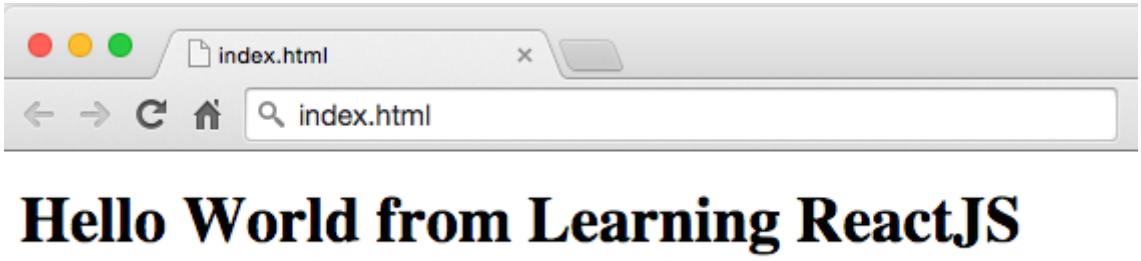
Chapter 1: Getting Started with ReactJS

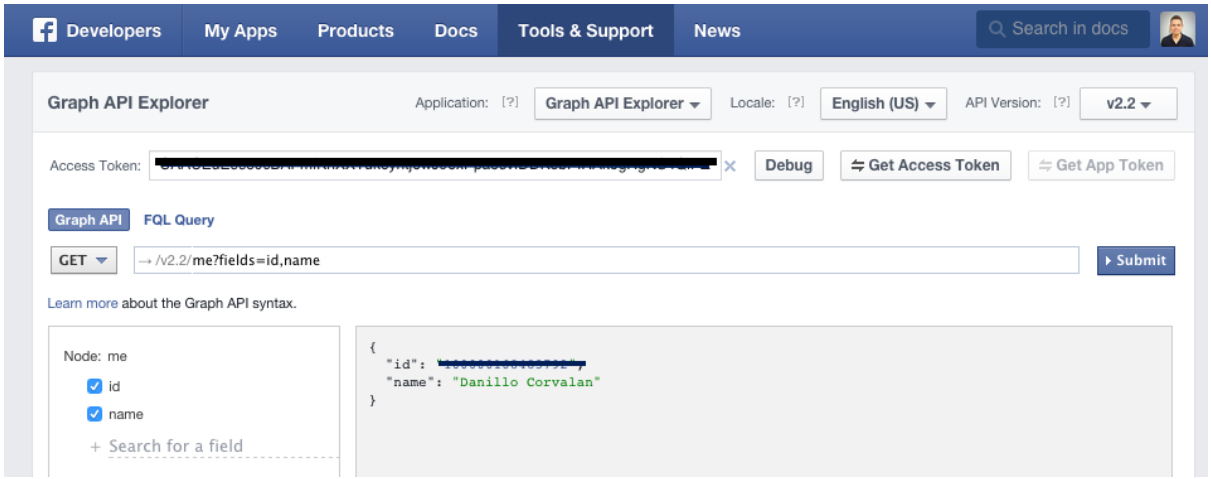


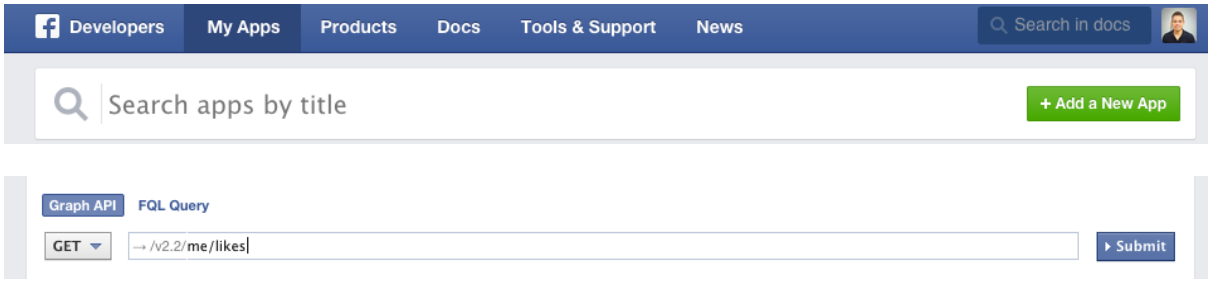

```
doel@doel-Vostro-3500:~/reactjs/ch10/app1$ httpster
Starting HTTPster v1.0.1 on port 3333 from /home/doel/reactjs/ch10/app1
```

