JWT	200 OK	3 ms	153 B
PASS Response is long enough				
PASS Response has three parts				
DELETE Delete non-existing region localhost:8443/regions/z...	...elete / Delete non-existing region	404 Not Found	4 ms	16 B
PASS Status code is 404				
POST Get JWT localhost:8443/gettoken	...ng for regions / Test Get / Get JWT	200 OK	2 ms	153 B
PASS Response is long enough				
PASS Response has three parts				
GET Get /regions/uy	localhost:8443/regions/uy ...gions / Test Get / Get /regions/uy	200 OK	4 ms	1.25 KB
PASS Answer should be JSON				
PASS Answer should have at least 19 regions				
GET Get /regions/uy/10	localhost:8443/regions/u...ns / Test Get / Get /regions/uy/10	200 OK	2 ms	64 B
PASS Answer has a single region				
PASS Country code is UY				
PASS Region code is 11				
PASS Region name is Paysandu				
PASS Answer is valid, JSON				

	executed	failed
iterations	1	0
requests	5	0
test-scripts	10	0
prerequest-scripts	5	0
assertions	12	0
total run duration:	212ms	
total data received:	1.6KB	(approx)
average response time:	4ms	

9 ✎ Federico

Swagger UI - Chromium

Swagger UI localhost:8443... 1.0.0

[Base URL: 127.0.0.1:8443]

This is a RESTful API to access world data, including countries, regions, and cities.

Schemes

HTTP

token Get a JWT for authorization >

countries Access the world countries ▾

regions Access the regions of countries ▾

GET /regions Get all regions of all countries

POST /regions Add a region to a given country

GET /regions/{country} Get all regions of a given country

GET /regions/{country}/{id} Get a specific region of a given country

DELETE /regions/{country}/{id} Delete a specific region of a given country

PUT /regions/{country}/{id} Update a specific region of a given country

Swagger UI - Chromium

Swagger UI localhost:8443... Federico

token Get a JWT for authorization

POST /gettoken Get a token to authorize future requests

Parameters

Name **Description**

user * required
string
(*formData*)

password * required
string
(*formData*)

Cancel

Execute

Responses

Code **Description**

200 *A valid token to use for other requests*

401 *Wrong user/password*

Response content type **text/plain**

The screenshot shows the Swagger UI interface for a POST request to '/gettoken'. The 'Parameters' section contains two fields: 'user' (required, string, formData) and 'password' (required, string, formData). The 'Responses' section defines two codes: 200, which returns a placeholder message 'A valid token to use for other requests', and 401, which returns a placeholder message 'Wrong user/password'. The 'Responses' dropdown is set to 'text/plain'.

Swagger UI - Chromium

Federico

localhost:8443...

Responses Response content type: text/plain

Curl

```
curl -X POST "http://127.0.0.1:8443/gettoken" -H "accept: text/plain" -H "Content-Type: application/x-www-form-urlencoded" -d "user=fkerek&password=modernjsbook"
```

Request URL

```
http://127.0.0.1:8443/gettoken
```

Server response

Code Details

200 Response body

```
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlc2VyaWQ1O1Jma2VyzWtpIiwiaWF0IjoxNTI4MjQyNTI2LCJleHAiOjE1MjgyNDYxMjZ9.q-u5ByRJKq3ngPXitRz9hxEVWyr000bm4OFNJRpmAw
```

Download

Response headers

```
content-type: text/html; charset=utf-8
```

Responses

Code Description

200 *A valid token to use for other requests*

401 *Wrong user/password*

The screenshot shows the Swagger UI interface running in a Chromium browser. The URL is localhost:8443. The main area displays a successful API call to the endpoint /gettoken. It includes a 'Curl' section with the command to make the request, a 'Request URL' input field containing the endpoint, and a 'Server response' section. The response is a JSON Web Token (JWT) with several fields. Below this, there's a 'Responses' section with two entries: a 200 status code with a description and a 401 status code with a description.

Swagger UI - Chromium

Federico

localhost:8443...

GET /regions/{country} Get all regions of a given country

Cancel

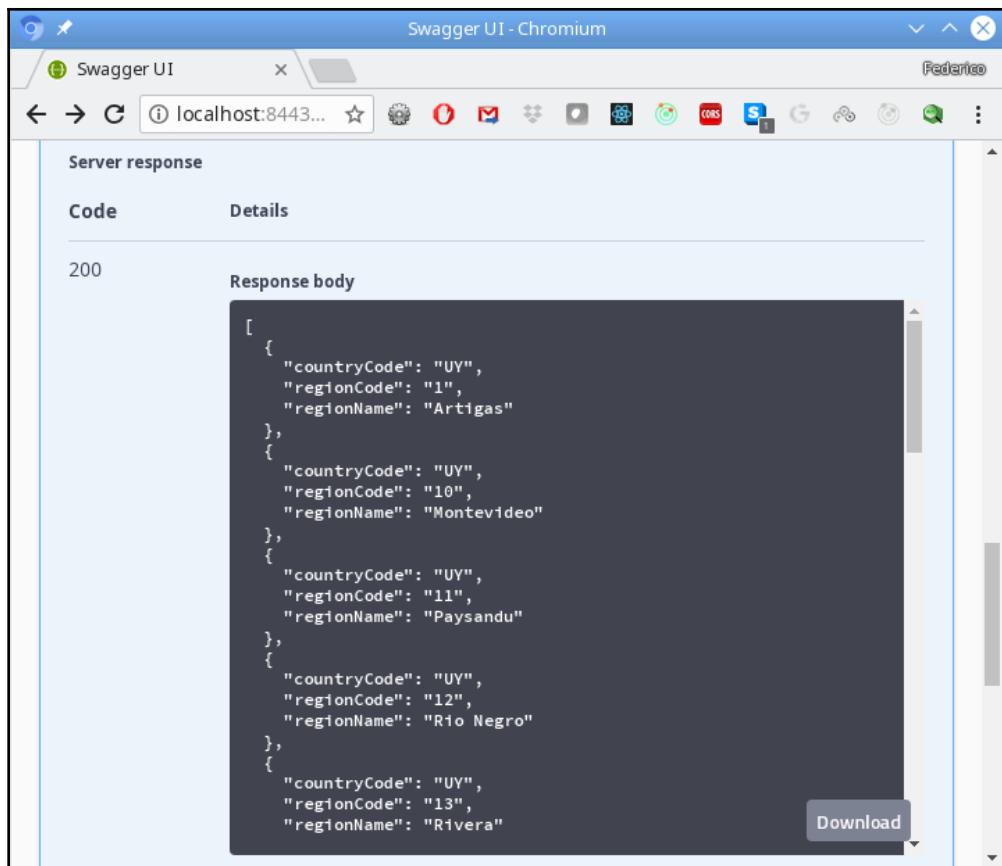
Parameters

Name	Description
country * required string (path)	Country (id) whose regions are required UY
Authorization * required string (header)	Authorization Token Bearer eyJhbGciOiJIUzI1NilsInR5cCl6IkpxV

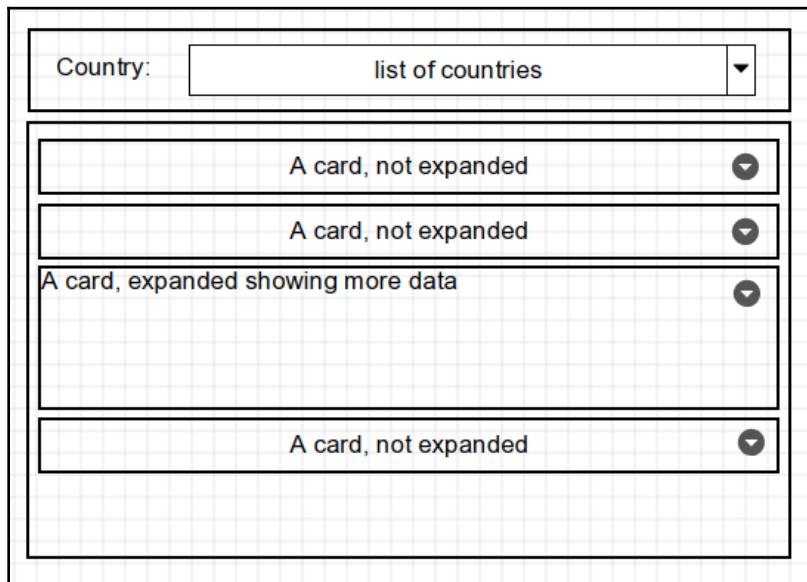
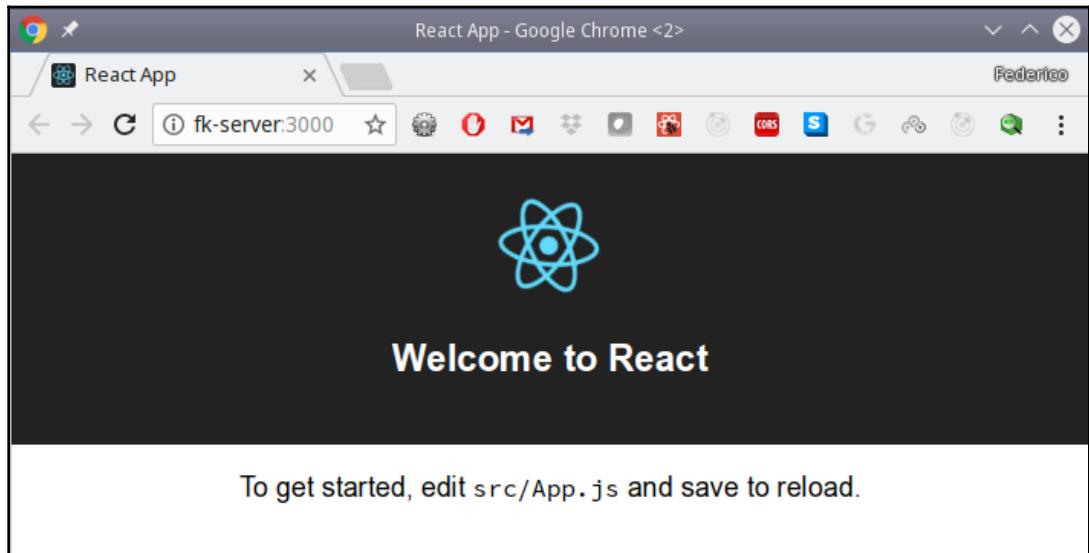
Execute Clear

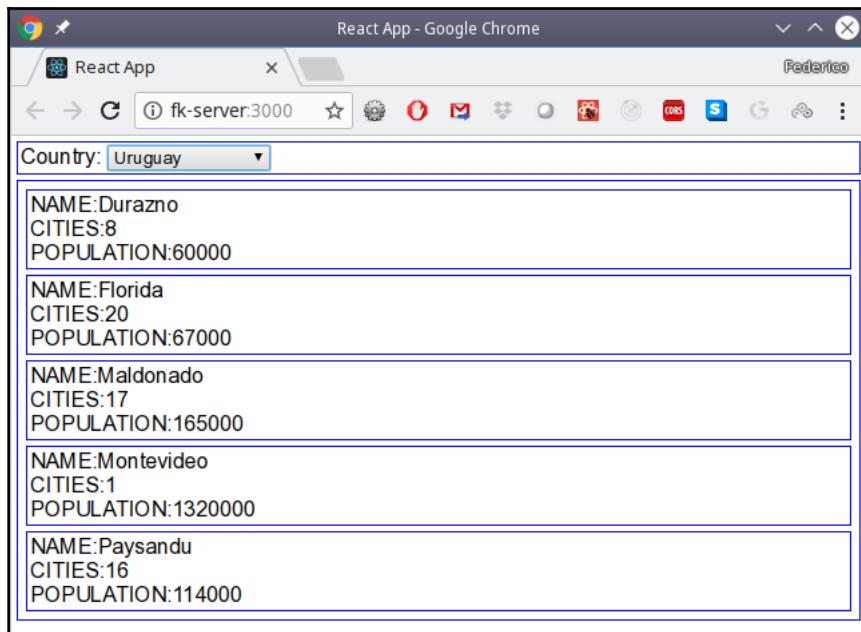
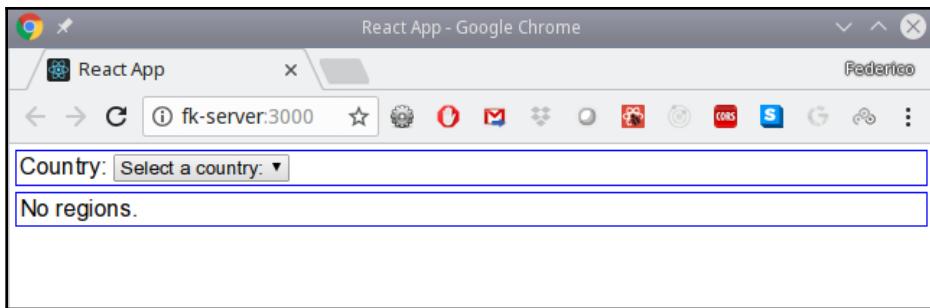
Responses Response content type application/json

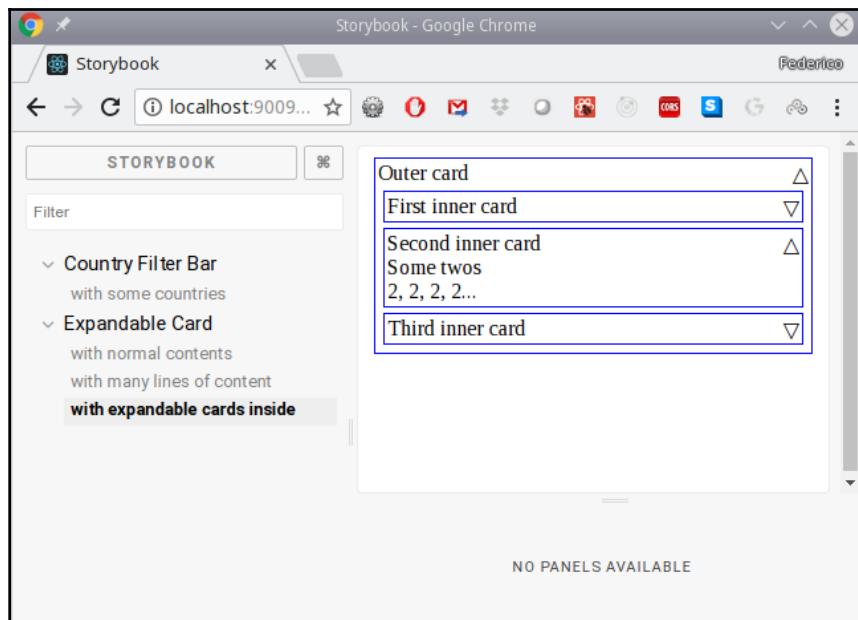
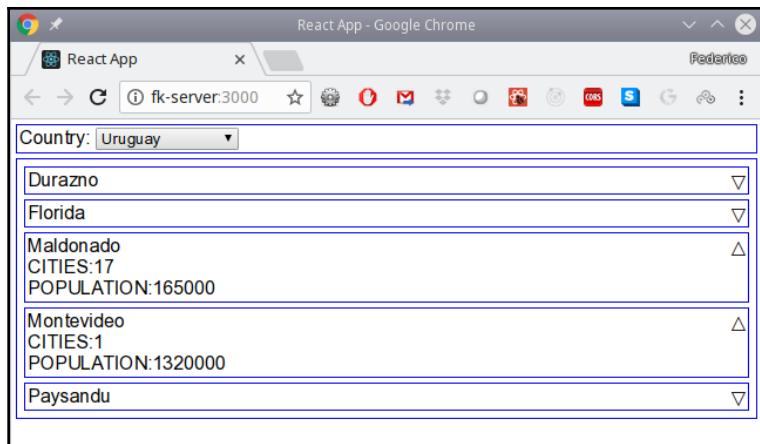
The screenshot shows the Swagger UI interface for a POST request to the endpoint `/regions/{country}`. The request is described as "Get all regions of a given country". There are two parameters: `country` (required, string, path) with value `UY`, and `Authorization` (required, string, header) with value `Bearer eyJhbGciOiJIUzI1NilsInR5cCl6IkpxV`. The `Execute` button is highlighted in blue.