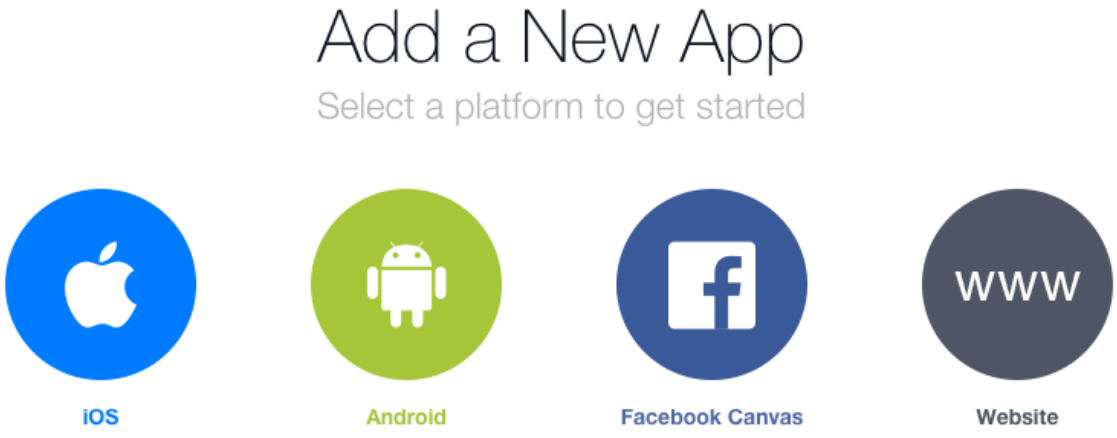
Chapter 2: Exploring JSX and the ReactJS Anatomy

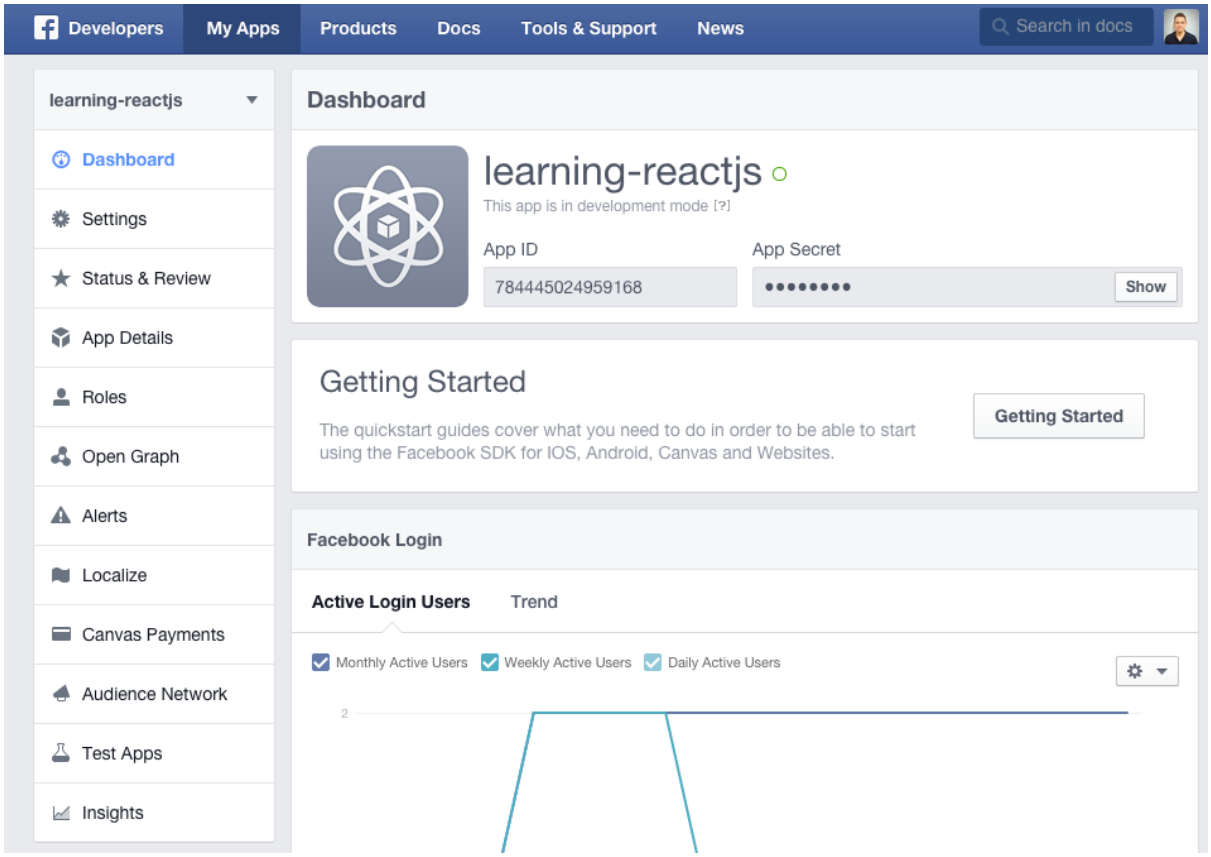
Chapter 3: Working with Properties

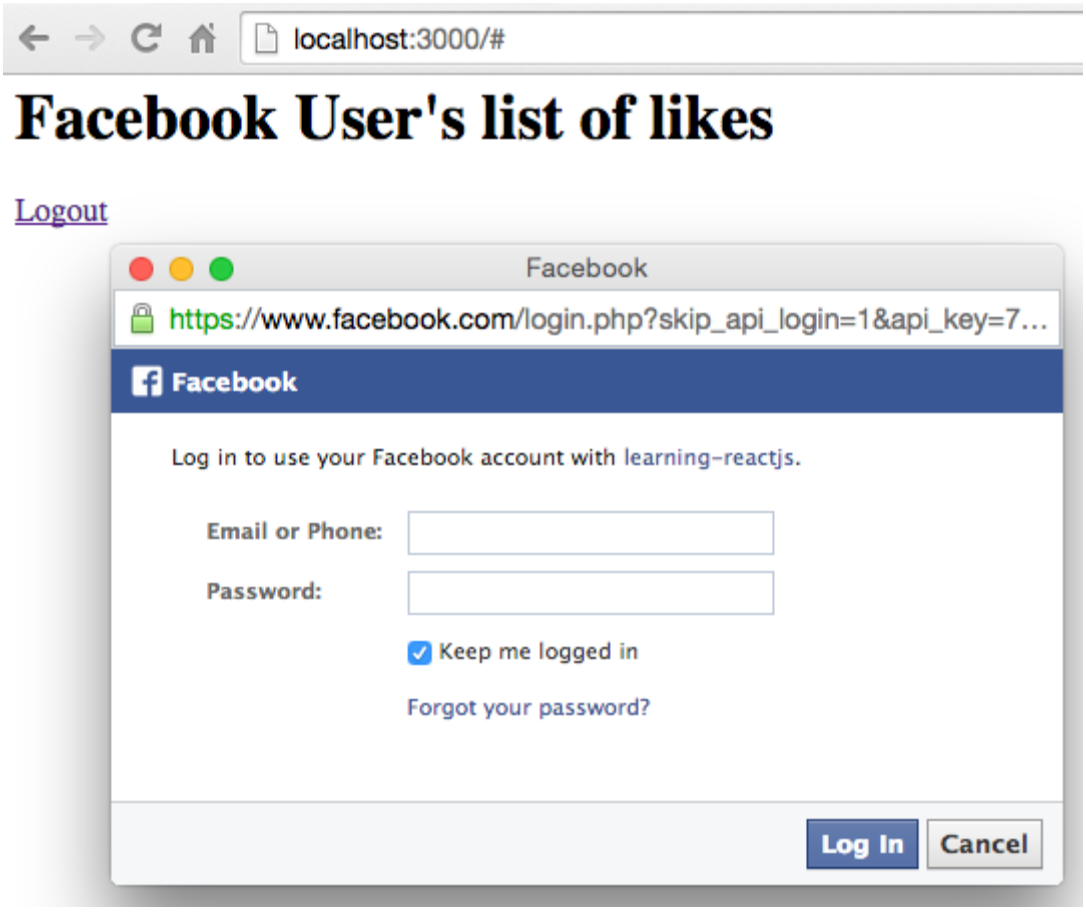
- Write this book with love <3 [ ] Remove
- Learn how to create isomorphic web apps [ ] Remove
- Study FLUX architecture [x] Remove