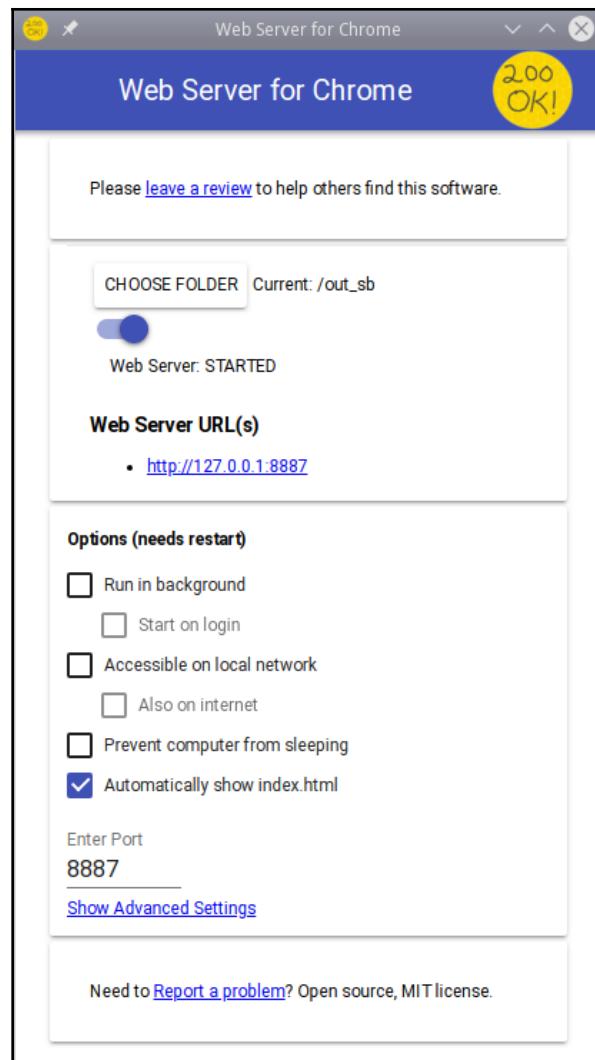


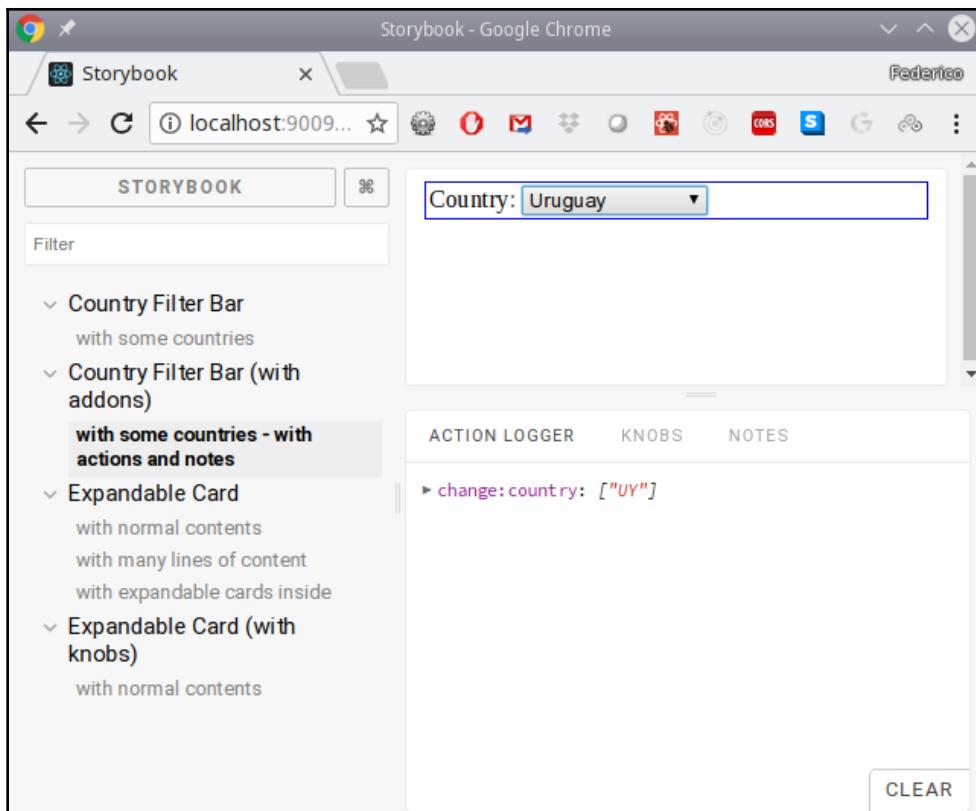
Chapter 6: Developing with React

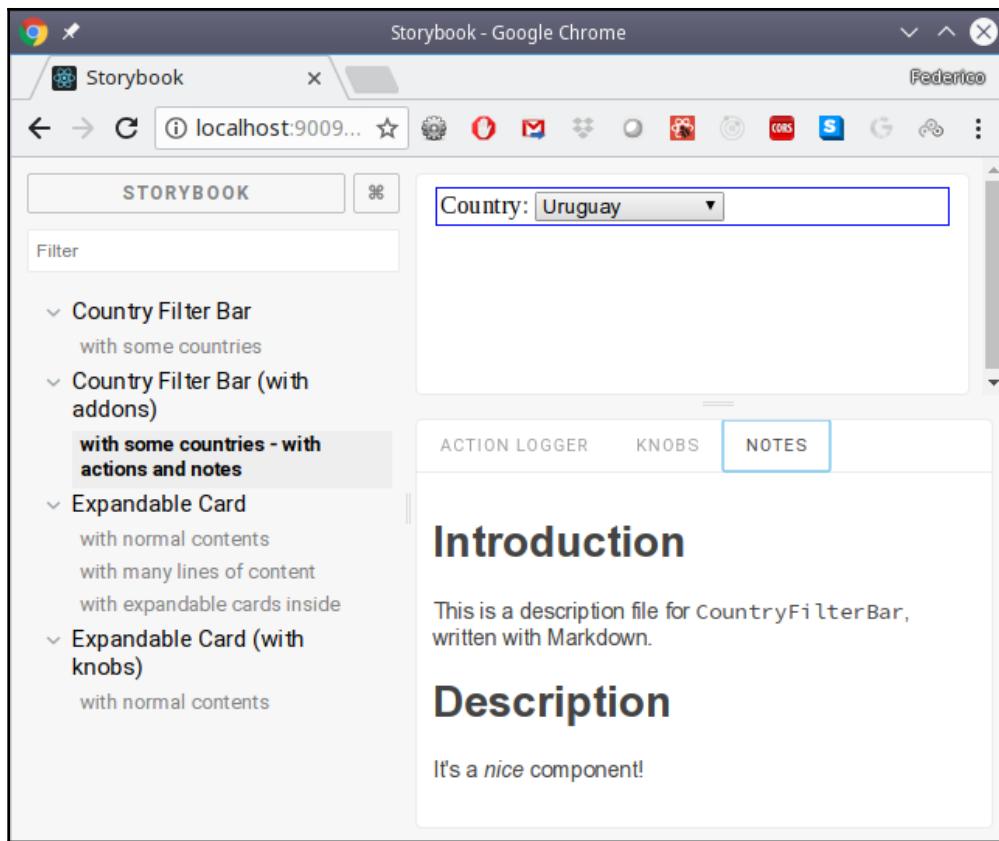


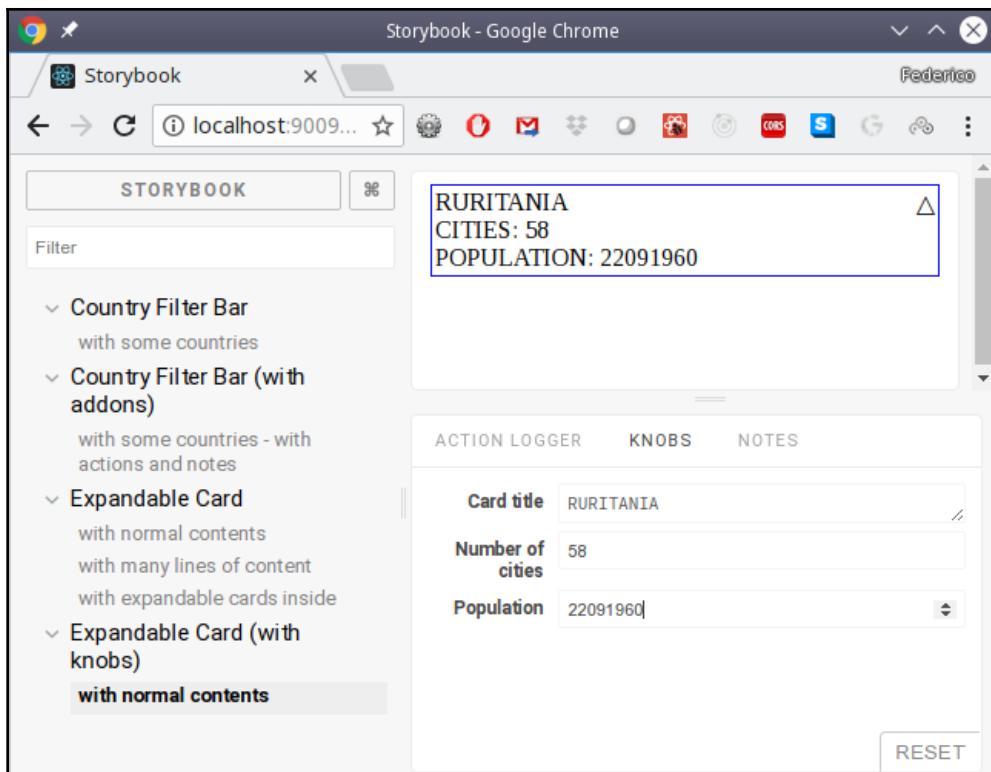




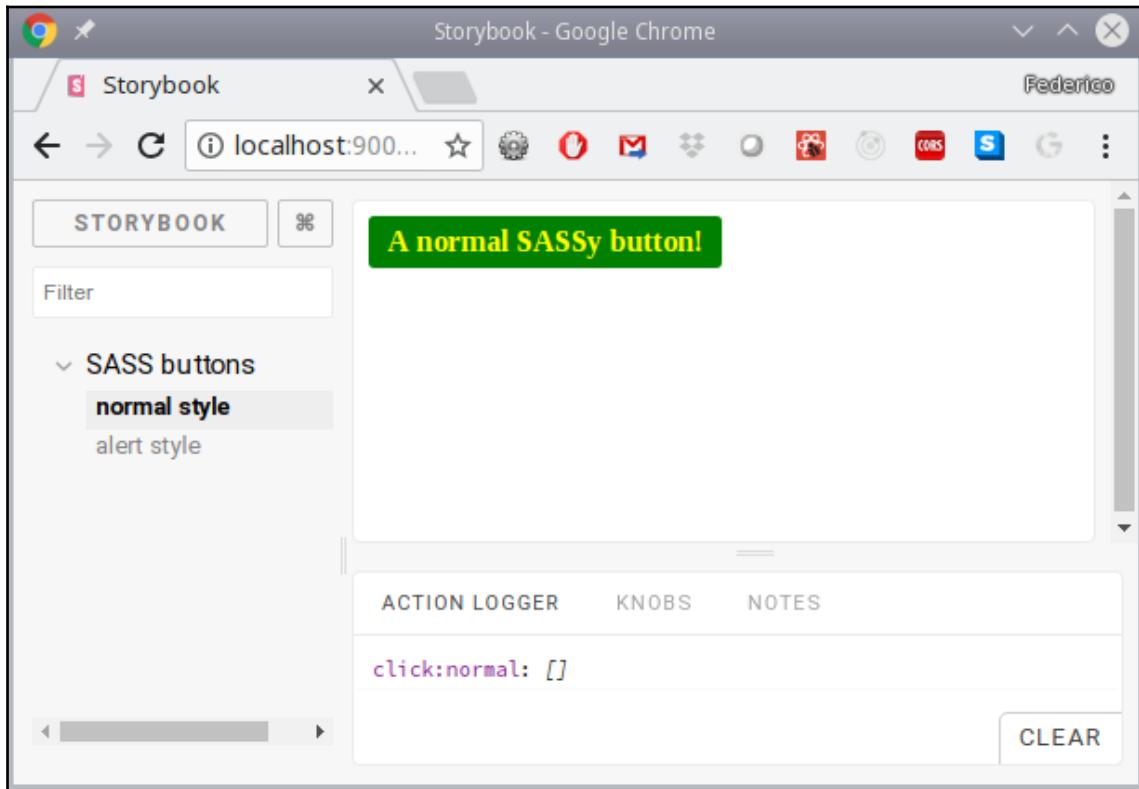


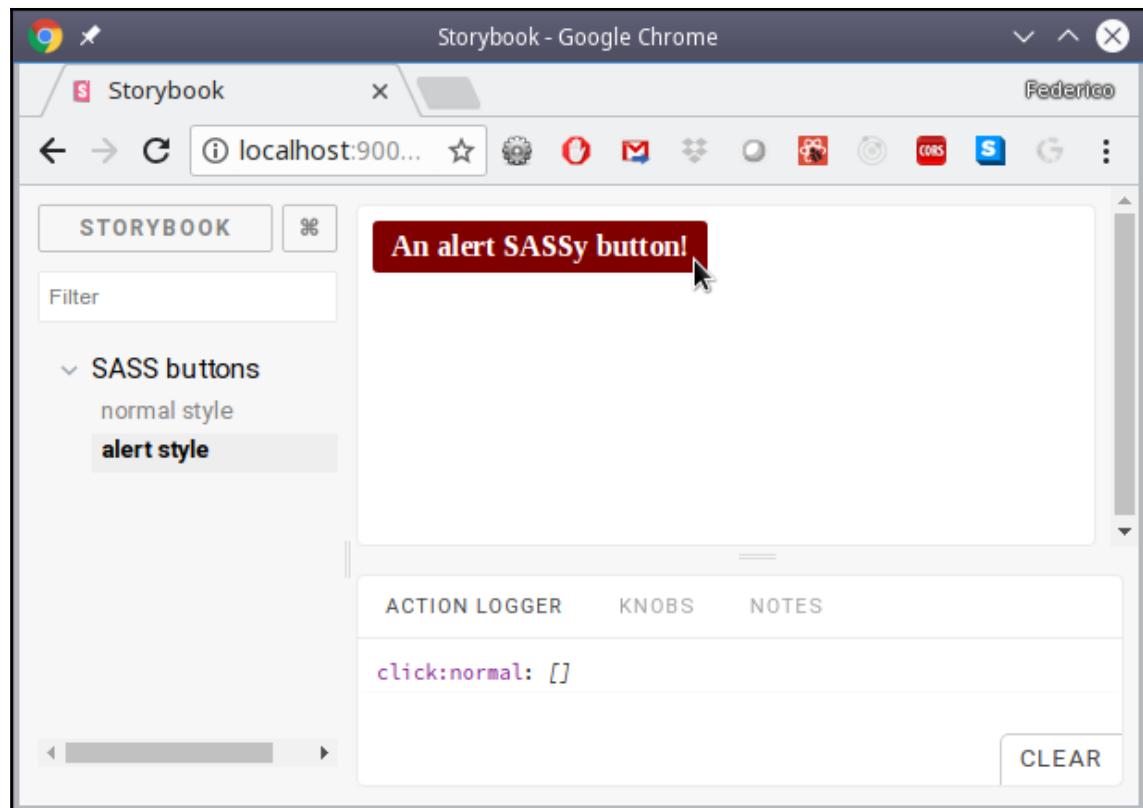


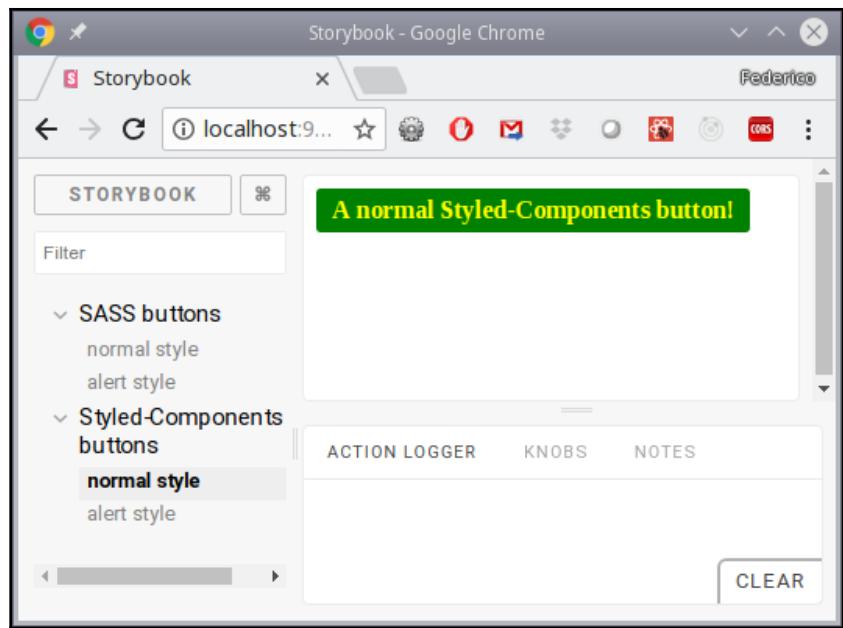




Chapter 7: Enhancing Your Application



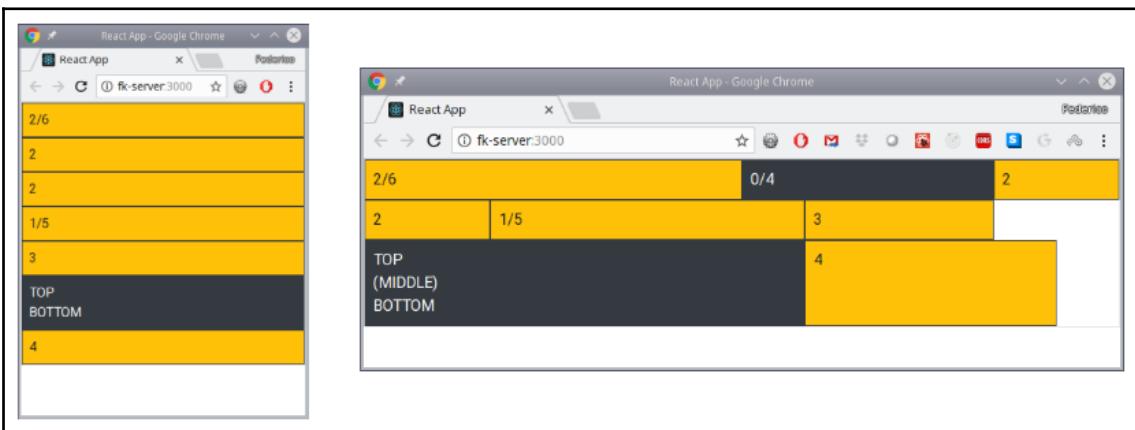
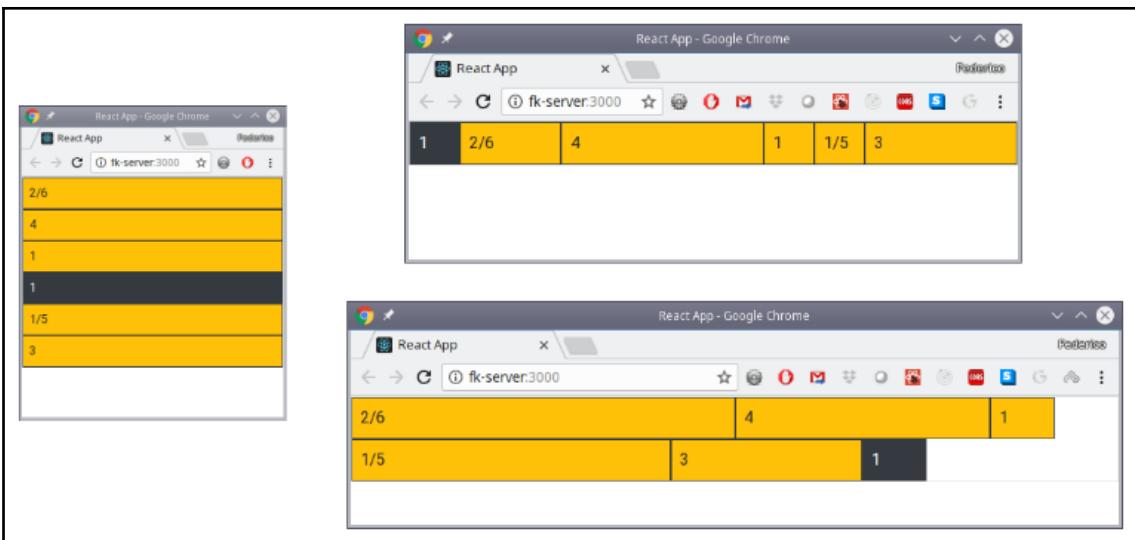


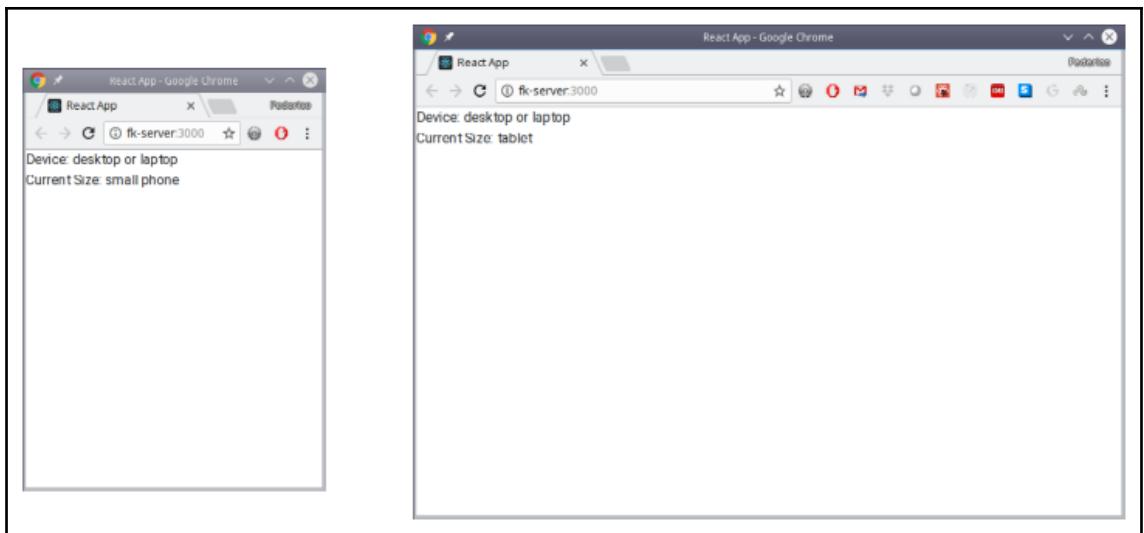


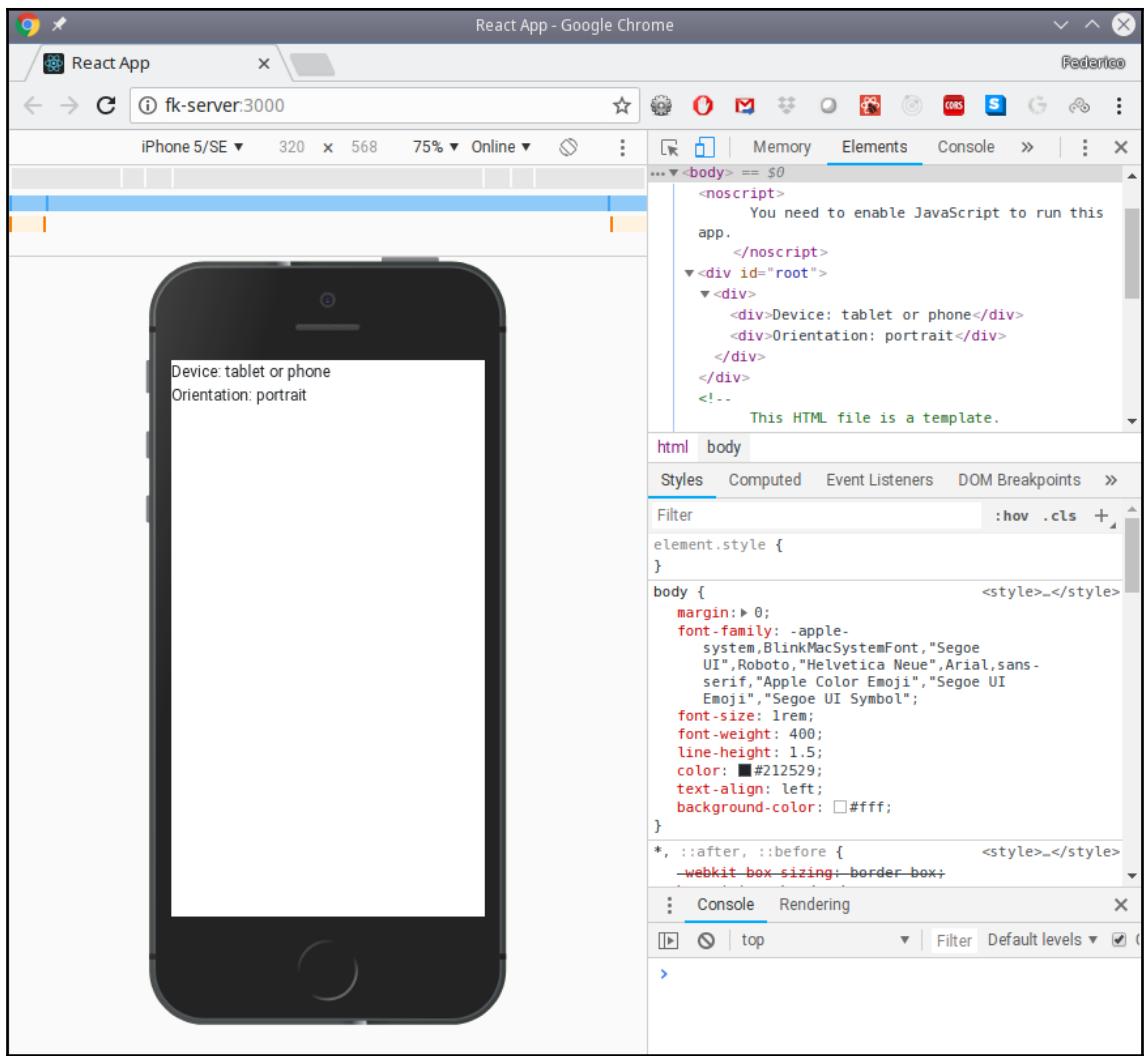
Two screenshots of a Google Chrome browser window titled "React App - Google Chrome". Both windows have the address bar showing "fk-server:3000".

The top window shows a grid layout with 12 columns. The first row contains four columns: "2/6", "4", "1", and "1". The second row contains three columns: "7/3", "4", and "1/3".

The bottom window shows a grid layout with 8 columns. The first row contains four columns: "2/6", "4", "1", and "1". The second row contains four columns: "1", "1/5", "2", and "7/3".







Storybook - Google Chrome

Federico

Storybook

localhost:9...

STORYBOOK

Filter

i18n form

- standard
- SASS buttons
- Styled-Components buttons

Details

ES EN

Please, enter details for your thing:

Send the thing before:

How many things?:

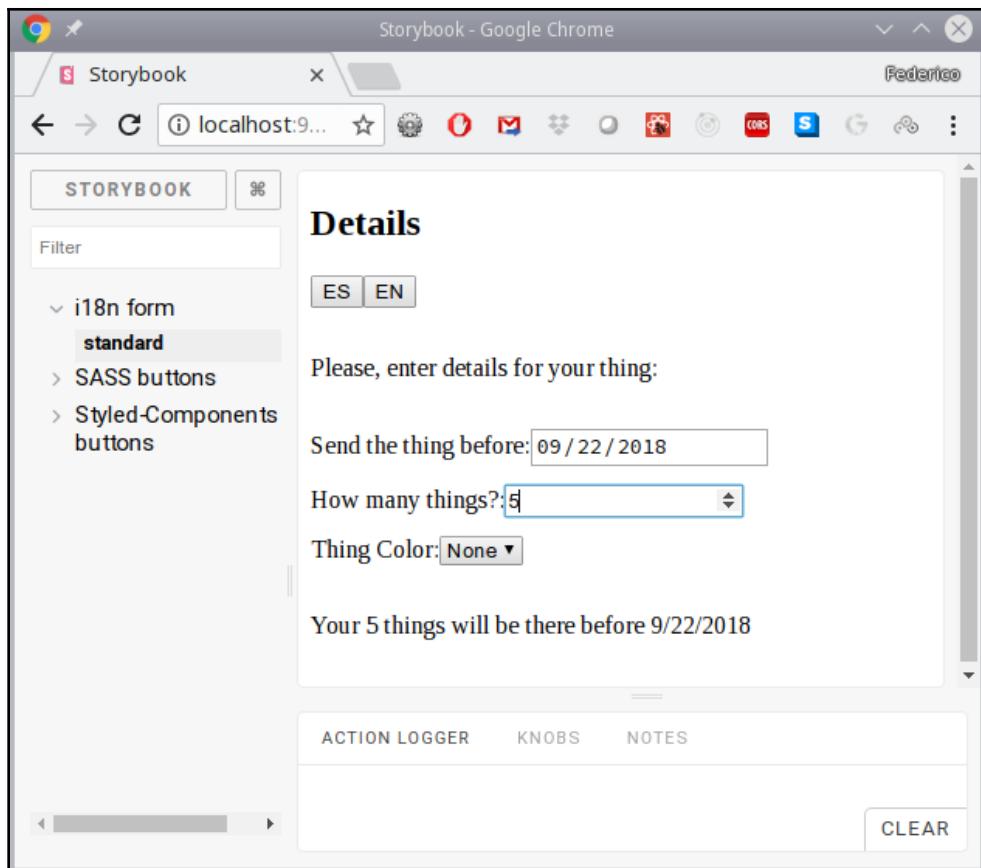
Thing Color:

Your only thing will be there before 9/22/2018

ACTION LOGGER KNOBS NOTES

CLEAR

The screenshot shows a browser window displaying a Storybook component named 'Details'. On the left, a sidebar lists 'i18n form' with 'standard' selected, and other options like 'SASS buttons' and 'Styled-Components buttons'. The main content area has a title 'Details' and two language buttons 'ES' and 'EN'. Below the title is a placeholder text 'Please, enter details for your thing:'. There are three input fields: 'Send the thing before:' with the value '09 / 22 / 2018', 'How many things?:' with the value '1', and 'Thing Color:' with a dropdown menu open showing 'None'. A note at the bottom says 'Your only thing will be there before 9/22/2018'. At the bottom of the main area are buttons for 'ACTION LOGGER', 'KNOBS', and 'NOTES', and a 'CLEAR' button.



Storybook - Google Chrome

Federico

localhost:9...

STORYBOOK

Filter

i18n form

- standard
- SASS buttons
- Styled-Components buttons

Detalles

ES EN

Por favor, ingrese detalles para su cosa:

Enviar antes de:

¿Cuántas cosas?:

Color de la cosa:

Sus 5 cosas llegarán antes del 22/9/2018

ACTION LOGGER KNOBS NOTES

CLEAR

The screenshot shows a Storybook component titled "Detalles". On the left, there's a sidebar with a tree view of components: "i18n form" has "standard" selected; "SASS buttons" and "Styled-Components buttons" are also listed. The main area has tabs for "ES" and "EN". Below that, it says "Por favor, ingrese detalles para su cosa:". There are three input fields: "Enviar antes de:" with the value "09/22/2018", "¿Cuántas cosas?: 5", and "Color de la cosa:" with a dropdown menu showing "Ninguno". Below these is a note: "Sus 5 cosas llegarán antes del 22/9/2018". At the bottom, there are buttons for "ACTION LOGGER", "KNOBS", and "NOTES", and a "CLEAR" button.

```
8  export class SassButton extends React.PureComponent<{
9    normal: boolean,
10   buttonText: string,
11   onSelect: () => void
12 }> {
13   static propTypes = {
14     normal: PropTypes.bool.isRequired,
15     buttonText: PropTypes.string.isRequired,
16     onSelect: PropTypes.func.isRequired
17   };
18   render() {
19     return (
20       <div
21         className={this.props.normal ? "normalButton" : "alertButton"}
22         onClick={this.props.onSelect}>
23         <span>{this.props.buttonText}</span>
24       </div>
25     );
26   }
27 }
28 
```

```
</div> [eslint] onBlur must be used instead of onchange, unless absolutely
<div> necessary and it causes no negative consequences for keyboard only
or screen reader users. (jsx-a11y/no-onchange)
<select
  onChange={e =>
    this.setState({ thingColor: e.target.value })
}
>
<option value="NC">{t("colors.none")}</option>
<option value="ST">{t("colors.steel")}</option>
<option value="SD">{t("colors.sand")}</option>
</select>
```

```
[eslint] img elements must have an alt prop, either with meaningful
text, or an empty string for decorative images. (jsx-a11y/alt-text)

<br />
<div>{t("please enter details")}</div>
```



Your personal details

Full name

As shown on your birth certificate or passport

Error message about full name goes here

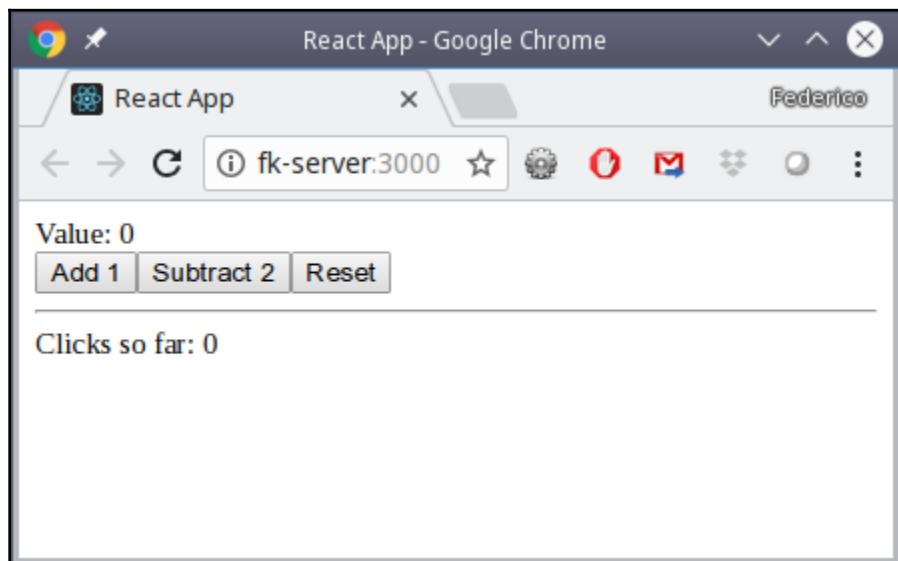
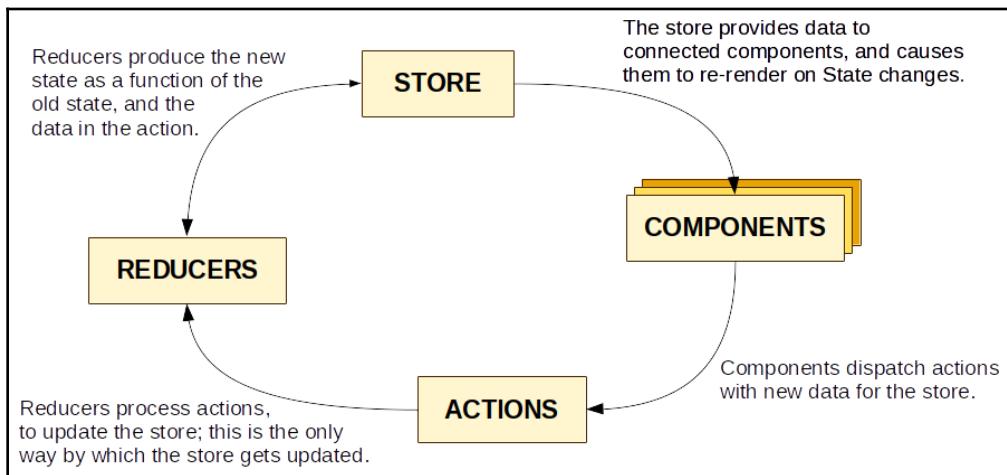
National Insurance number

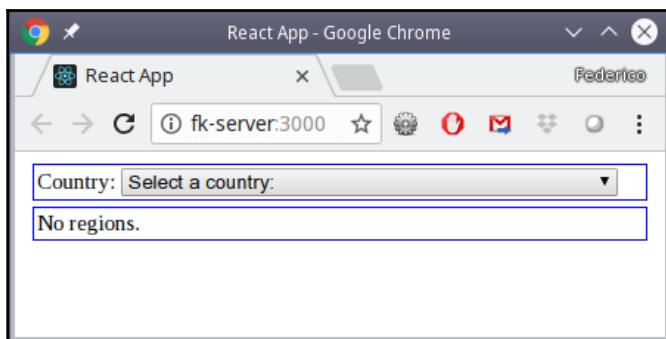
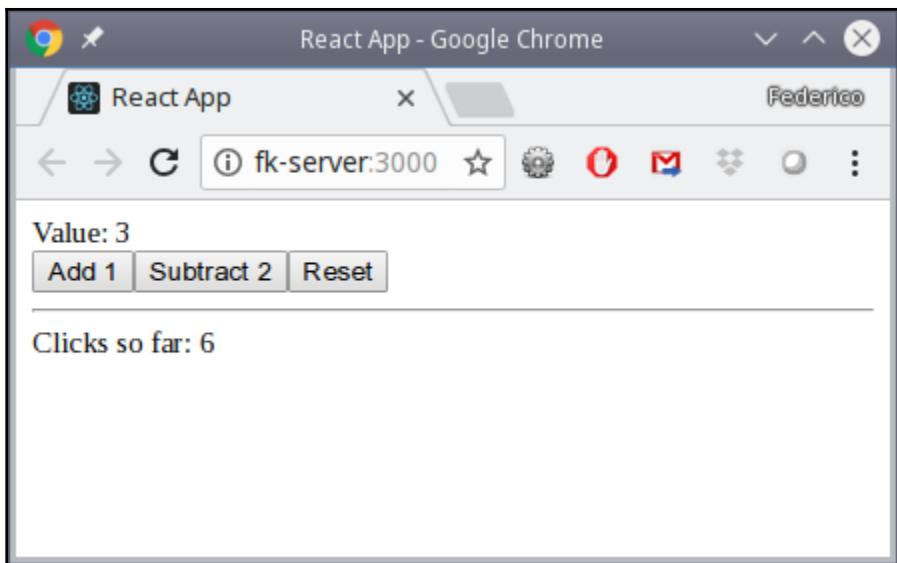
It's on your National Insurance card, benefit letter, payslip or P60.
For example, 'QQ 12 34 56 C'.