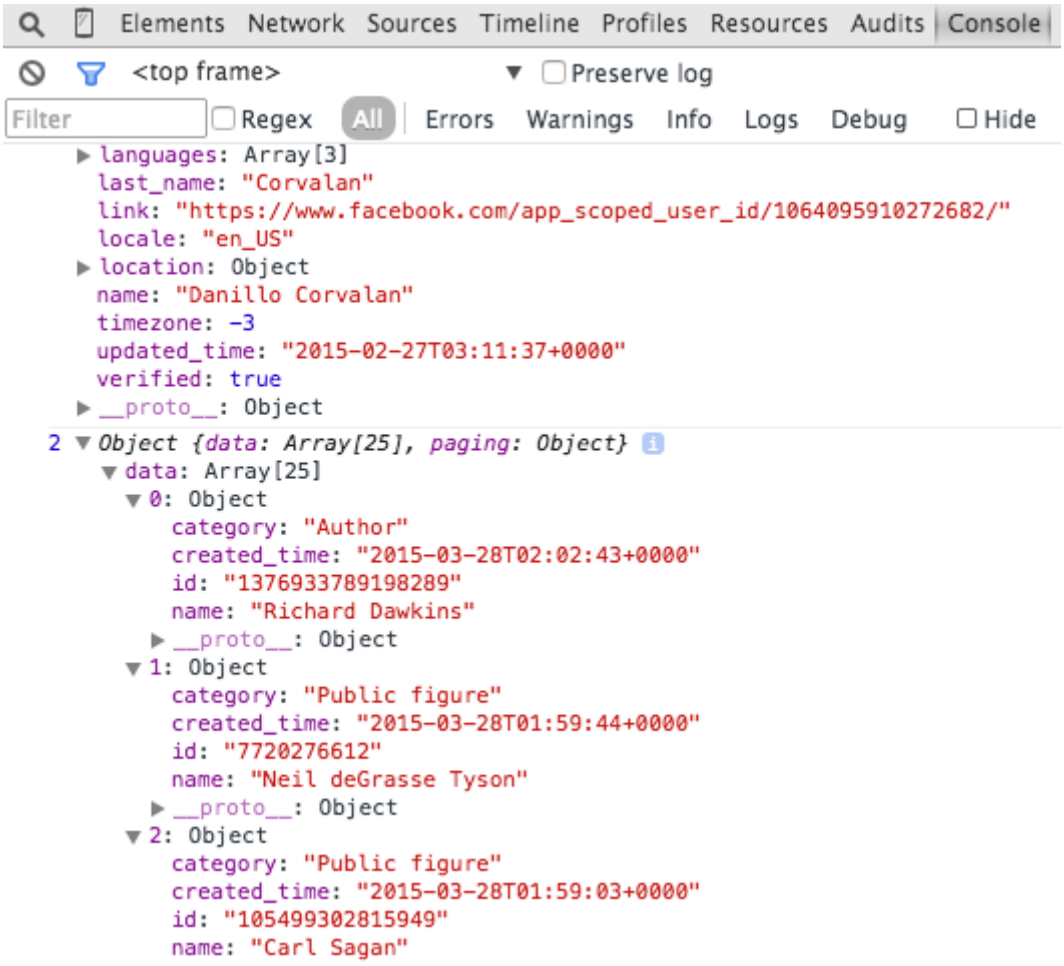


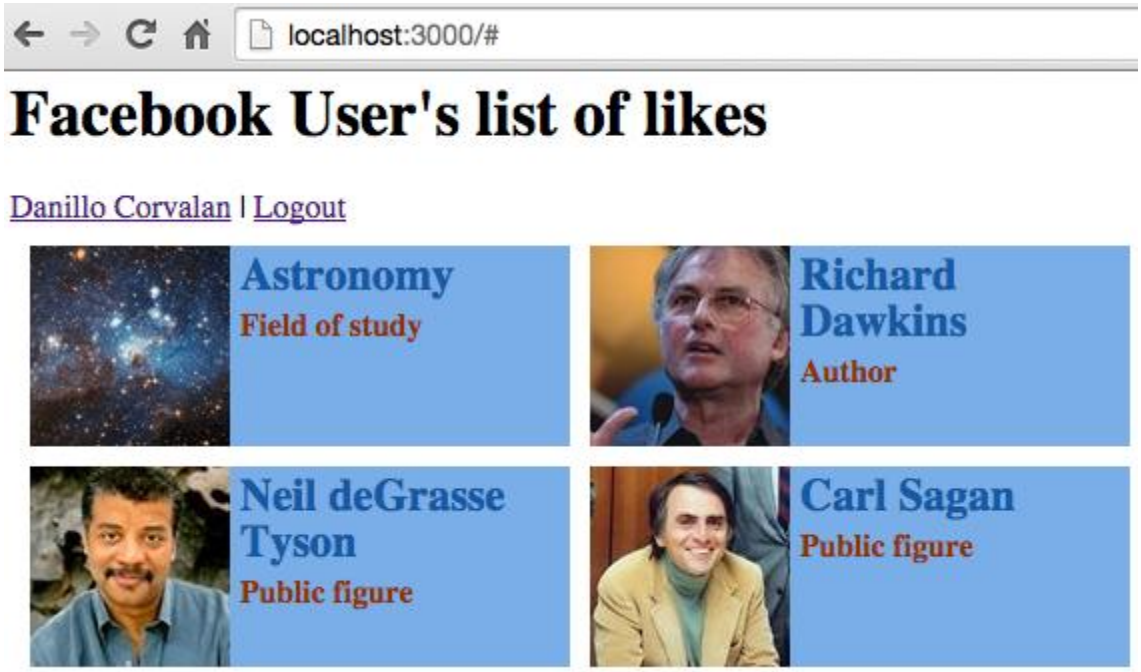




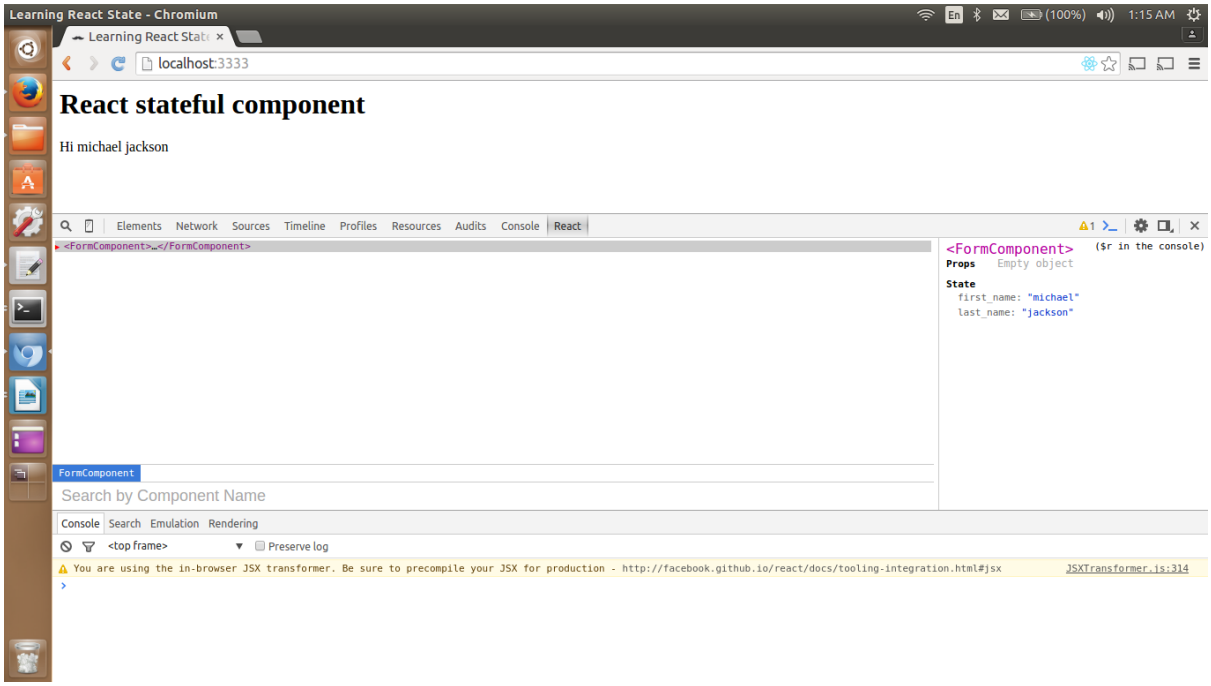

Developers
My Apps
Products
Docs
Tools & Support
News
Search in docs
learning-reactjs
Dashboard
Settings
Status & Review
App Details
Roles
Open Graph
Alerts
Localize
Canvas Payments
Audience Network
Test Apps
Insights
Dashboard
learning-reactjs
This app is in development mode [?]
App ID
App Secret
784445024959168
Show
Getting Started
The quickstart guides cover what you need to do in order to be able to start using the Facebook SDK for IOS, Android, Canvas and Websites.
Getting Started
Facebook Login
Active Login Users
Trend
Monthly Active Users
Weekly Active Users
Daily Active Users