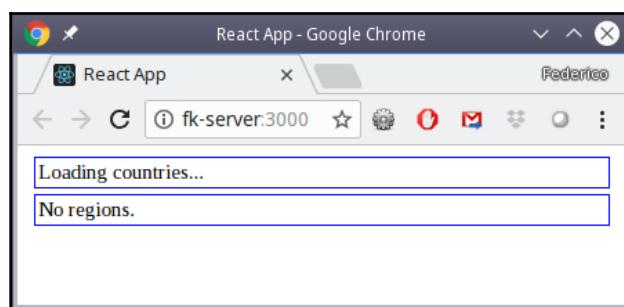
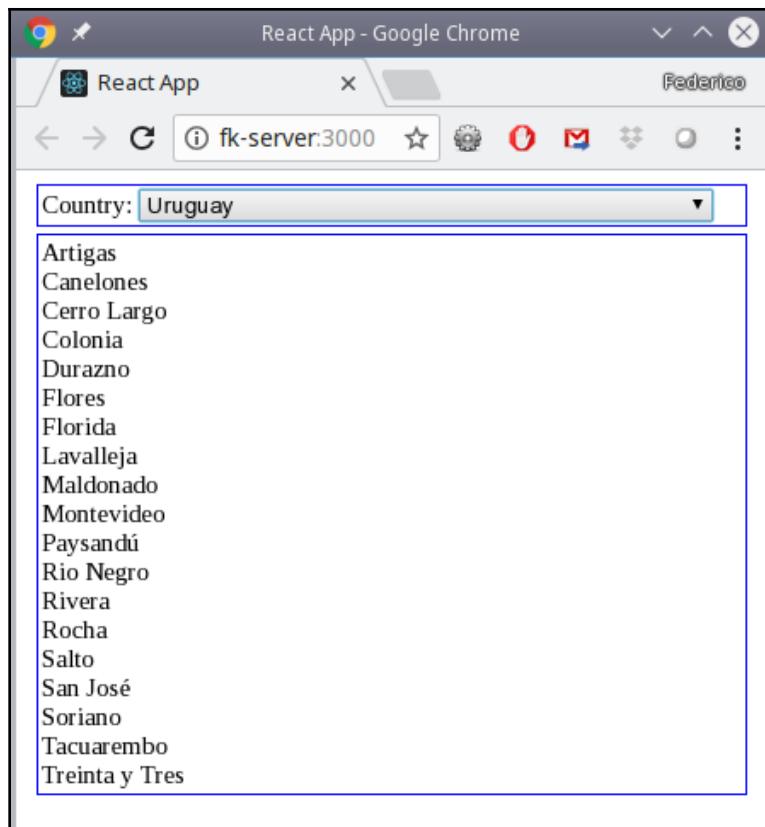
FK 22 09 60 B

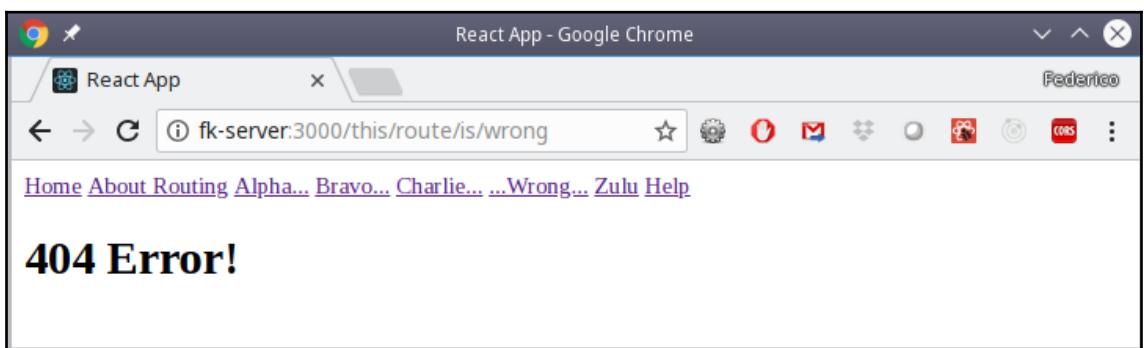
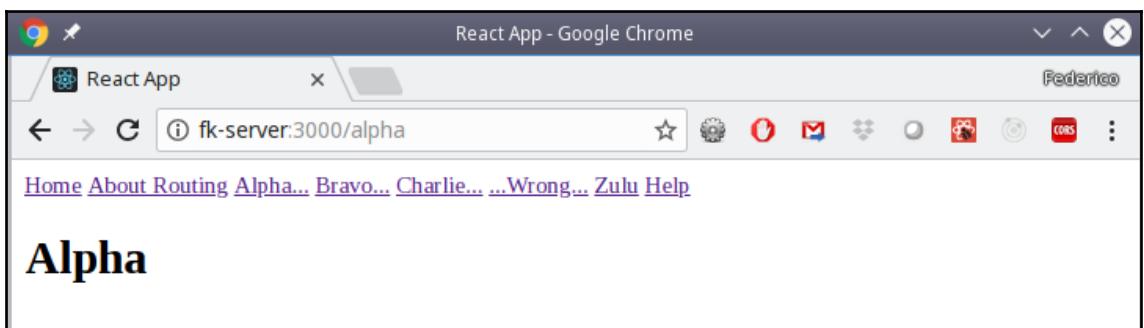
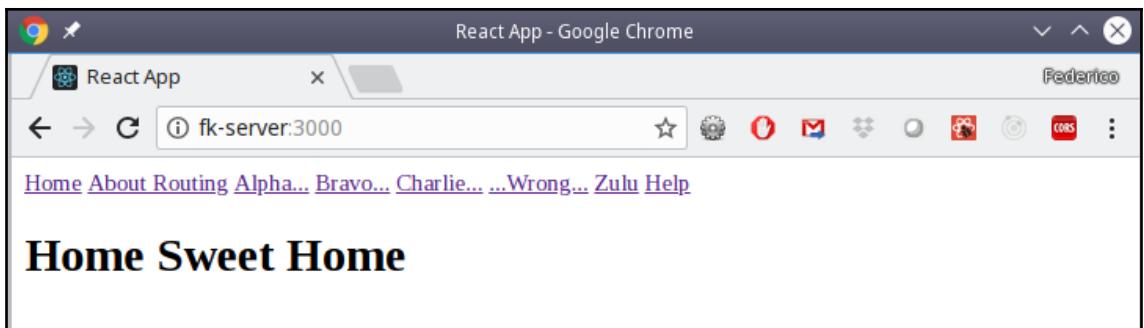
Continue

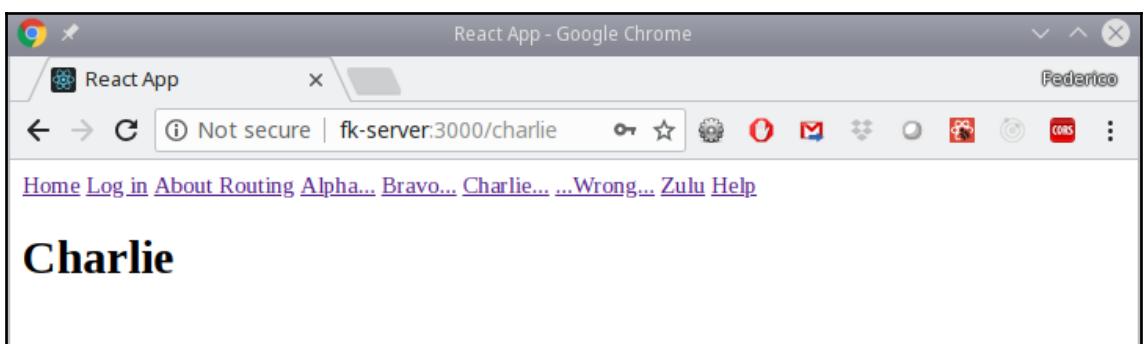
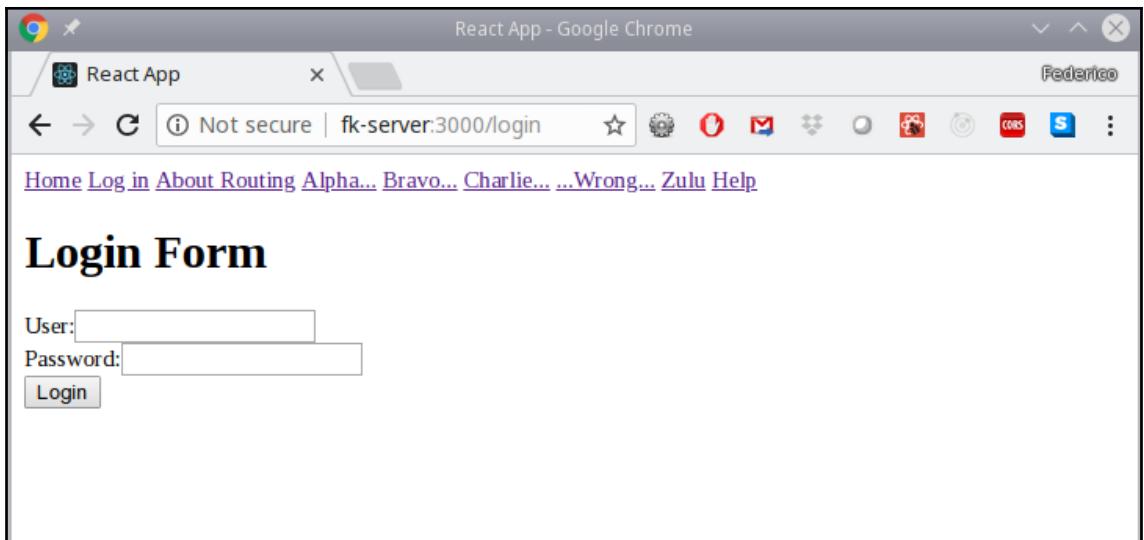
Chapter 8: Expanding Your Application











React App - Google Chrome

React App Federico

fk-server:3000

Home Alpha... Bravo... Charlie... ...Wrong... Zulu Help

Home Sweet Home

Memory Elements Console Sources Audits Network Performance »

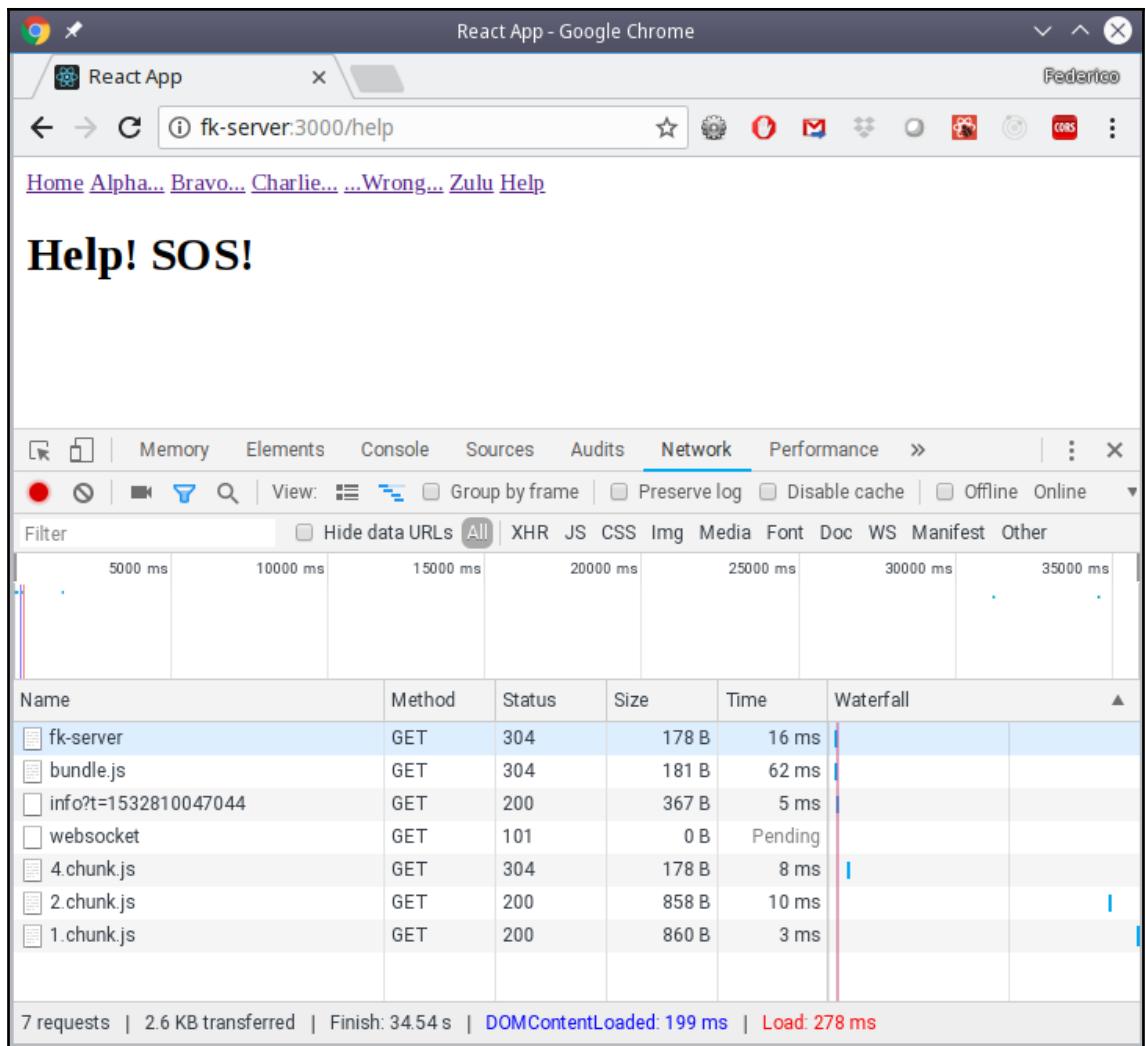
View: Group by frame Preserve log Disable cache Offline Online

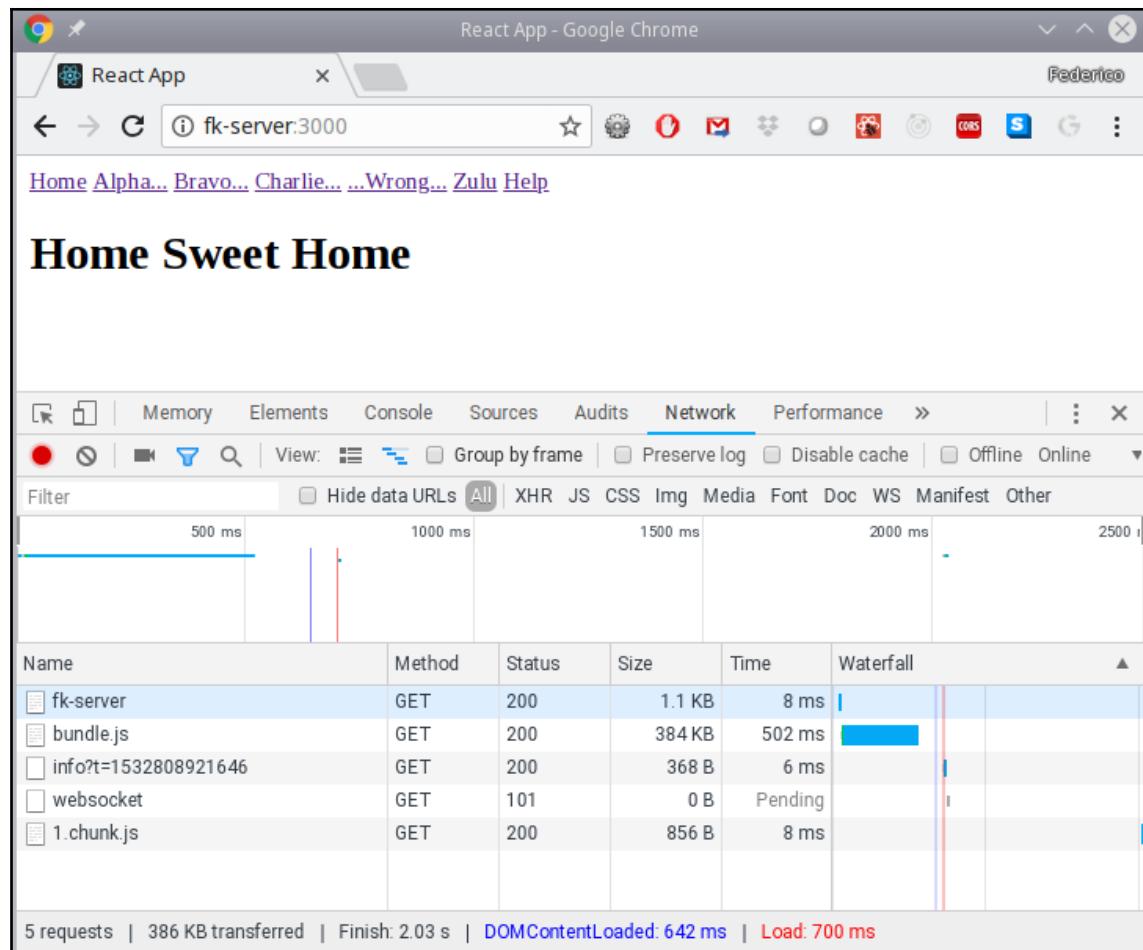
Filter Hide data URLs All XHR JS CSS Img Media Font Doc WS Manifest Other

Name	Method	Status	Size	Time	Waterfall
fk-server	GET	200	1.1 KB	7 ms	
bundle.js	GET	200	384 KB	91 ms	
info?t=1532809866689	GET	200	368 B	4 ms	
websocket	GET	101	0 B	Pending	

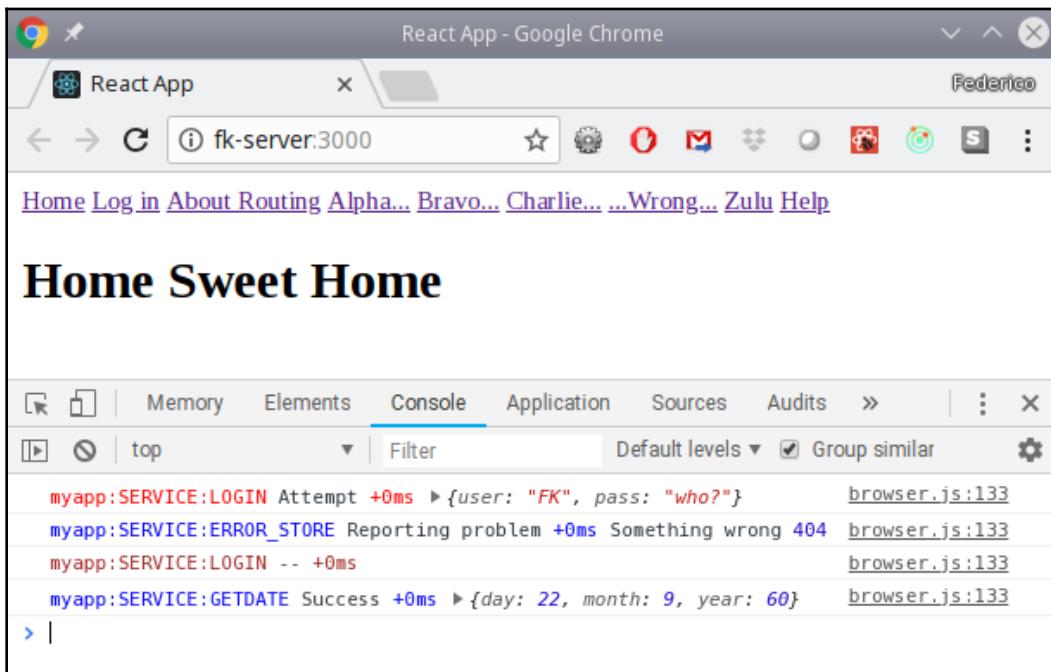
4 requests | 386 KB transferred | Finish: 285 ms | DOMContentLoaded: 228 ms | Load: 282 ms

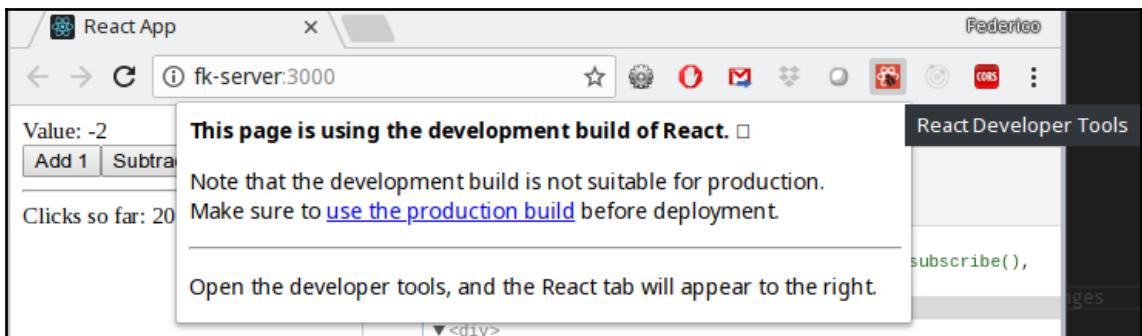
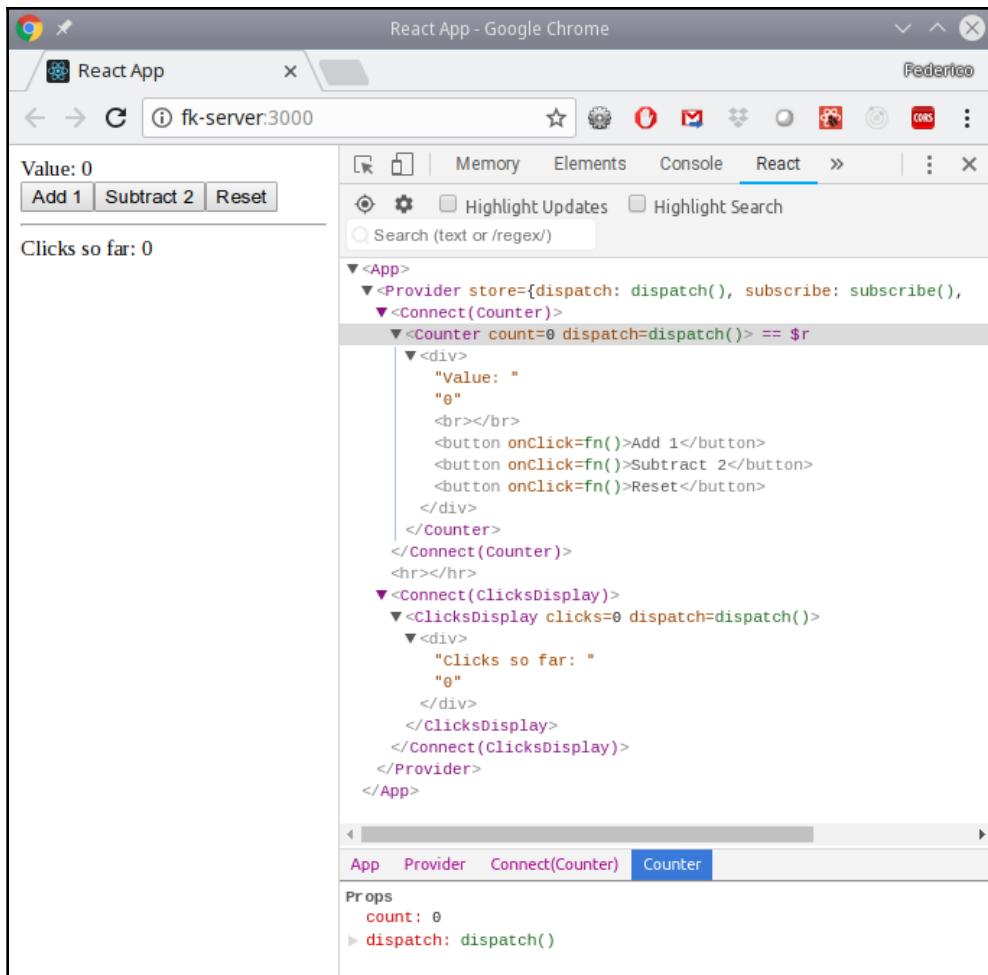
Name	Method	Status	Size	Time	Waterfall
fk-server	GET	200	1.1 KB	7 ms	
bundle.js	GET	200	384 KB	91 ms	
info?t=1532809866689	GET	200	368 B	4 ms	
websocket	GET	101	0 B	Pending	