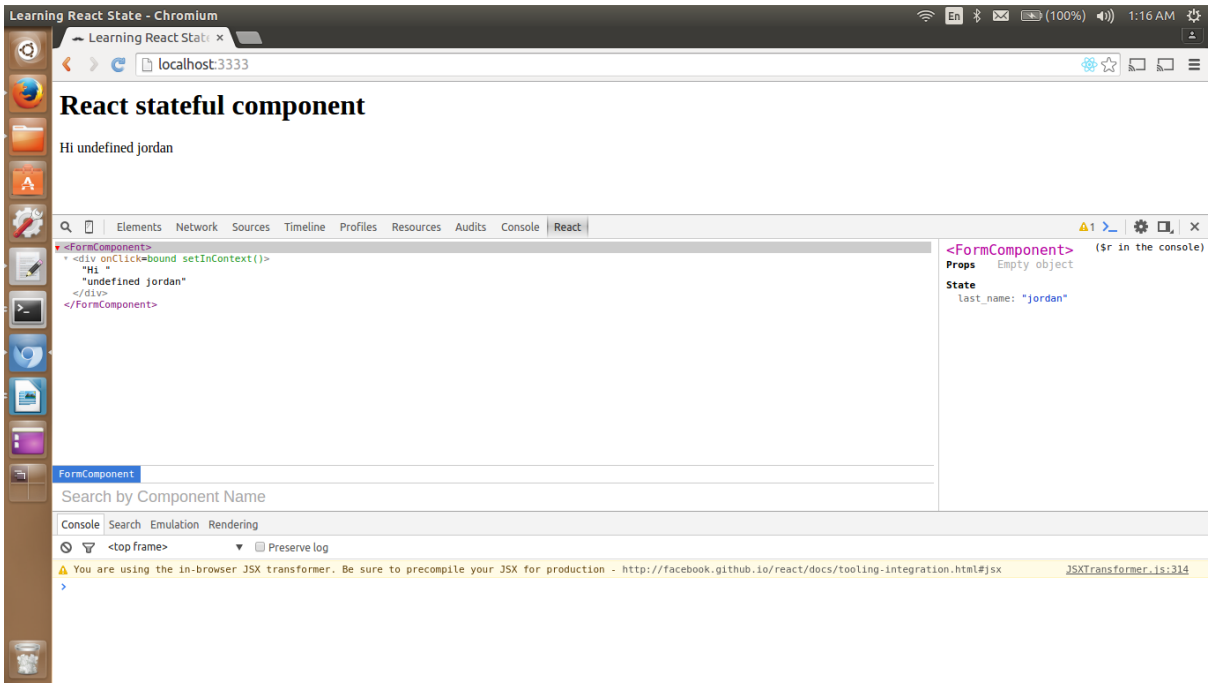

localhost:3000/#
Facebook User's list of likes
Logout
Facebook
https://www.facebook.com/login.php?skip_api_login=1&api_key=7...
Facebook
Log in to use your Facebook account with learning-reactjs.
Email or Phone:
Password:
Keep me logged in
Forgot your password?
Log In
Cancel

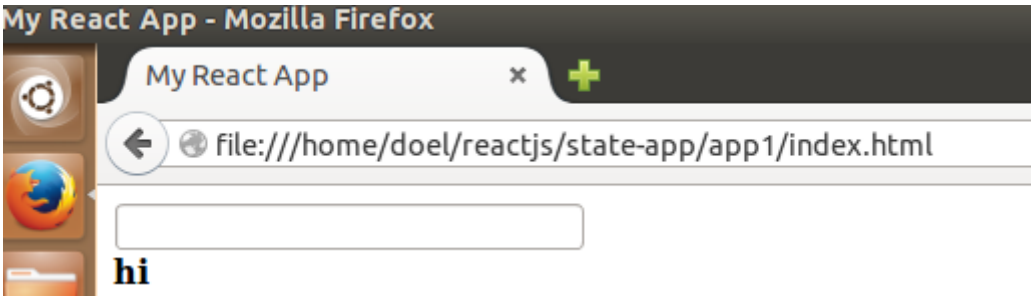

Elements Network Sources Timeline Profiles Resources Audits Console
<top frame>
Preserve log
Filter
Regex
All
Errors
Warnings
Info
Logs
Debug
Hide
languages: Array[3]
last_name: "Corvalan"
link: "https://www.facebook.com/app_scoped_user_id/1064095910272682/"
locale: "en_US"
location: Object
name: "Danillo Corvalan"
timezone: -3
updated_time: "2015-02-27T03:11:37+0000"
verified: true
__proto__: Object
2 Object {data: Array[25], paging: Object}
data: Array[25]
0: Object
category: "Author"
created_time: "2015-03-28T02:02:43+0000"
id: "1376933789198289"
name: "Richard Dawkins"
__proto__: Object
1: Object
category: "Public figure"
created_time: "2015-03-28T01:59:44+0000"
id: "7720276612"
name: "Neil deGrasse Tyson"
__proto__: Object
2: Object
category: "Public figure"
created_time: "2015-03-28T01:59:03+0000"
id: "105499302815949"
name: "Carl Sagan"

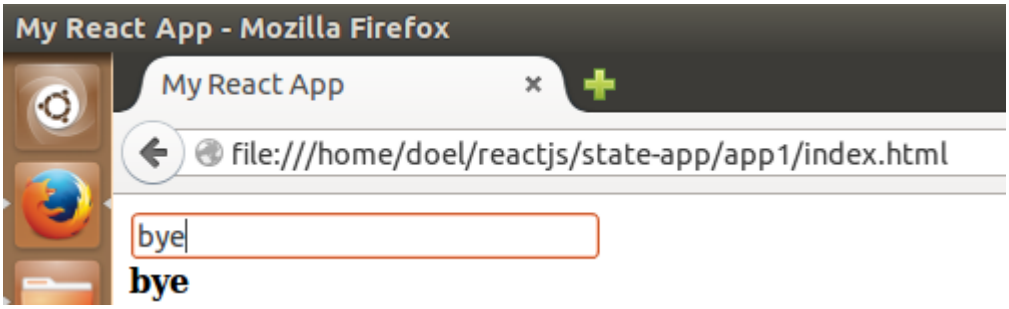

localhost:3000/#
Facebook User's list of likes
Danillo Corvalan | Logout
Astronomy
Field of study
Richard Dawkins
Author
Neil deGrasse Tyson
Public figure
Carl Sagan
Public figure

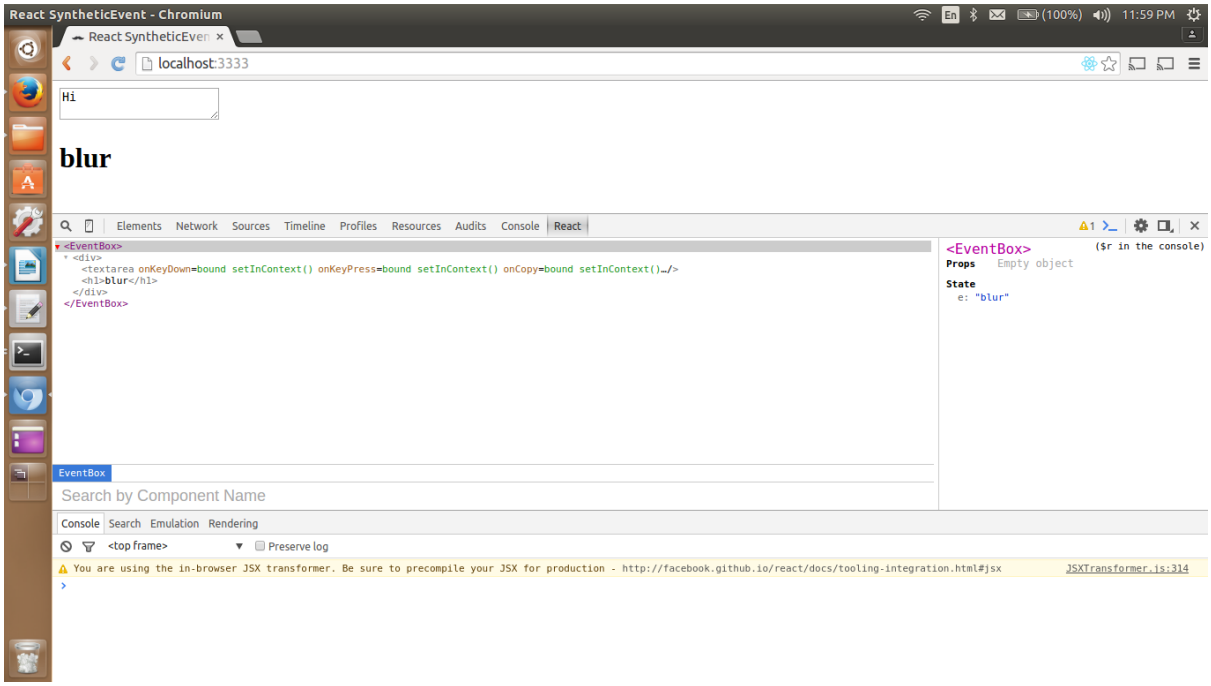
Chapter 4: Stateful Components and Events