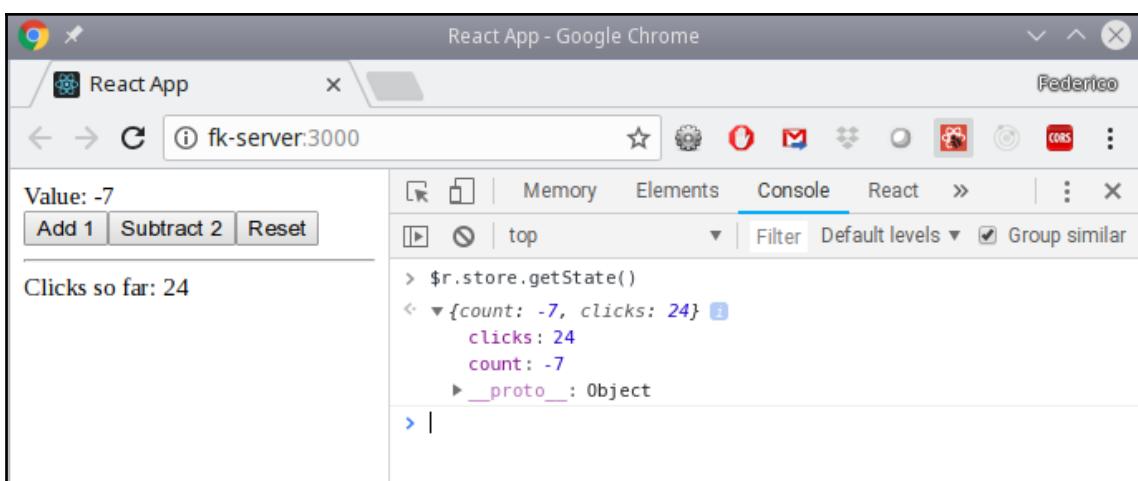
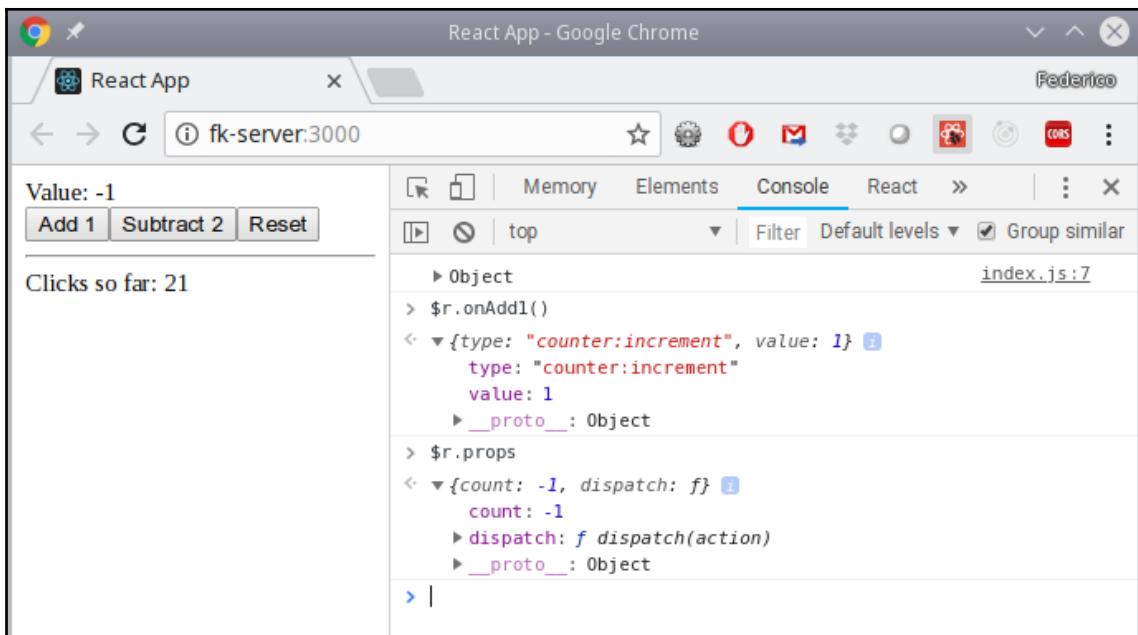


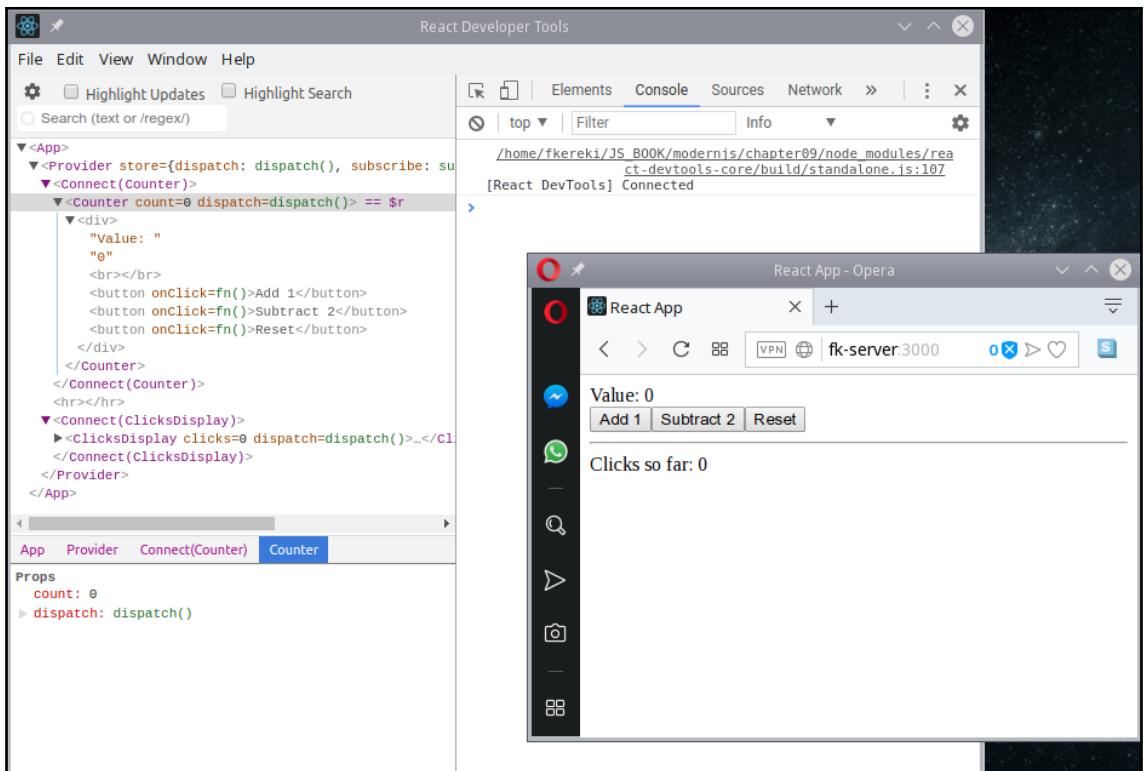


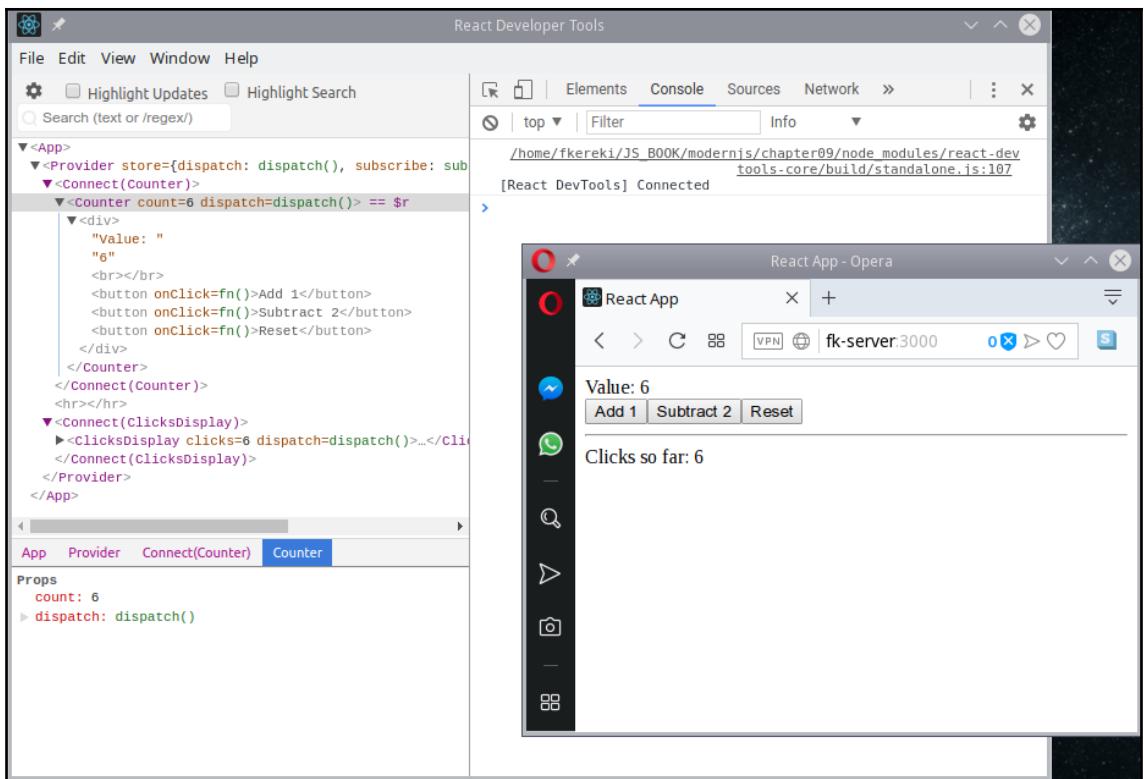
Chapter 9: Debugging Your Application

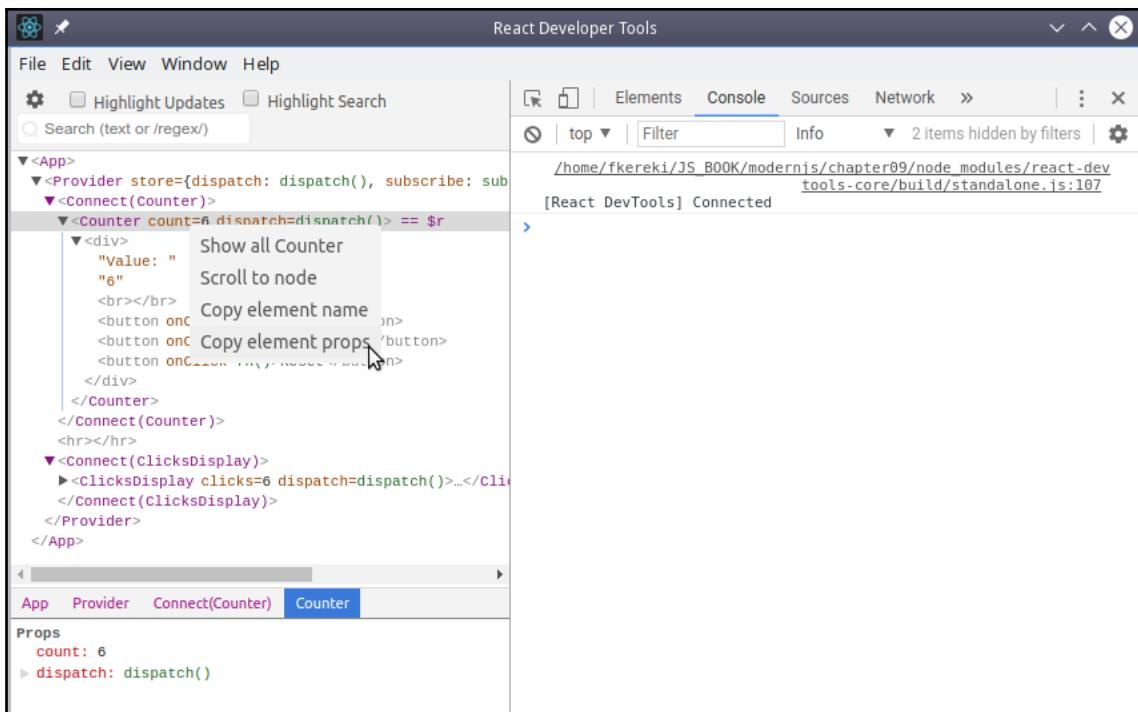


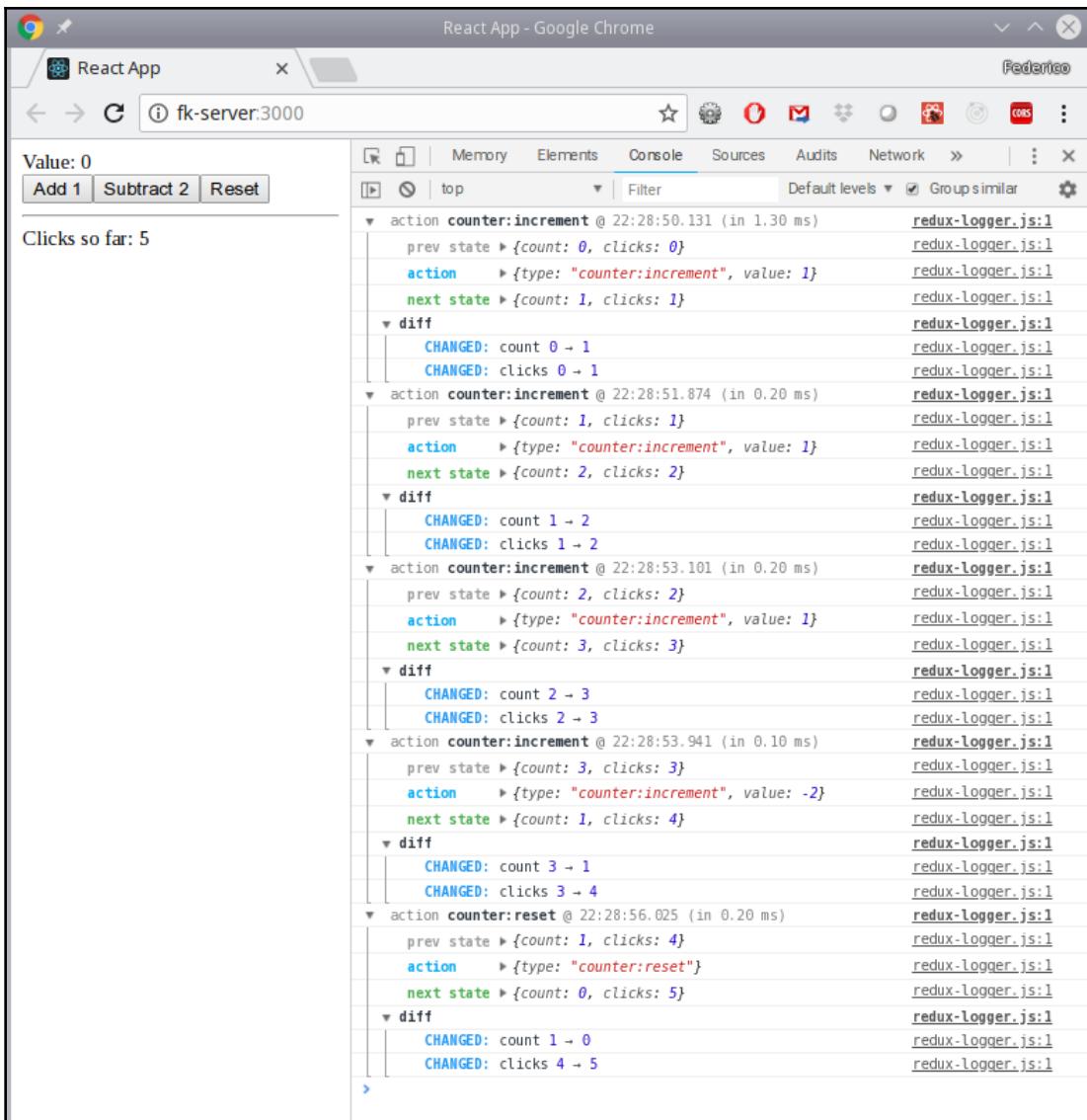


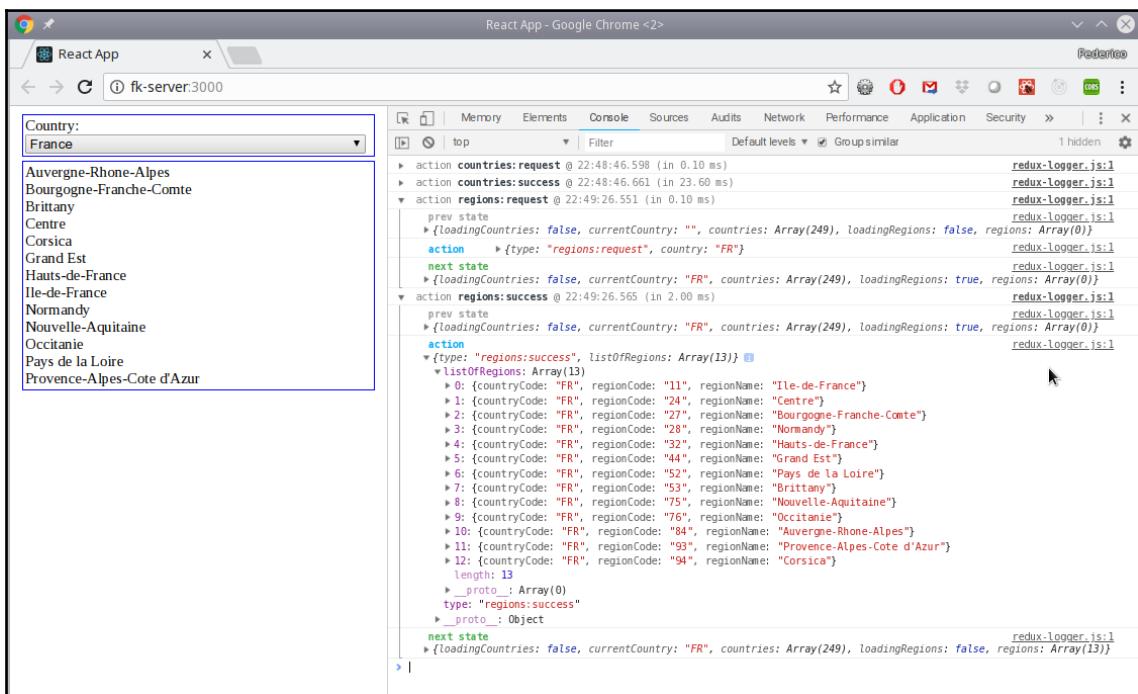
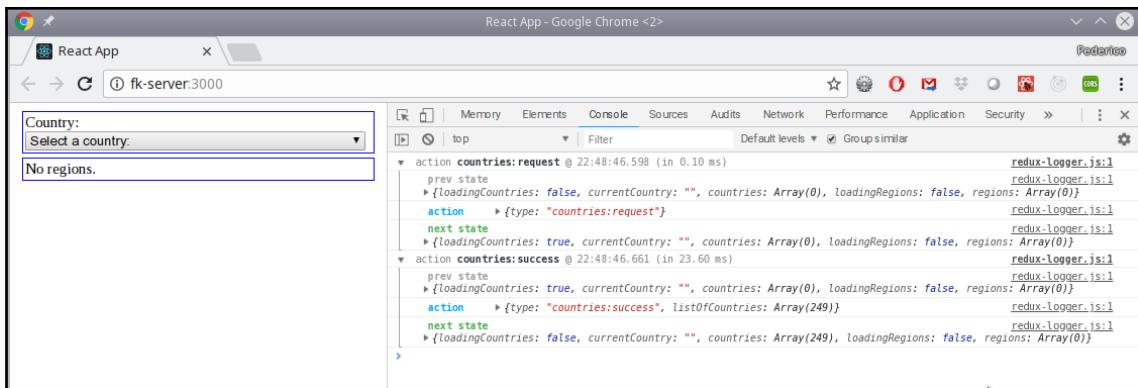


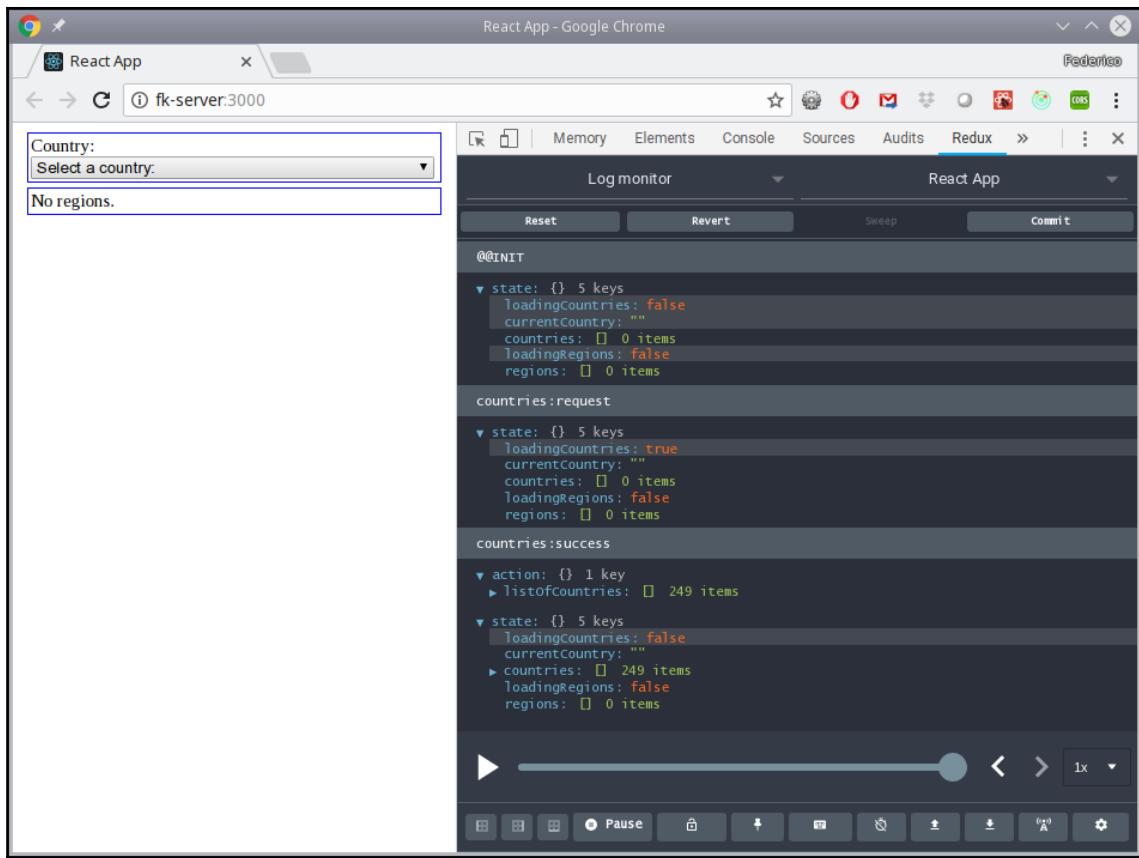


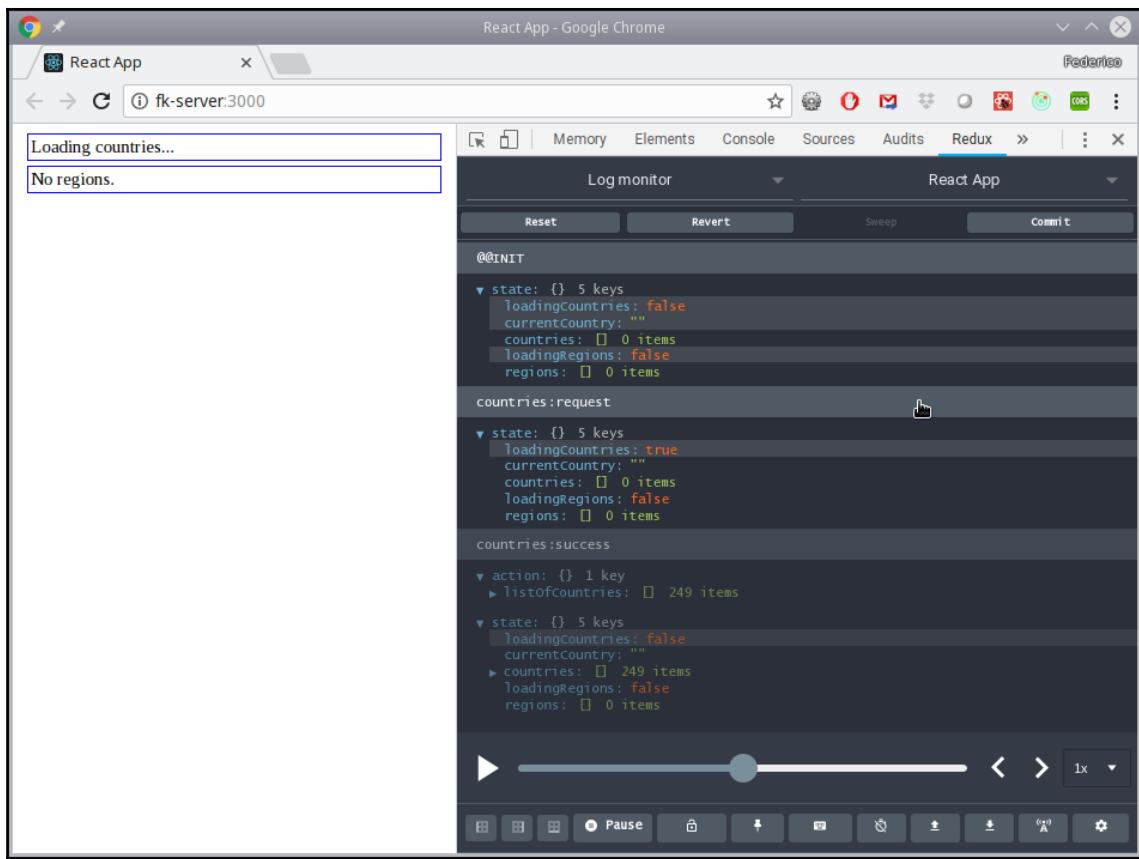


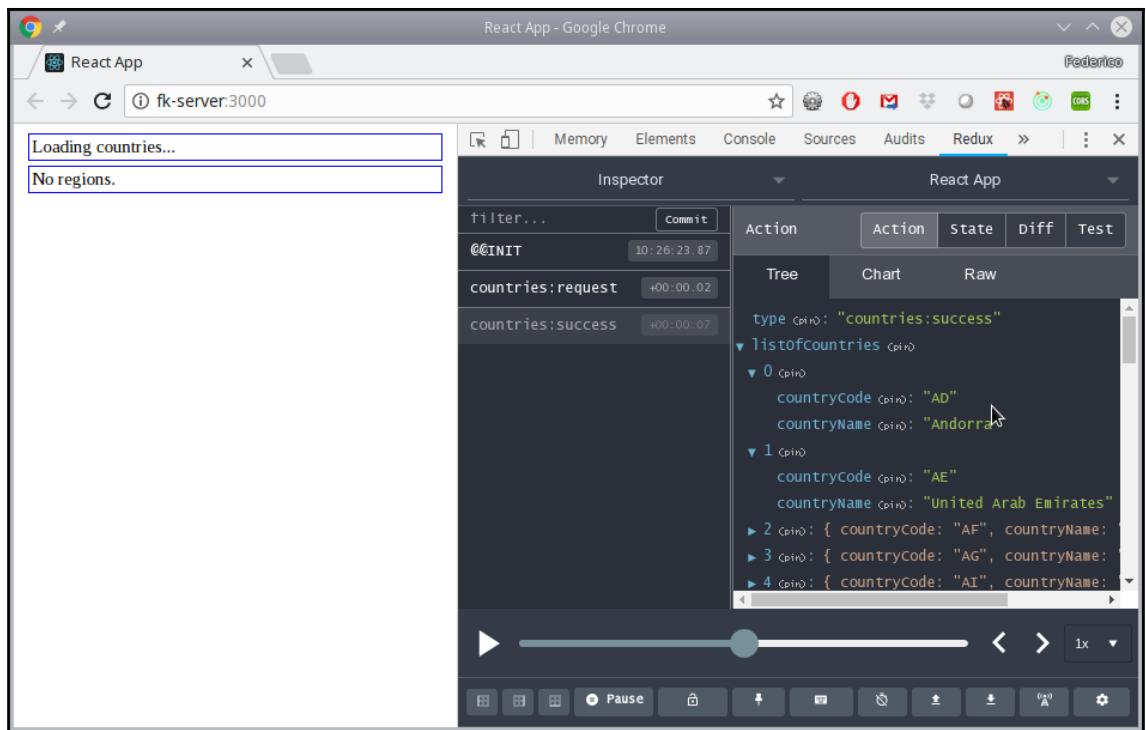


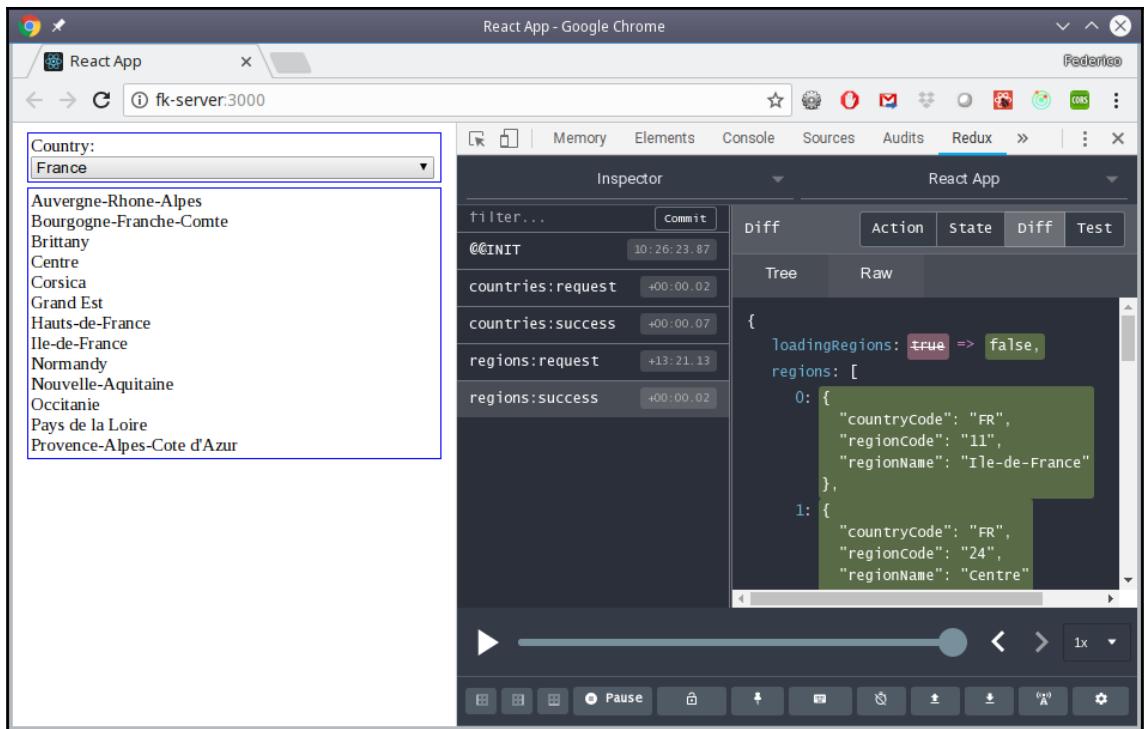


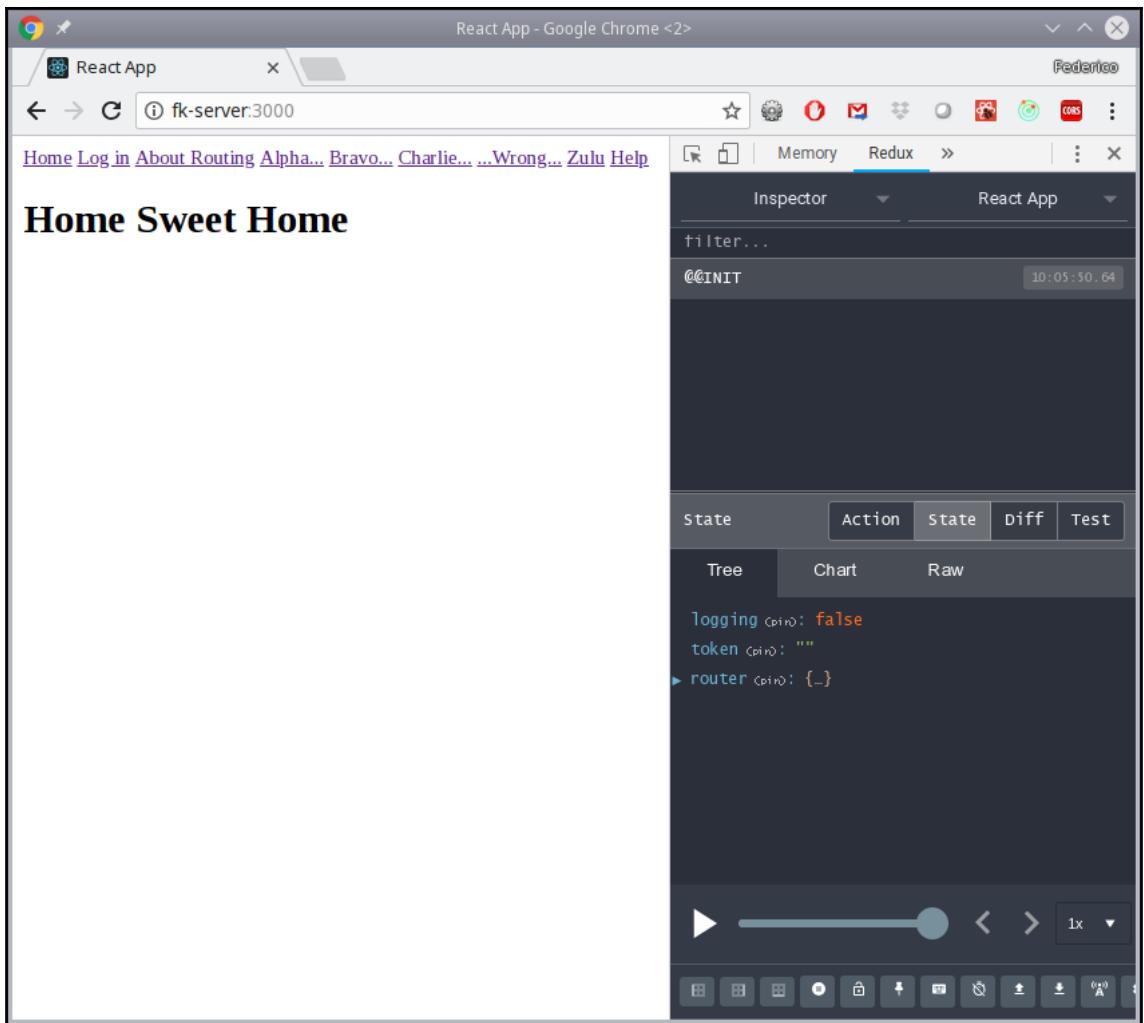


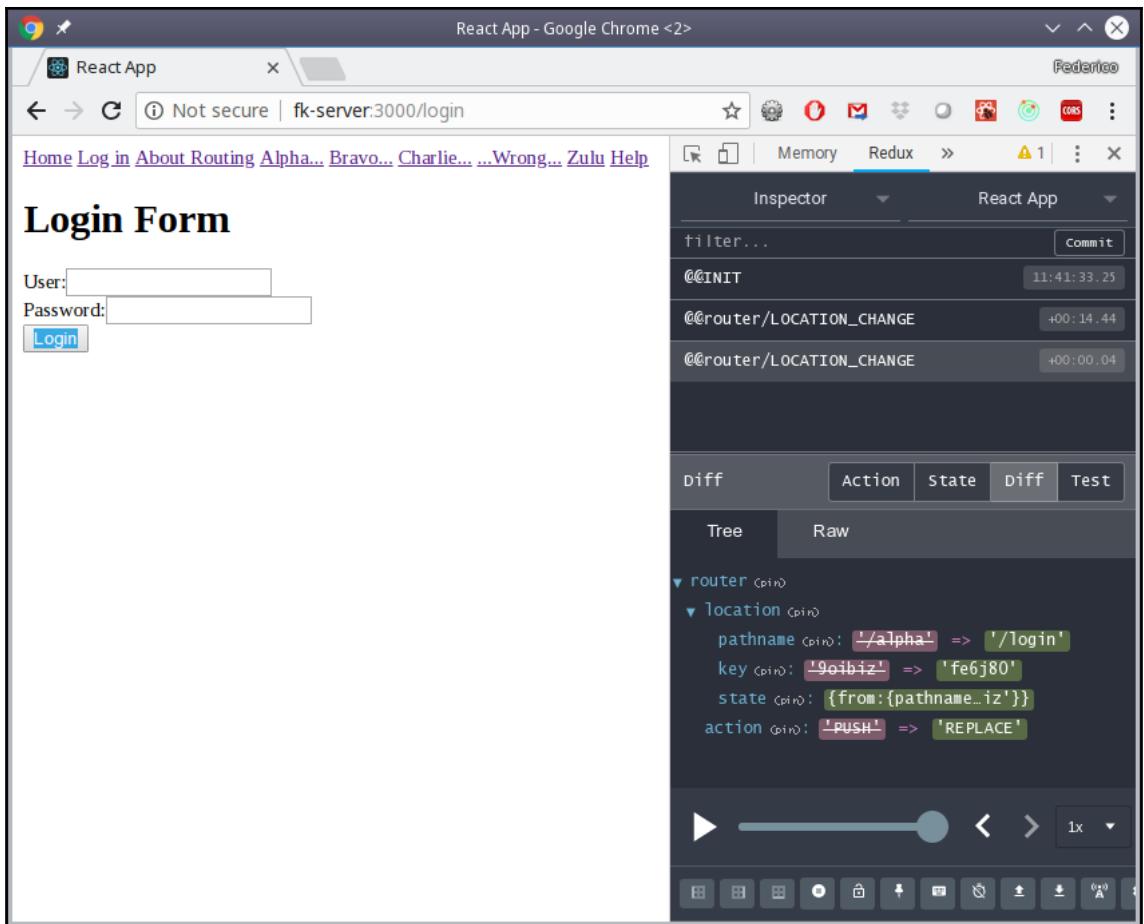


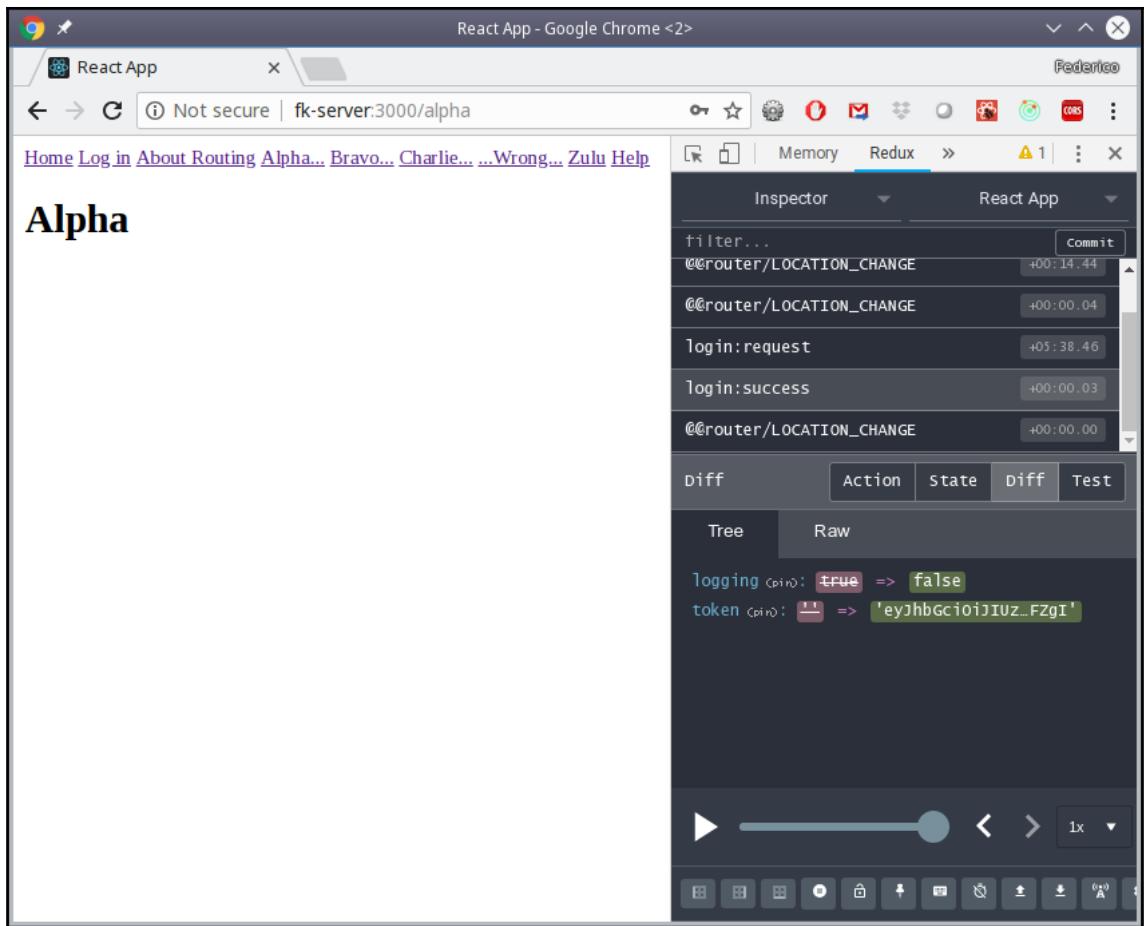


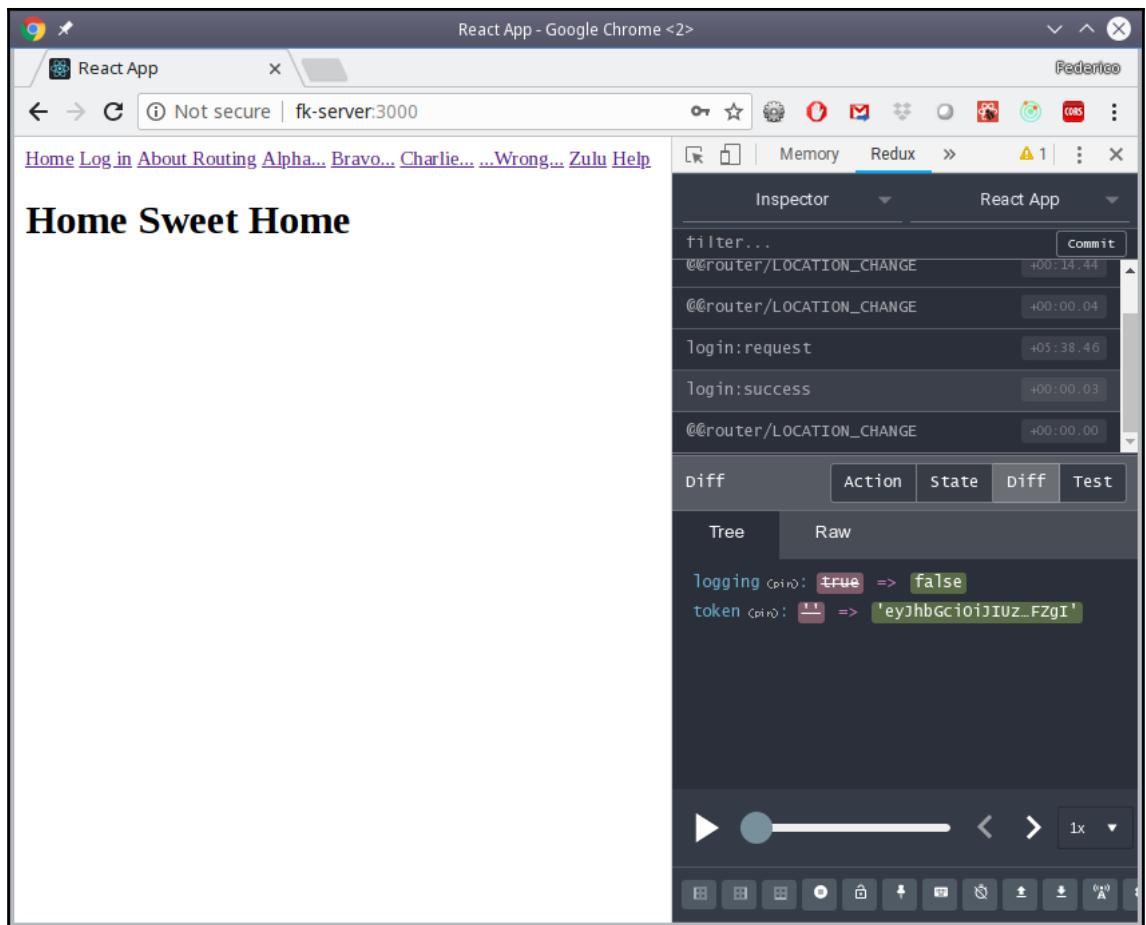












Chapter 10: Testing Your Application

```
PASS  src/regionsApp/regionsTable.test.js
PASS  src/regionsApp/countrySelect.test.js
```

```
Test Suites: 2 passed, 2 total
Tests:      5 passed, 5 total
Snapshots:  0 total
Time:       1.031s, estimated 2s
Ran all test suites related to changed files.
```

Watch Usage

- › Press `a` to run all tests.
- › Press `p` to filter by a filename regex pattern.
- › Press `t` to filter by a test name regex pattern.
- › Press `q` to quit watch mode.
- › Press `Enter` to trigger a test run.



```
FAIL src/regionsApp/regionsTable.connected.test.js
• getProps for RegionsTable › should extract regions and loading

  expect(received).toEqual(expected) 
```

Expected value to equal:

```
{"list": [{"something": 1}, {"something": 2}], "loading": false}
```

Received:

```
{"list": [{"other": 1}, {"other": 2}, {"other": 3}], "loading": false}
```

Difference:

```
- Expected
+ Received
```

```
Object {
  "list": Array [
    Object {
      - "something": 1,
      + "other": 1,
    },
    Object {
      - "something": 2,
      + "other": 2,
    },
    Object {
      + "other": 3,
    },
  ],
  "loading": false,
}
```

```
PASS  src/regionsApp/world.actions.test.js
  getCountries
    ✓ on API success (5ms)
    ✓ on API failure (1ms)
  optimized getCountries
    ✓ doesn't do unneeded calls (1ms)

Test Suites: 1 passed, 1 total
Tests:       3 passed, 3 total
Snapshots:   0 total
Time:        0.608s, estimated 1s
Ran all test suites related to changed files.

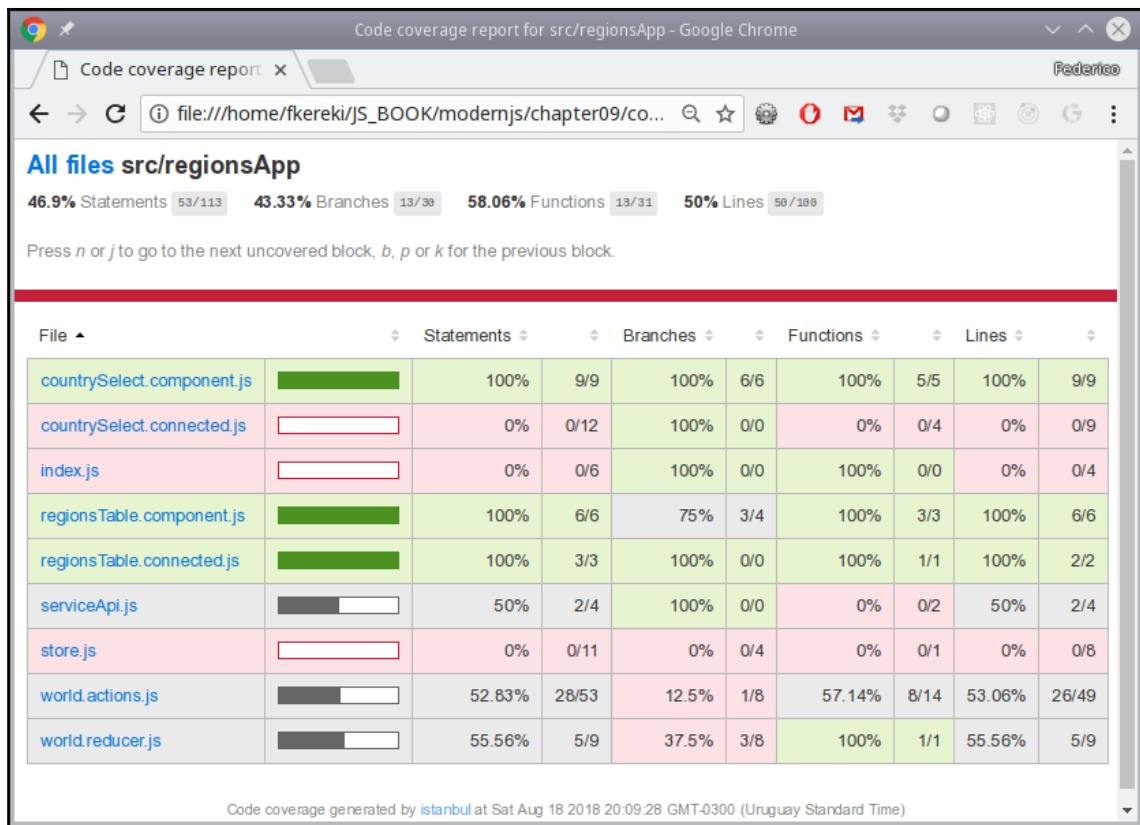
Watch Usage
> Press a to run all tests.
> Press p to filter by a filename regex pattern.
> Press t to filter by a test name regex pattern.
> Press q to quit watch mode.
> Press Enter to trigger a test run.
```

chapter09 : bash — Konsole

File Edit View Bookmarks Settings Help

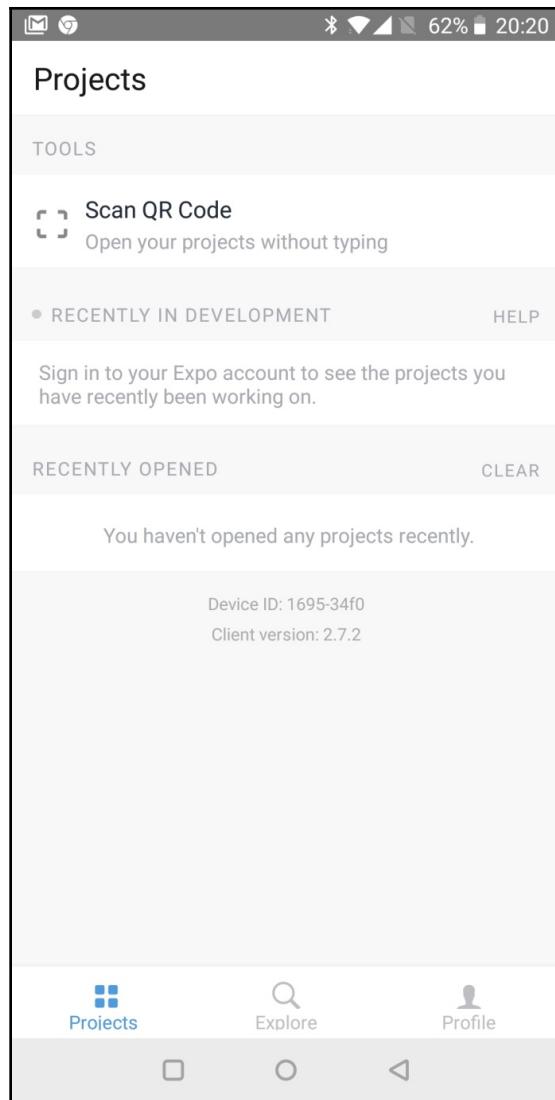
Test Suites: 10 passed, 10 total
 Tests: 19 passed, 19 total
 Snapshots: 7 passed, 7 total
 Time: 2.43s
 Ran all test suites.

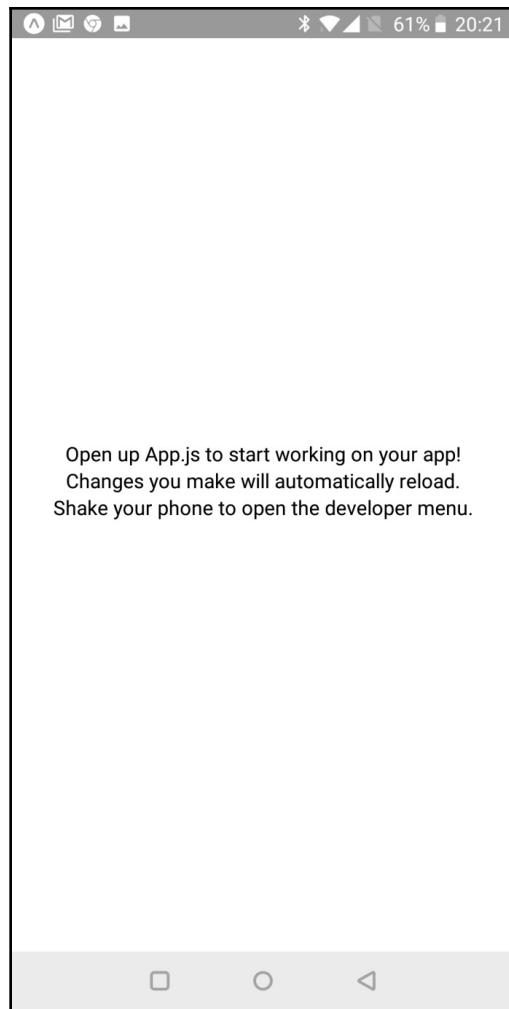
File	%Stmts	%Branch	%Funcs	%Lines	Uncovered Line #s
All files	13.22	10.08	18.87	17.07	
src	0	0	0	0	1,3,4,6,7,11,20
App.counter.js	0	0	0	0	1,3,4,6,11,15,23
App.regions.js	0	0	0	0	... 22,23,27,58,88
App.routing.auth.js	0	0	0	0	... 17,18,23,25,26
index.js	0	0	0	0	1,2,4,5,7,8
index.without.logging.js	0	0	0	0	... 36,137,138,139
registerServiceWorker.js	0	0	0	0	
src/counterApp	13.21	0	18.18	15.56	
clicksDisplay.component.js	100	100	100	100	
clicksDisplay.connected.js	0	100	0	0	1,3,5,7,11
counter.actions.js	62.5	100	0	62.5	13,18,24
counter.component.js	25	100	25	25	22,23,24
counter.connected.js	0	100	0	0	1,3,5,7,9
counter.reducer.js	0	0	0	0	1,3,7,15,17,23,26
index.js	0	100	100	0	1,3,4,6,7,10,11,12
store.js	0	100	100	0	1,3,4,5,7,9,24
src/logging	0	0	0	0	
index.js	0	0	0	0	... 45,46,50,51,53
index.without.level.js	0	0	0	0	... 14,15,16,20,62
src/regionsApp	46.9	43.33	58.06	50	
countrySelect.component.js	100	100	100	100	
countrySelect.connected.js	0	100	0	0	... ,8,13,14,15,18
index.js	0	100	100	0	1,3,4,6
regionsTable.component.js	100	75	100	100	27
regionsTable.connected.js	100	100	100	100	
serviceApi.js	50	100	0	50	6,9
store.js	0	0	0	0	1,3,4,5,6,8,10,19
world.actions.js	52.83	12.5	57.14	53.06	... 14,115,117,120
world.reducer.js	55.56	37.5	100	55.56	36,43,50,65
src/routingApp	0	0	0	0	
authRoute.component.js	0	0	0	0	... 21,22,23,31,32
authRoute.connected.js	0	100	0	0	1,3,5,6
index.js	0	100	100	0	1,3,4,5,7
login.actions.js	0	100	0	0	... 28,29,32,33,35
login.component.js	0	0	0	0	... 30,33,38,42,67
login.connected.js	0	100	0	0	1,3,5,6,8,9,13,15
login.reducer.js	0	0	0	0	... 17,19,26,33,39
protectedRoutes.component.js	0	0	0	0	1,3,4,5,19,29
protectedRoutes.connected.js	0	100	0	0	1,3,5,7
serviceApi.js	0	0	0	0	1,3,5,6
store.js	0	0	0	0	... ,8,10,12,14,16

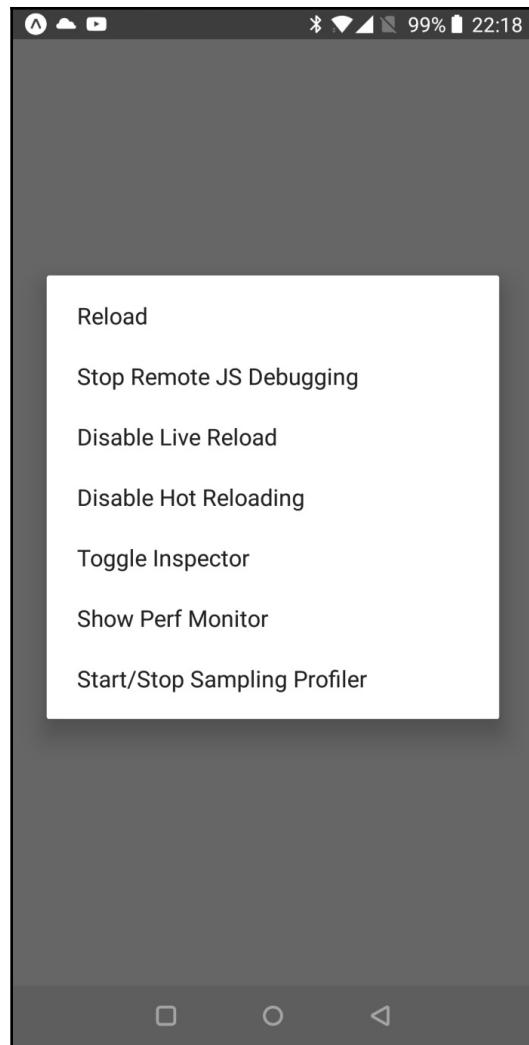


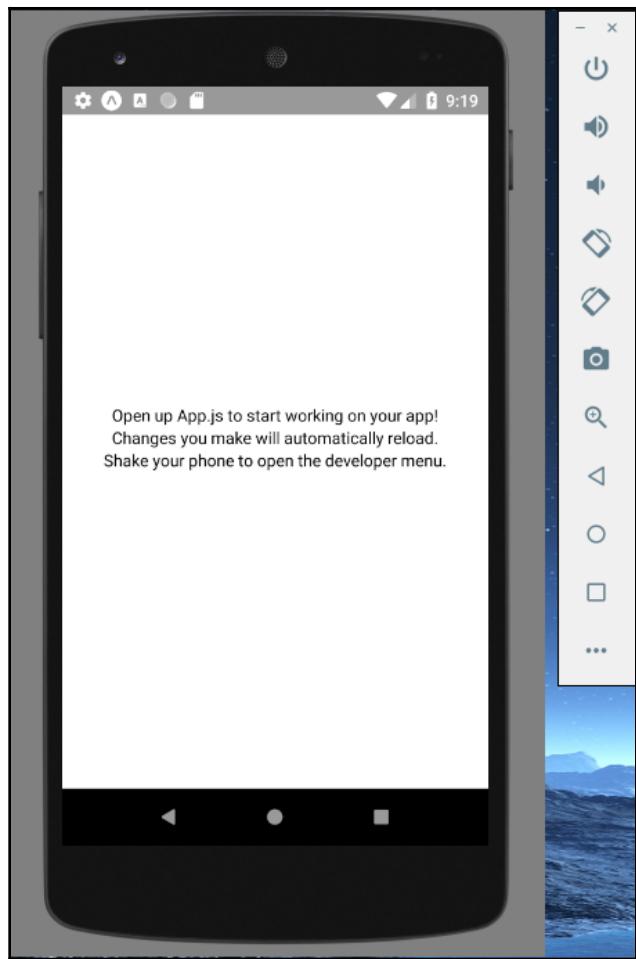
Chapter 11: Creating Mobile Apps with React Native

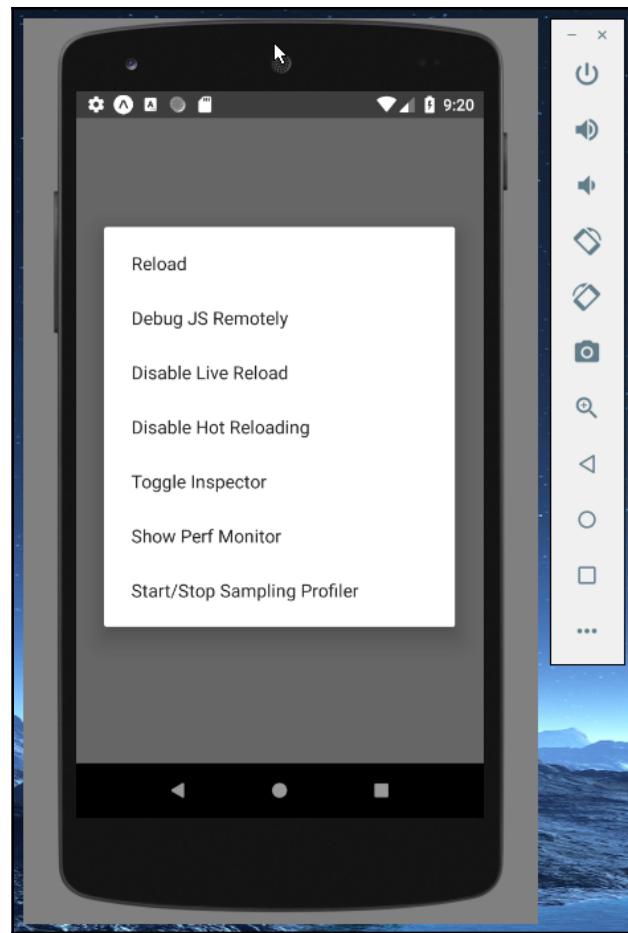






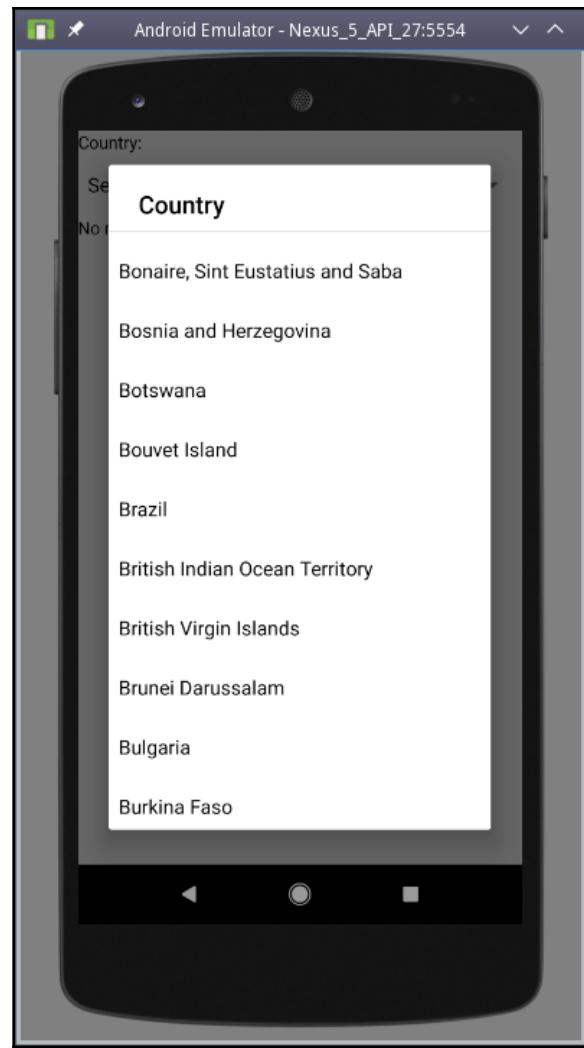


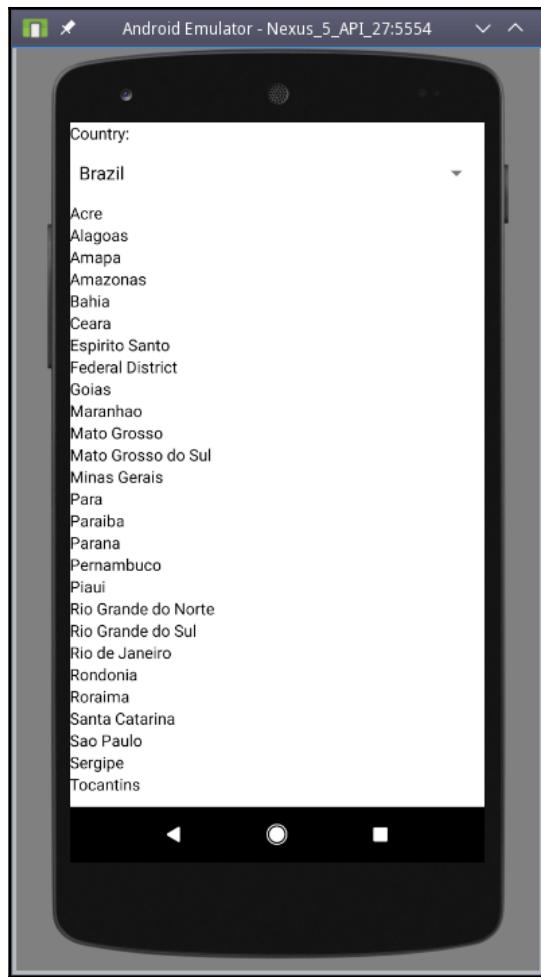


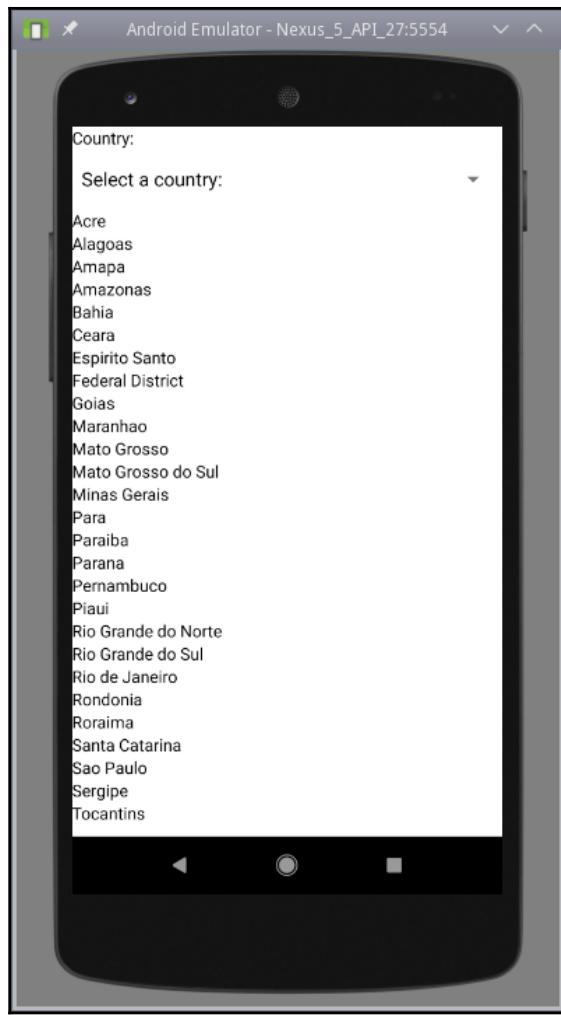


```
15
16 const styles = StyleSheet.create({
17   container: {
18     flex: 1,
19     backgroundColor: "#fff",
20     alignItems: "center",
21     justifyContent: "center"
22   }
23 });
24
```

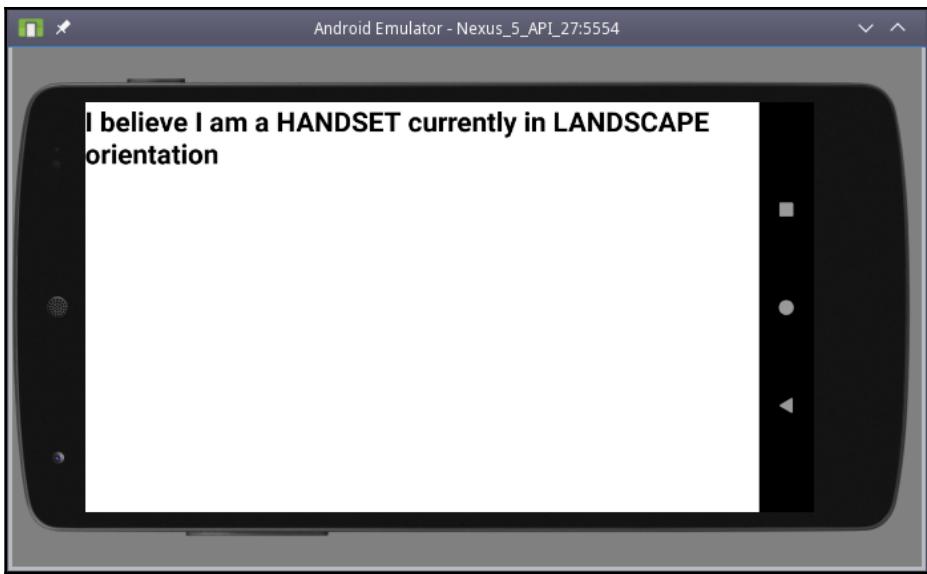




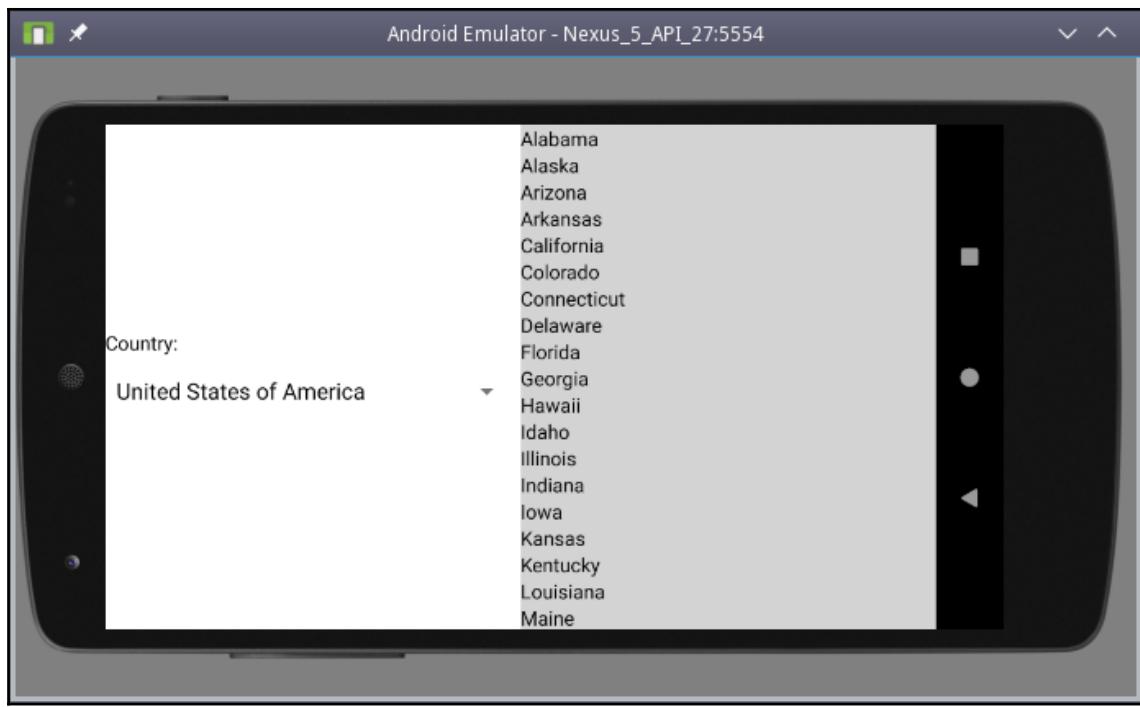




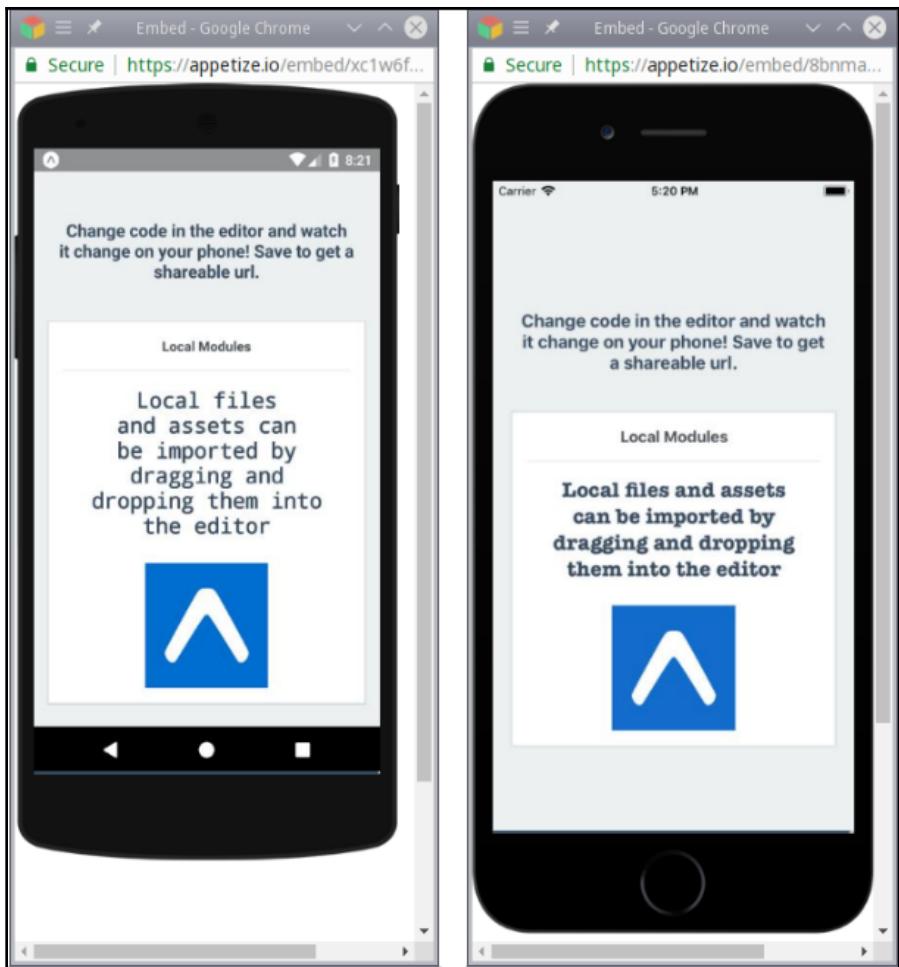








```
const styles = StyleSheet.create({
  container: {
    alignItems: 'center',
    justifyContent: 'center',
  },
  paragraph: {
    fontFamily: Platform.OS === "android" ? "monospace" : "AmericanTypewriter",
    margin: 24,
    marginTop: 0,
    fontSize: 22,
    fontWeight: 'bold',
    textAlign: 'center',
    color: '#34495e',
  },
});
```









Chapter 12: Testing and Debugging Your Mobile App

```
fkereki@fk-server:~/JS_B00K/modernjs/chapter12> npm test
> chapter12b@0.1.0 test /home/fkereki/JS_B00K/modernjs/chapter12
> jest

PASS  src/regionsStyledApp/regionsTable.test.js
PASS  src/regionsStyledApp/regionsTable.connected.test.js
PASS  src/regionsStyledApp/countrySelect.test.js
PASS  src/regionsStyledApp/world.reducer.test.js
PASS  src/regionsStyledApp/world.actions.test.js

Test Suites: 5 passed, 5 total
Tests:       11 passed, 11 total
Snapshots:   0 total
Time:        1.395s
Ran all test suites.
```

```
fkereki@fk-server:~/JS_B00K/modernjs/chapter12> npm test snapshot
> chapter12b@0.1.0 test /home/fkereki/JS_B00K/modernjs/chapter12
> jest "snapshot"

PASS  src/regionsStyledApp/main.snapshot.test.js
  > 2 snapshots written.
PASS  src/regionsStyledApp/regionsTable.snapshot.test.js
  > 2 snapshots written.
PASS  src/regionsStyledApp/countrySelect.snapshot.test.js
  > 2 snapshots written.

Snapshot Summary
  > 6 snapshots written in 3 test suites.

Test Suites: 3 passed, 3 total
Tests:       6 passed, 6 total
Snapshots:   6 added, 6 total
Time:        0.844s, estimated 1s
Ran all test suites matching /snapshot/i.
```

```

fkereki@fk-server:~/JS_B00K/modernjs/chapter12> npm test snapshot
> chapter12b@0.1.0 test /home/fkereki/JS_B00K/modernjs/chapter12
> jest "snapshot"

PASS  src/regionsStyledApp/main.snapshot.test.js
PASS  src/regionsStyledApp/regionsTable.snapshot.test.js
PASS  src/regionsStyledApp/countrySelect.snapshot.test.js

Test Suites: 3 passed, 3 total
Tests:       6 passed, 6 total
Snapshots:   6 passed, 6 total
Time:        0.893s, estimated 1s
Ran all test suites matching /snapshot/i.

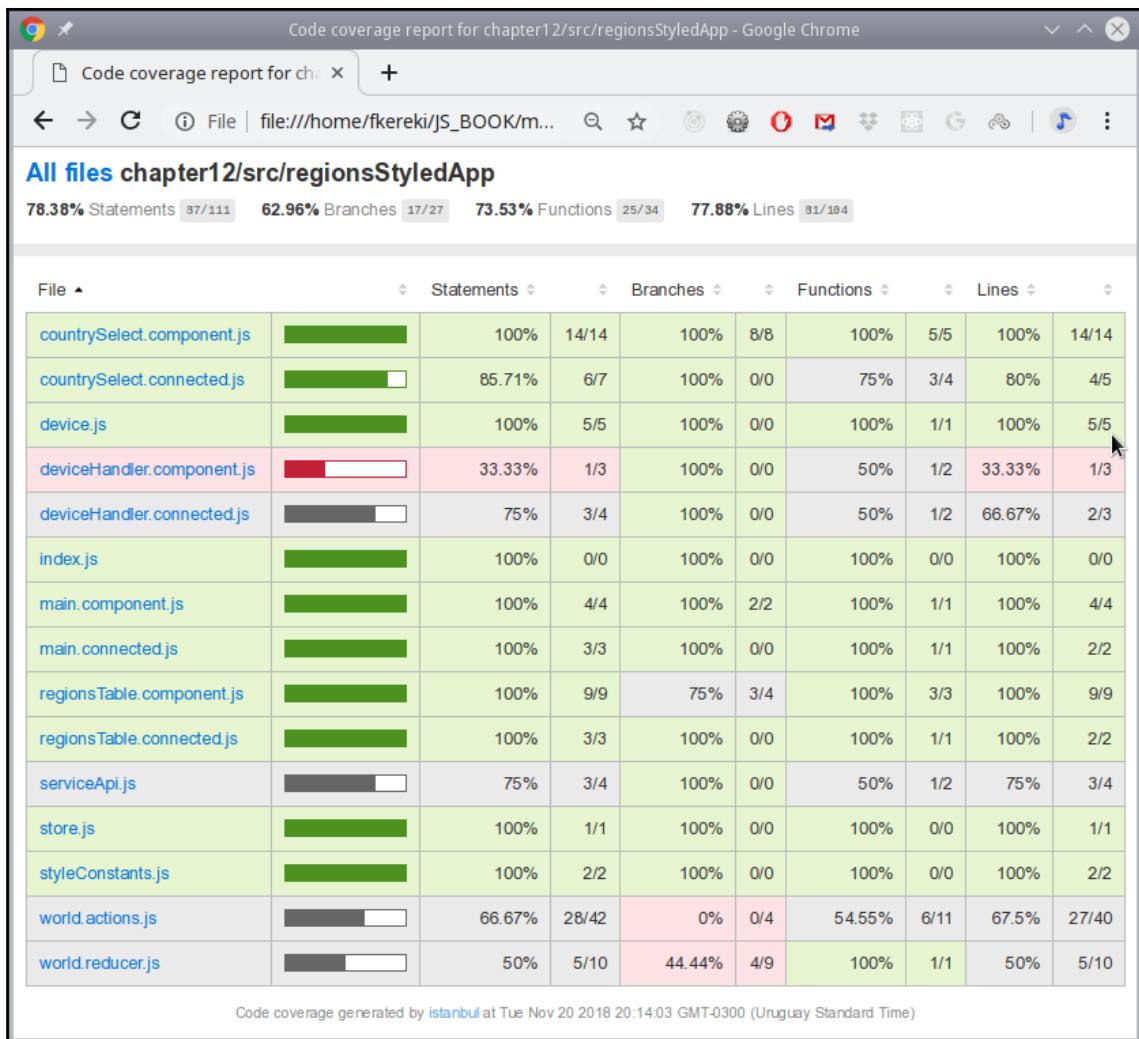
```

File	% Stmt	% Branch	% Funcs	% Lines	Uncovered Line #s
All files	78.57	62.96	74.29	78.1	
chapter12	100	100	100	100	
App.js	100	100	100	100	
chapter12/src/regionsStyledApp	78.38	62.96	73.53	77.88	
countrySelect.component.js	100	100	100	100	
countrySelect.connected.js	85.71	100	75	80	17
device.js	100	100	100	100	
deviceHandler.component.js	33.33	100	50	33.33	15, 16
deviceHandler.connected.js	75	100	50	66.67	9
index.js	100	100	100	100	
main.component.js	100	100	100	100	
main.connected.js	100	100	100	100	
regionsTable.component.js	100	75	100	100	47
regionsTable.connected.js	100	100	100	100	
serviceApi.js	75	100	50	75	9
store.js	100	100	100	100	
styleConstants.js	100	100	100	100	
world.actions.js	66.67	0	54.55	67.5	... 99, 100, 103, 104
world.reducer.js	50	44.44	100	50	30, 43, 50, 57, 72

```

Test Suites: 9 passed, 9 total
Tests:       18 passed, 18 total
Snapshots:   6 passed, 6 total
Time:        8.733s
Ran all test suites.

```



Code coverage report for chapter12/src/regionsStyledApp/deviceHandler.component.js - Google Chrome

All files / chapter12/src/regionsStyledApp deviceHandler.component.js

33.33% Statements 1/3 100% Branches 0/0 50% Functions 1/2 33.33% Lines 1/3

```
/* @flow */
import React from "react";
import PropTypes from "prop-types";
import { View } from "react-native";

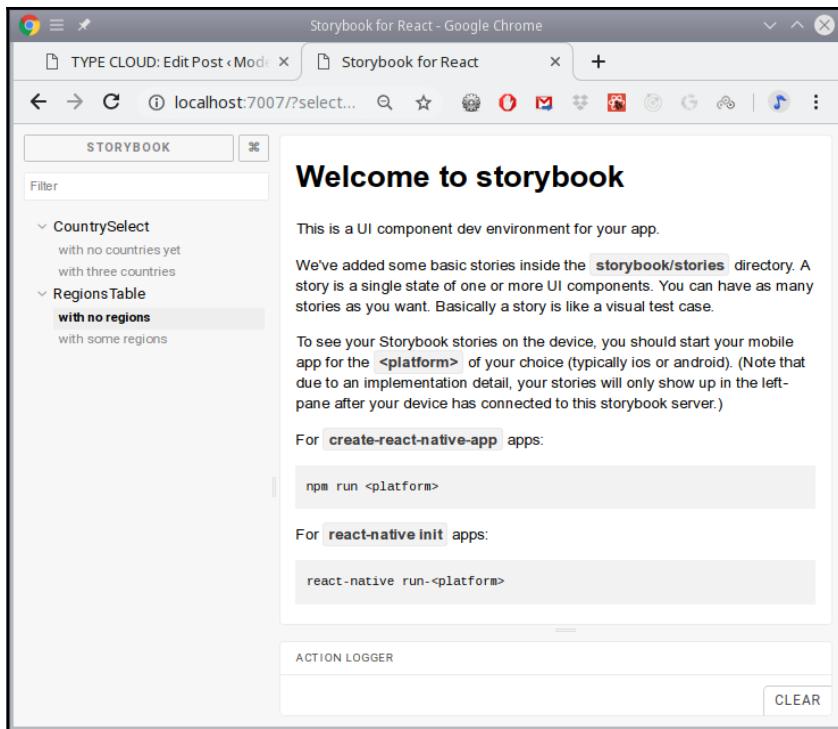
class DeviceHandler extends React.PureComponent<{
  setDevice: () => any
}> {
  static propTypes = {
    setDevice: PropTypes.func.isRequired
  };

  onLayoutHandler = () => {
    console.log("deviceHandler: onLayoutHandler called");
    this.props.setDevice();
  };

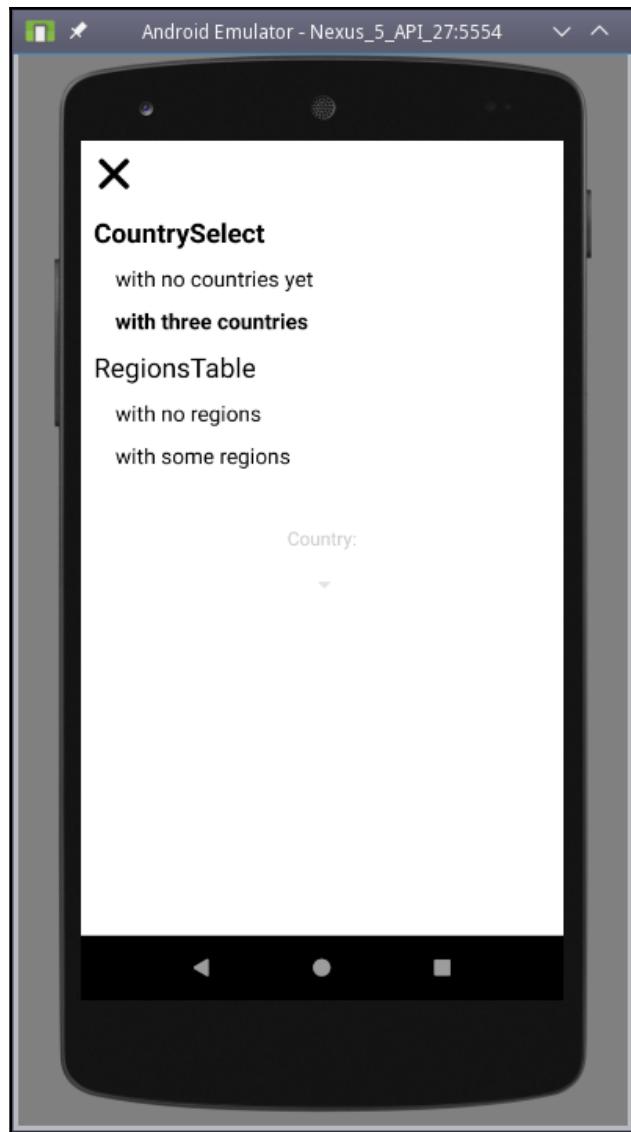
  render() {
    return <View hidden onLayout={this.onLayoutHandler} />;
  }
}

export { DeviceHandler };
```

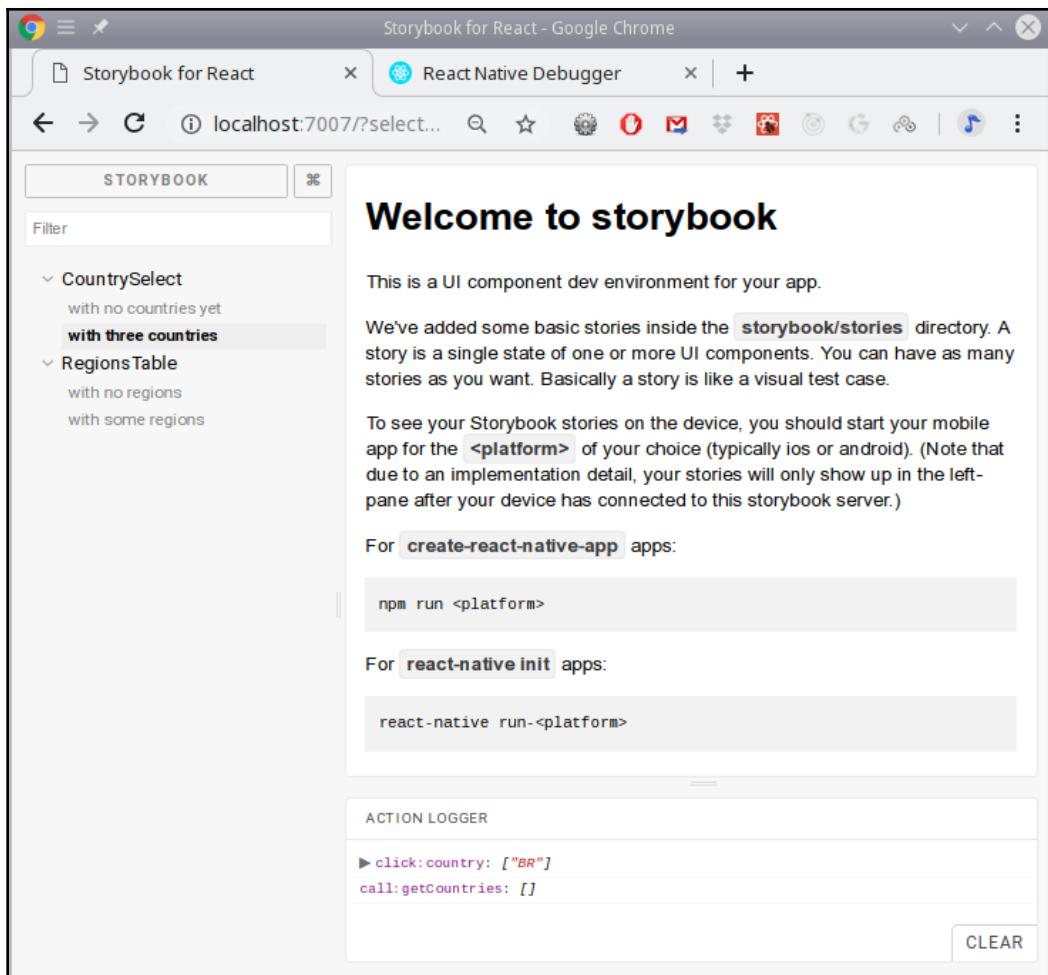
Code coverage generated by [istanbul](#) at Tue Nov 20 2018 20:14:03 GMT-0300 (Uruguay Standard Time)

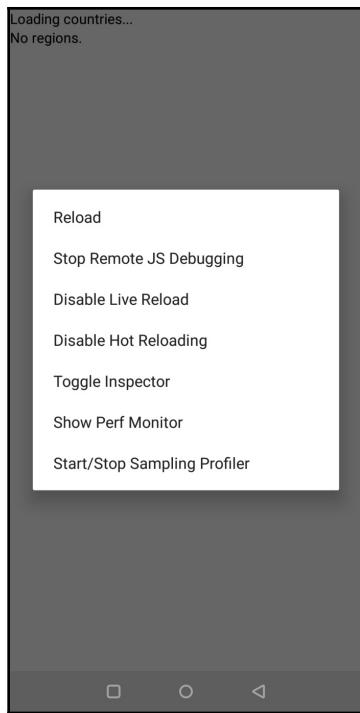


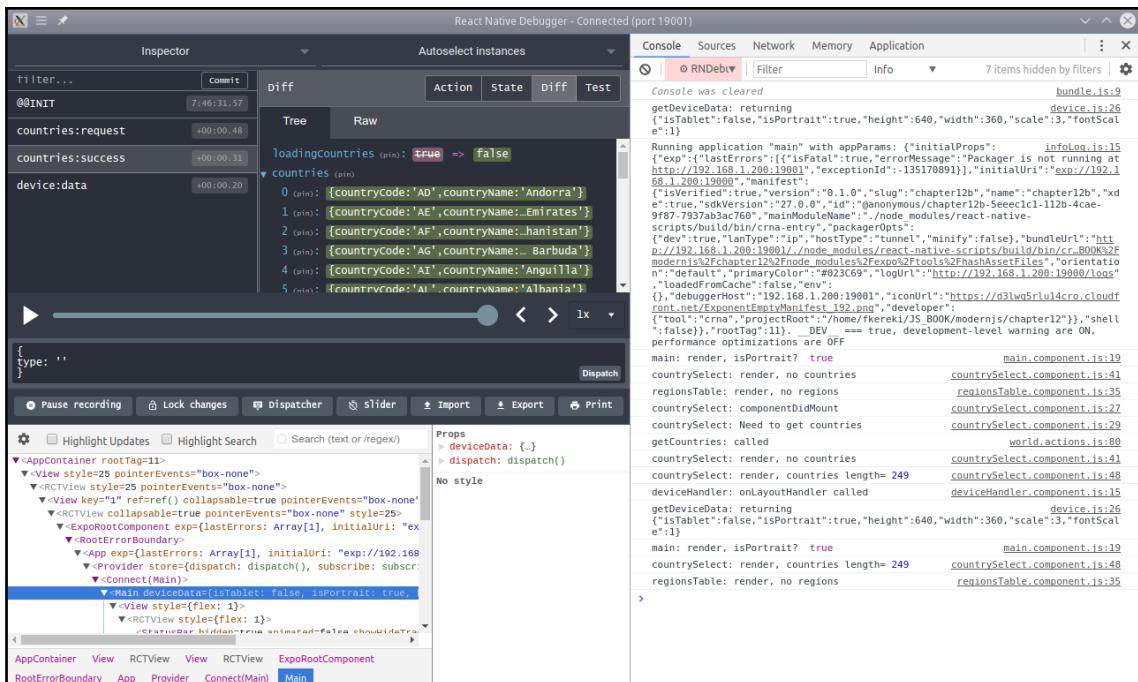


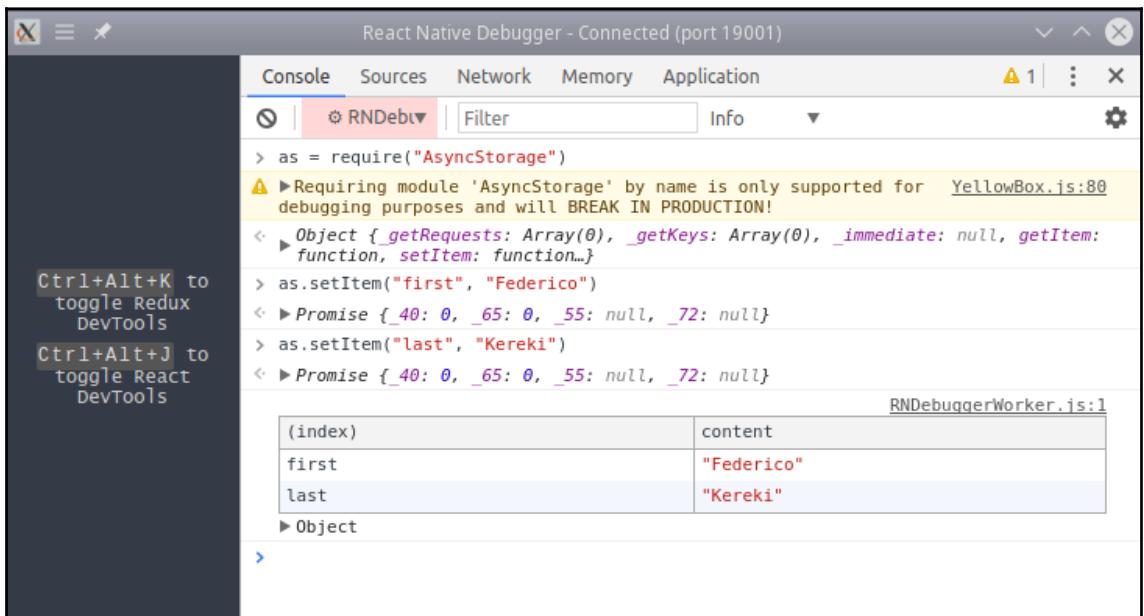
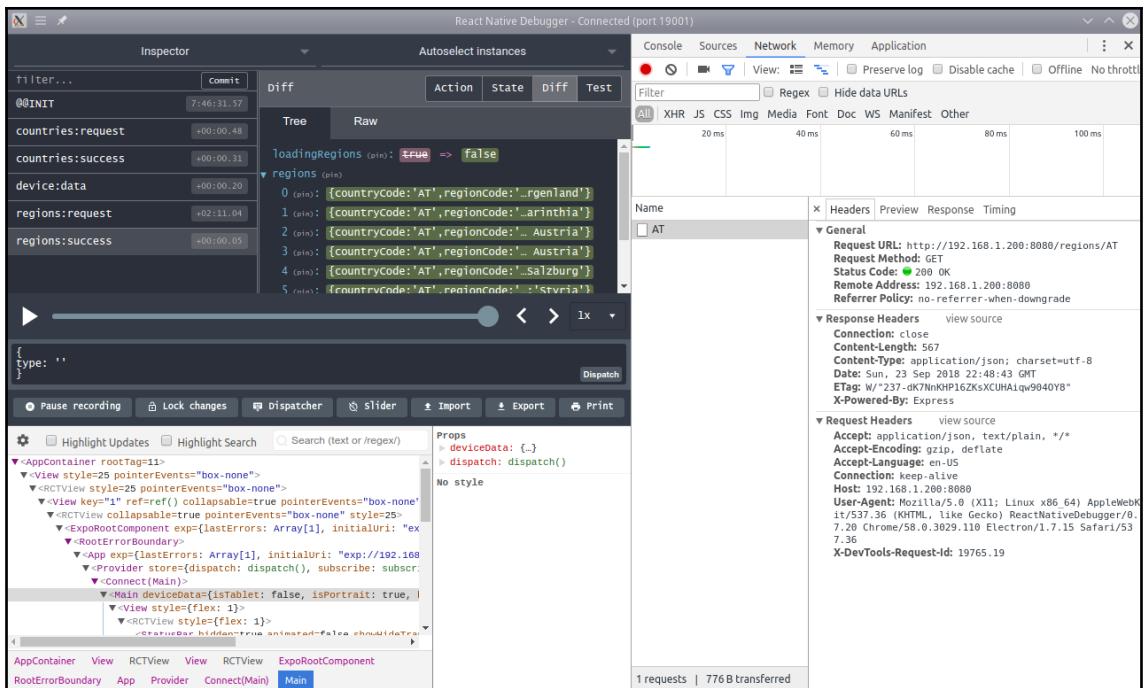


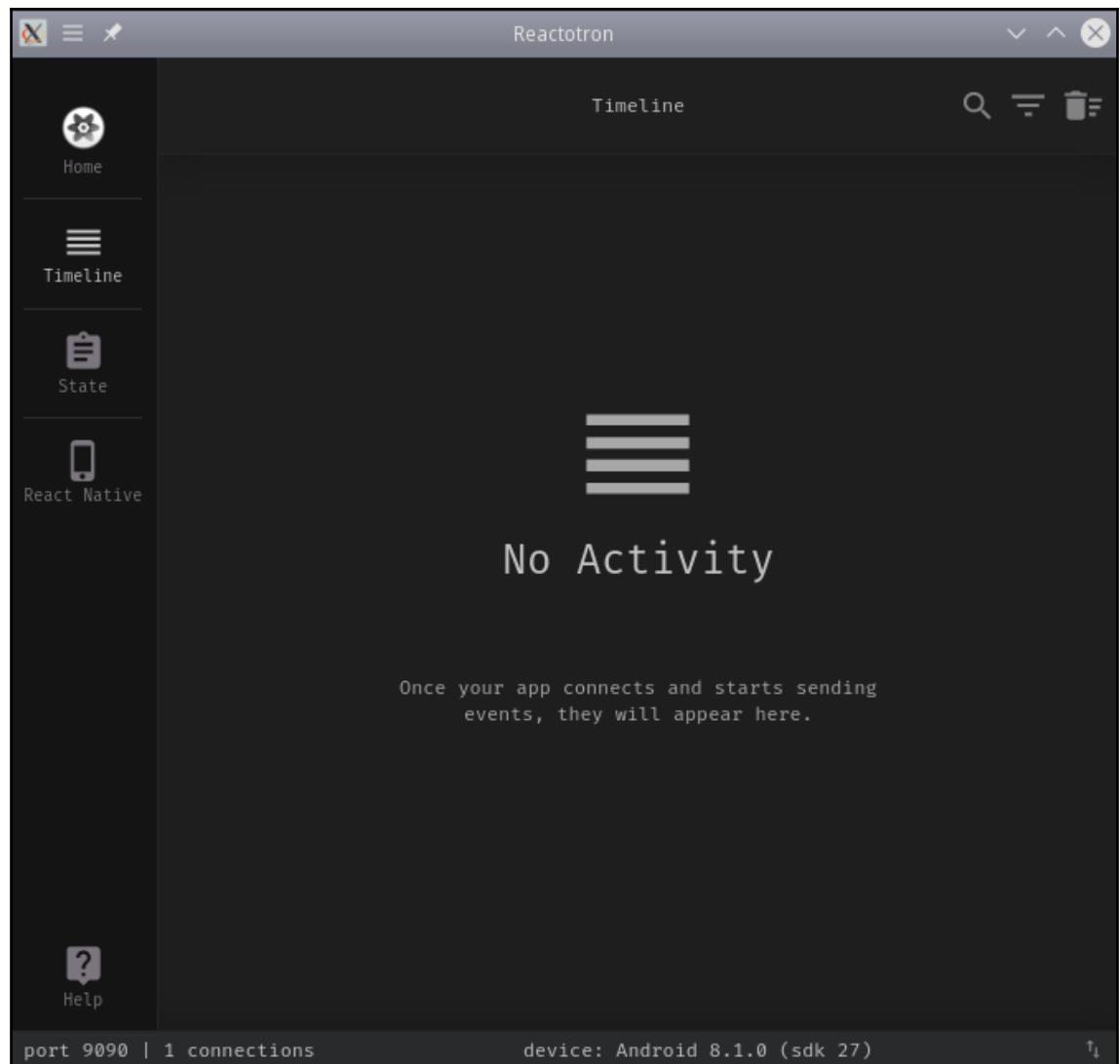


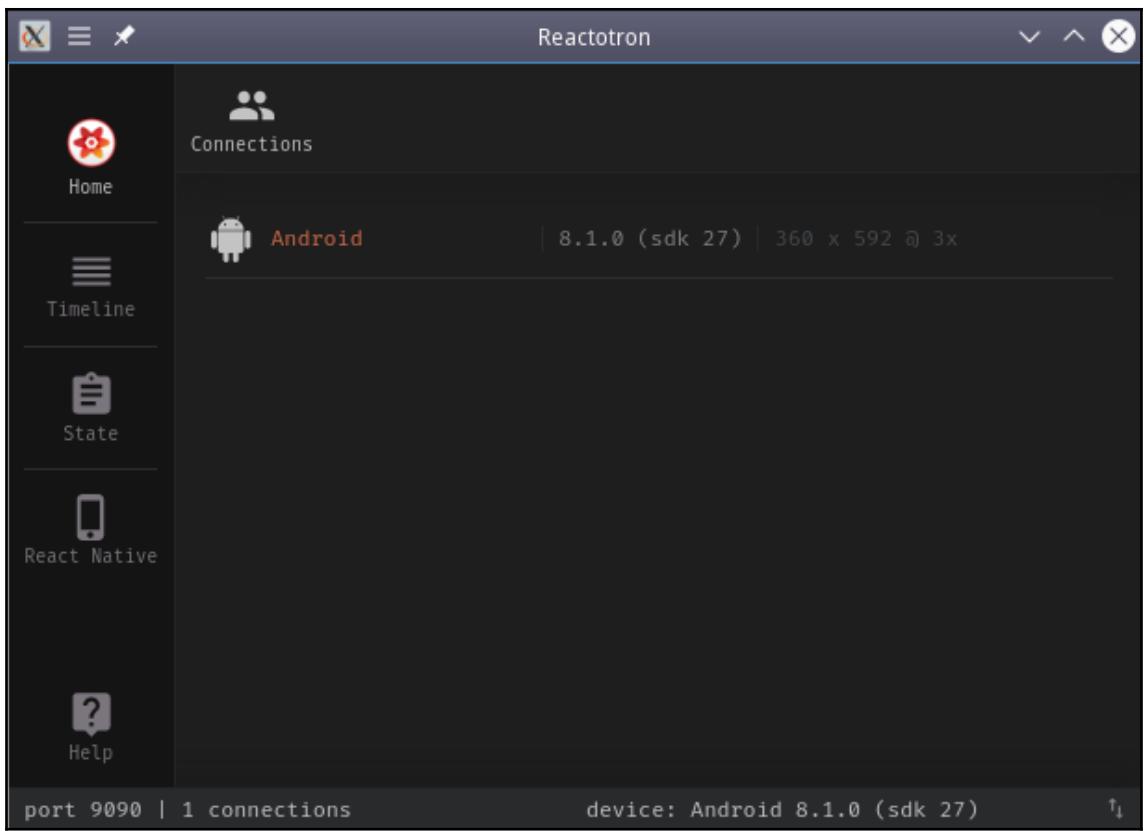








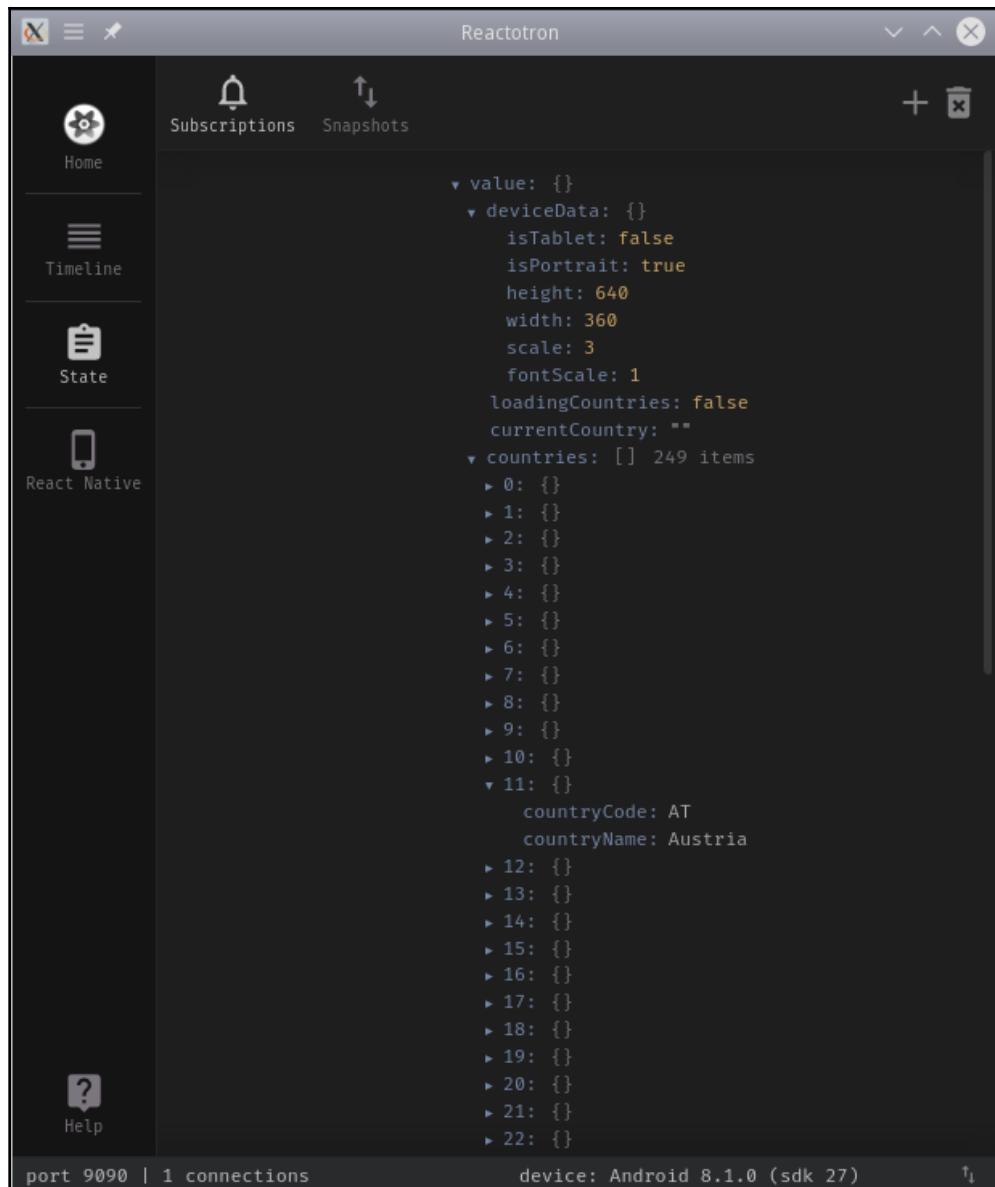




The screenshot shows the Reactotron interface with the 'Timeline' tab selected. The left sidebar has icons for Home, Timeline, State, and React Native. The Timeline table lists various events:

Time	Type	Details
+6 ms 3:16:32.785	ACTION	device:data
+3 ms 3:16:32.779	ASYNC STORAGE	setItem: Date
+27 ms 3:16:32.776	ACTION	countries:success
+2 ms 3:16:32.749	SUBSCRIPTIONS	1 changed
+7 ms 3:16:32.747	API RESPONSE	GET http://192.168.1.200:8080/countries
3:16:32.740	ASYNC STORAGE	setItem: Last
+24 ms 3:16:32.740	SUBSCRIPTIONS	1 added
+61 ms 3:16:32.716	ACTION	countries:request
+8 ms 3:16:32.655	ASYNC STORAGE	setItem: First
3:16:32.647	ERROR	Another nice mess you've gotten me into.
+1 ms 3:16:32.647	WARNING	If you must make a noise, make it quietly
+~98 ms 3:16:32.646	DEBUG	A knick-knack is a thing that sits on top of a whatnot
3:16:32.744	CONNECTION	React Native App

At the bottom, it says 'port 9090 | 1 connections' and 'device: Android 8.1.0 (sdk 27)'. There is also a small icon with a question mark and the number 14.



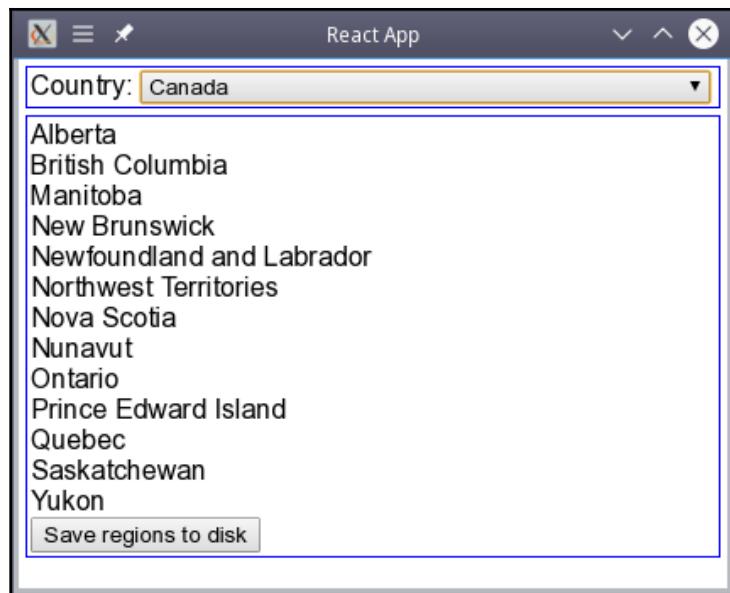
The screenshot shows the Reactotron Timeline interface. On the left is a sidebar with icons for Home, Timeline, State, and React Native. The main area is titled "Timeline" and shows a list of events:

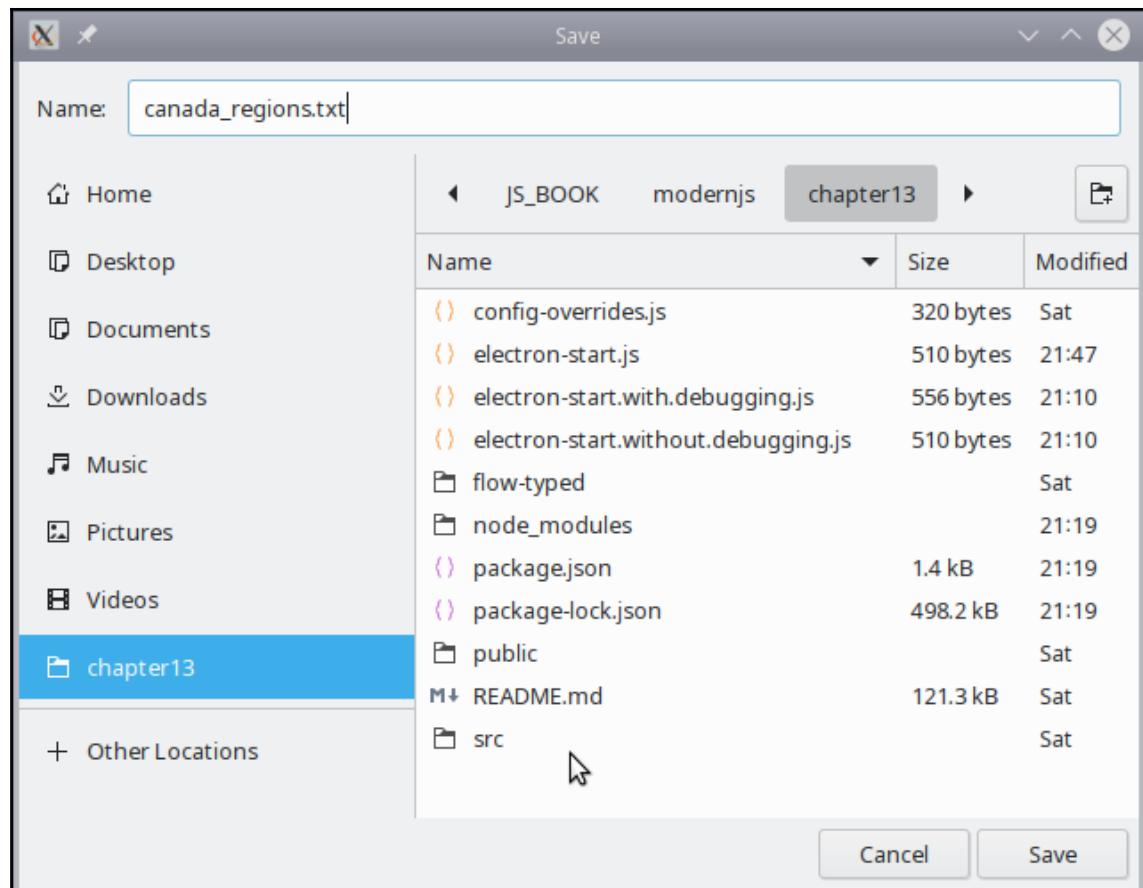
- ACTION** at 3:21:05.646: `regions:success`.
Details: type: regions:success, listOfRegions: [] 9 items, item 4: {countryCode: AT, regionCode: 5, regionName: Salzburg}.
- SUBSCRIPTIONS** at 3:21:05.612: 1 changed.
- API RESPONSE** at 3:21:05.611:
 - Request URL: <http://192.168.1.200:8080/regions/AT>
 - Status Code: 200
 - Method: GET
 - Duration (ms): 5.844081997871399
- ACTION** at 3:21:05.595: `regions:request`.

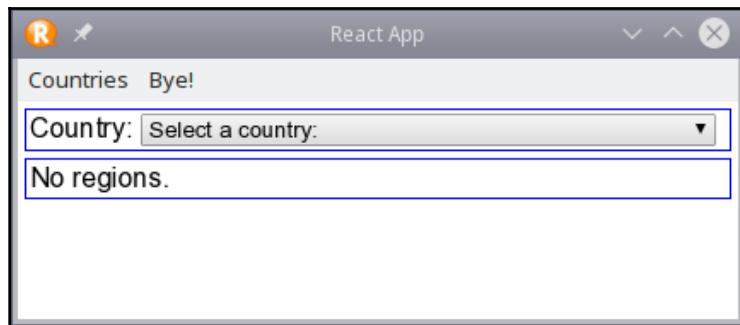
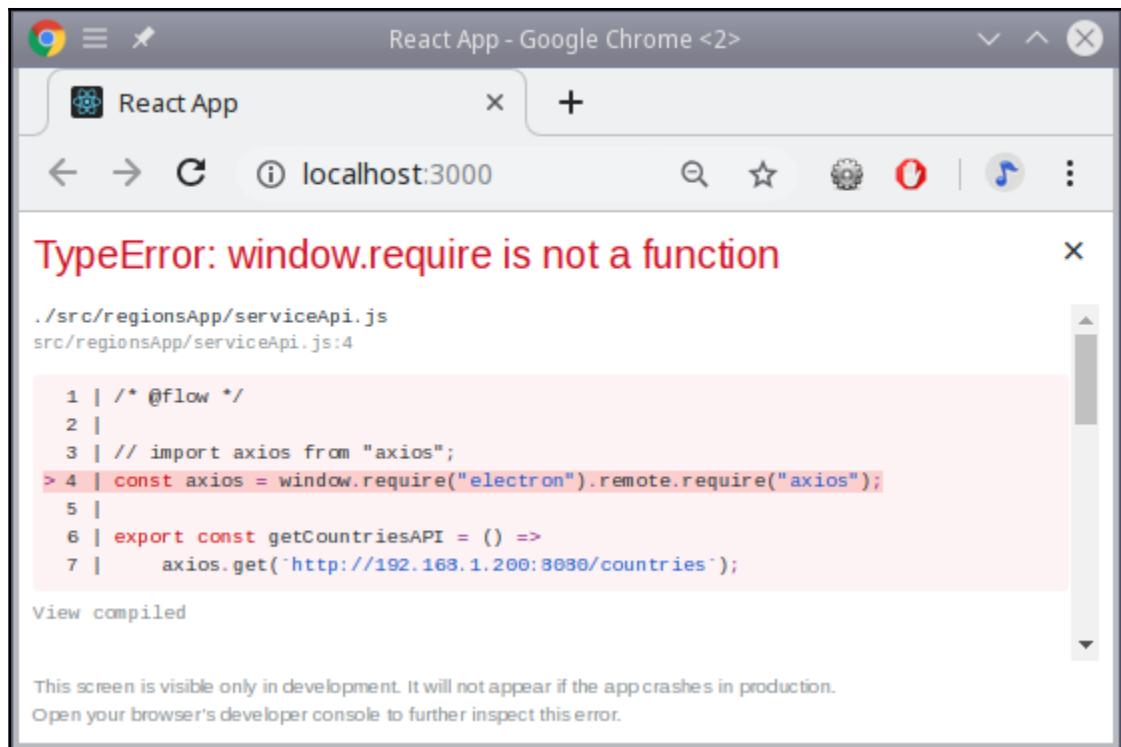
At the bottom, it says "port 9090 | 1 connections" and "device: Android 8.1.0 (sdk 27)".

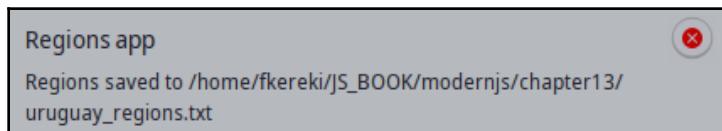
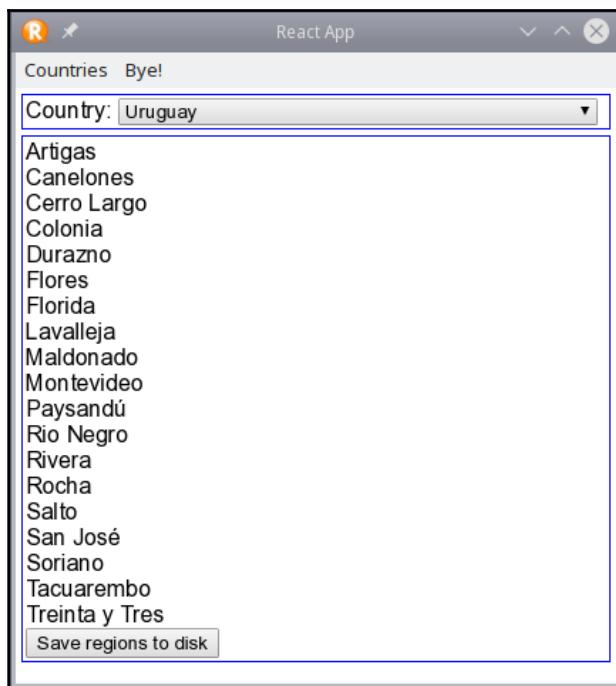
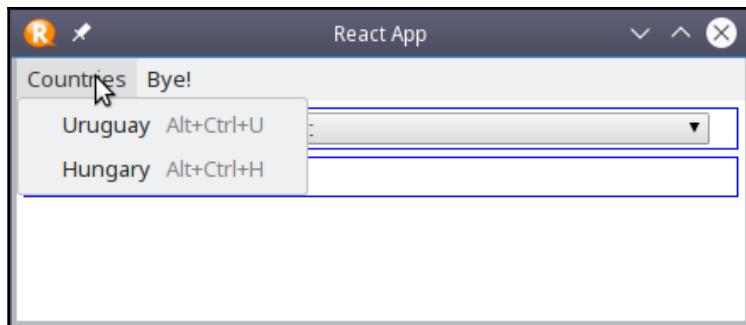
Chapter 13: Creating a Desktop Application with Electron

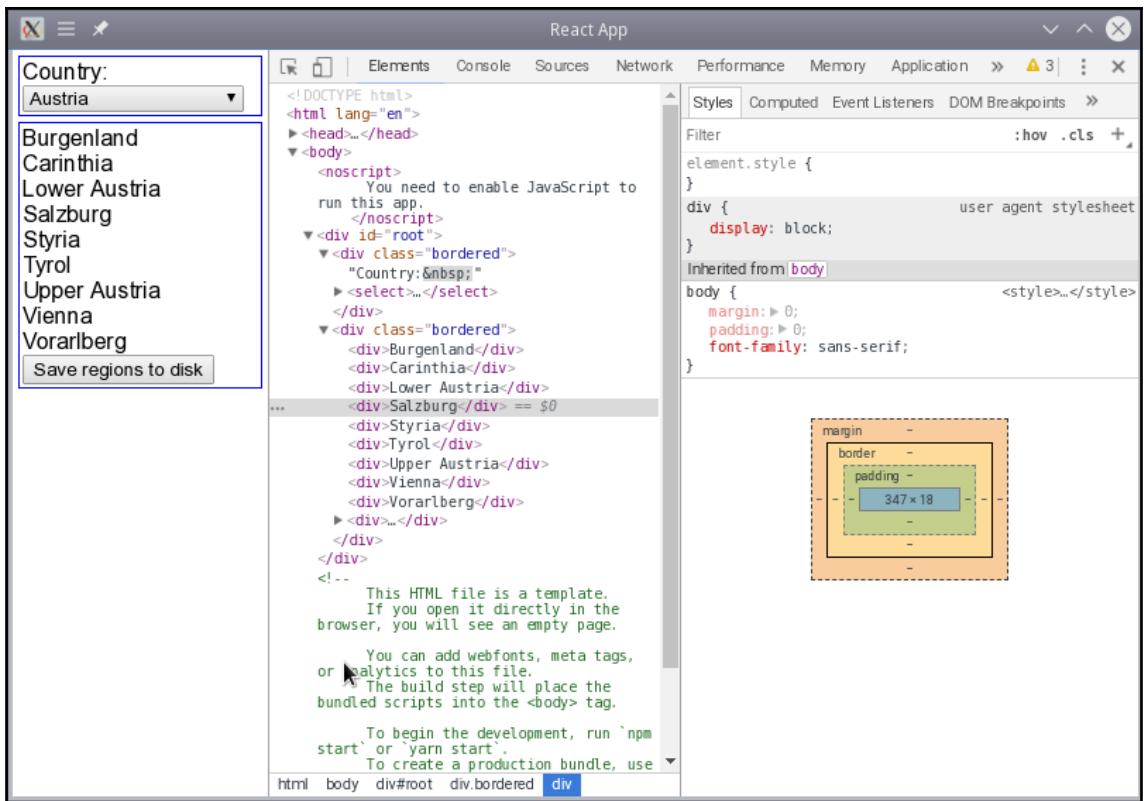


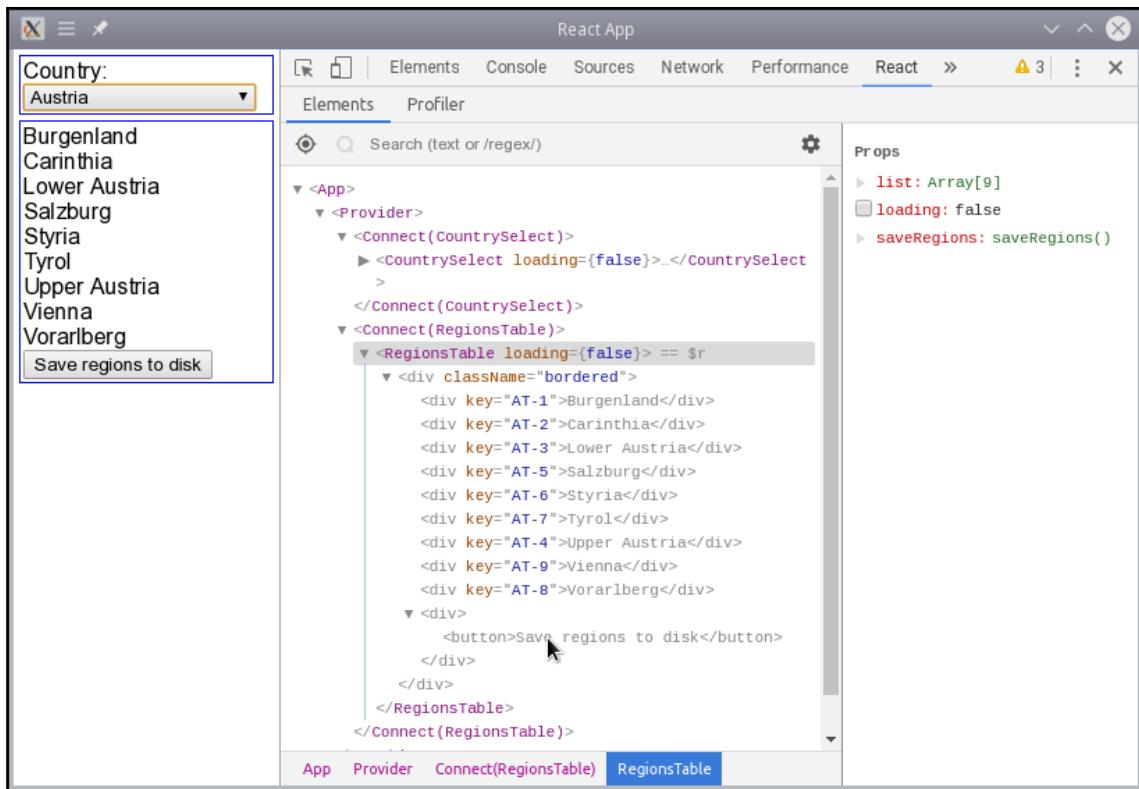












The screenshot shows the React DevTools Inspector window. On the left, there is a component tree view with a dropdown menu set to "Austria". Below it, a list of regions is displayed: Burgenland, Carinthia, Lower Austria, Salzburg, Styria, Tyrol, Upper Austria, Vienna, and Vorarlberg. At the bottom of this list is a button labeled "Save regions to disk".

The main part of the window is the "Inspector" tab, which displays a timeline of actions. The actions listed are:

- @@INIT [9:20:50.95]
- countries:request [+00:00.02]
- countries:success [+00:00.08]
- regions:request [+01:36.100]
- regions:success [+00:00.12]

Below the actions, the state of the application is shown in a table:

Action	Action	State	Diff	Test
Tree	Chart	Raw		
type @pi0: "regions:success"				
listofRegions @pi0				
0 @pi0				
countryCode @pi0: "AT"				
regionCode @pi0: "1"				
regionName @pi0: "Burgenland"				
1 @pi0				
countryCode @pi0: "AT"				
regionCode @pi0: "2"				
regionName @pi0: "Carinthia"				
2 @pi0				
countryCode @pi0: "AT"				
regionCode @pi0: "3"				
regionName @pi0: "Lower Austria"				
3 @pi0				
countryCode @pi0: "AT"				
regionCode @pi0: "4"				

At the bottom of the Inspector window, there are several buttons: Pause recording, Lock changes, Persist, Dispatcher, Slider, Import, and Export.

```

GET http://192.168.1.200:8080/countries ▶ {request: {...}, response: {...}} serviceApi.js:29
GET http://192.168.1.200:8080/regions/CA
▼ {request: {...}, response: {...}} ↴
  ▶ request: {uri: "http://192.168.1.200:8080/regions/CA", options: undefined}
  ▼ response:
    config: (...)

    ▶ data: Array(13)
      headers: (...)

      request: (...)

      status: (...)

      statusText: (...)
```