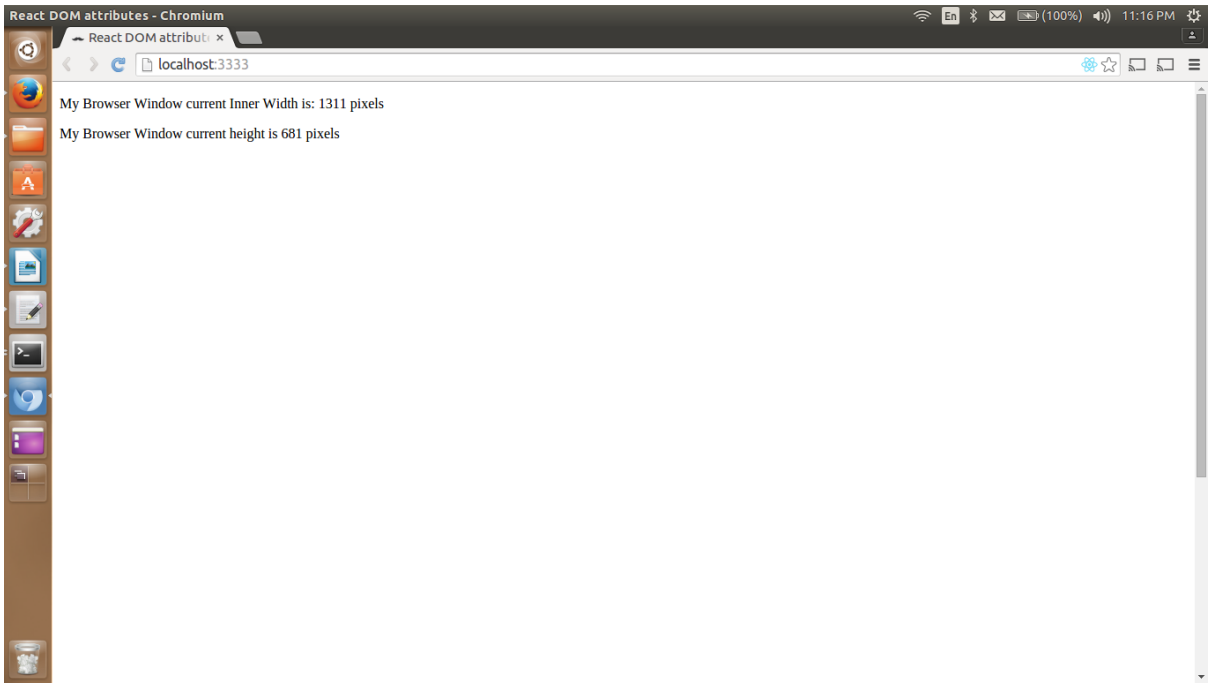


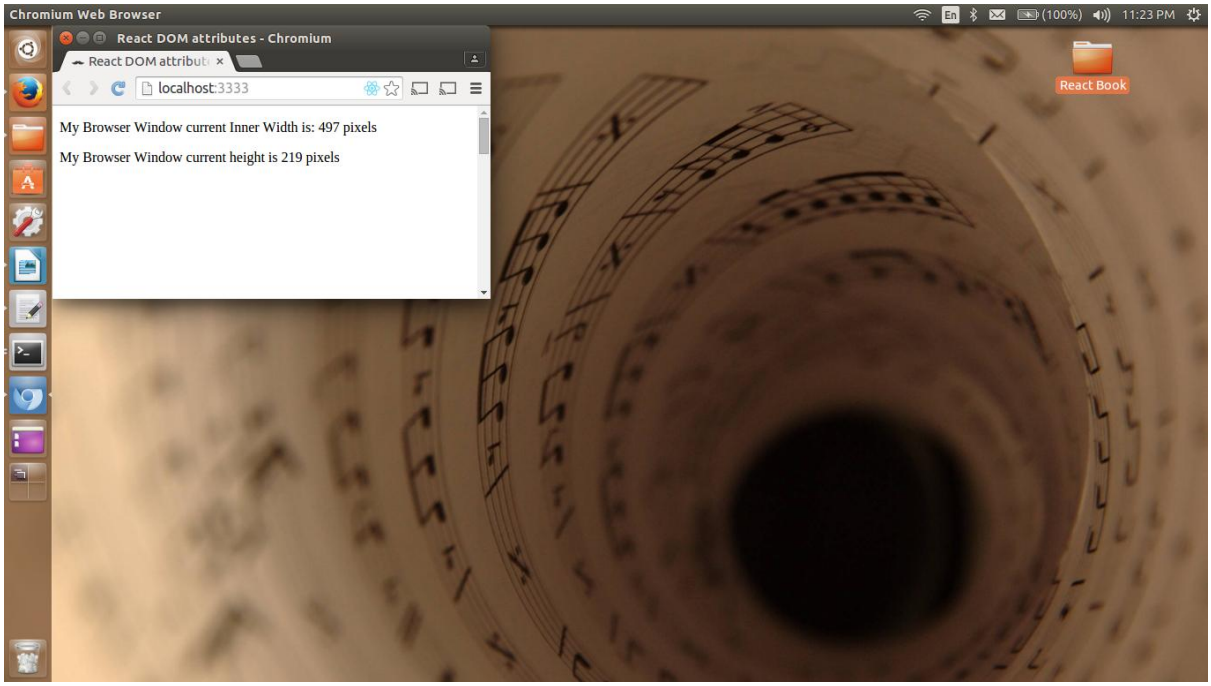

My React App - Mozilla Firefox
My React App
file:///home/doel/reactjs/state-app/app1/index.html
bye
bye

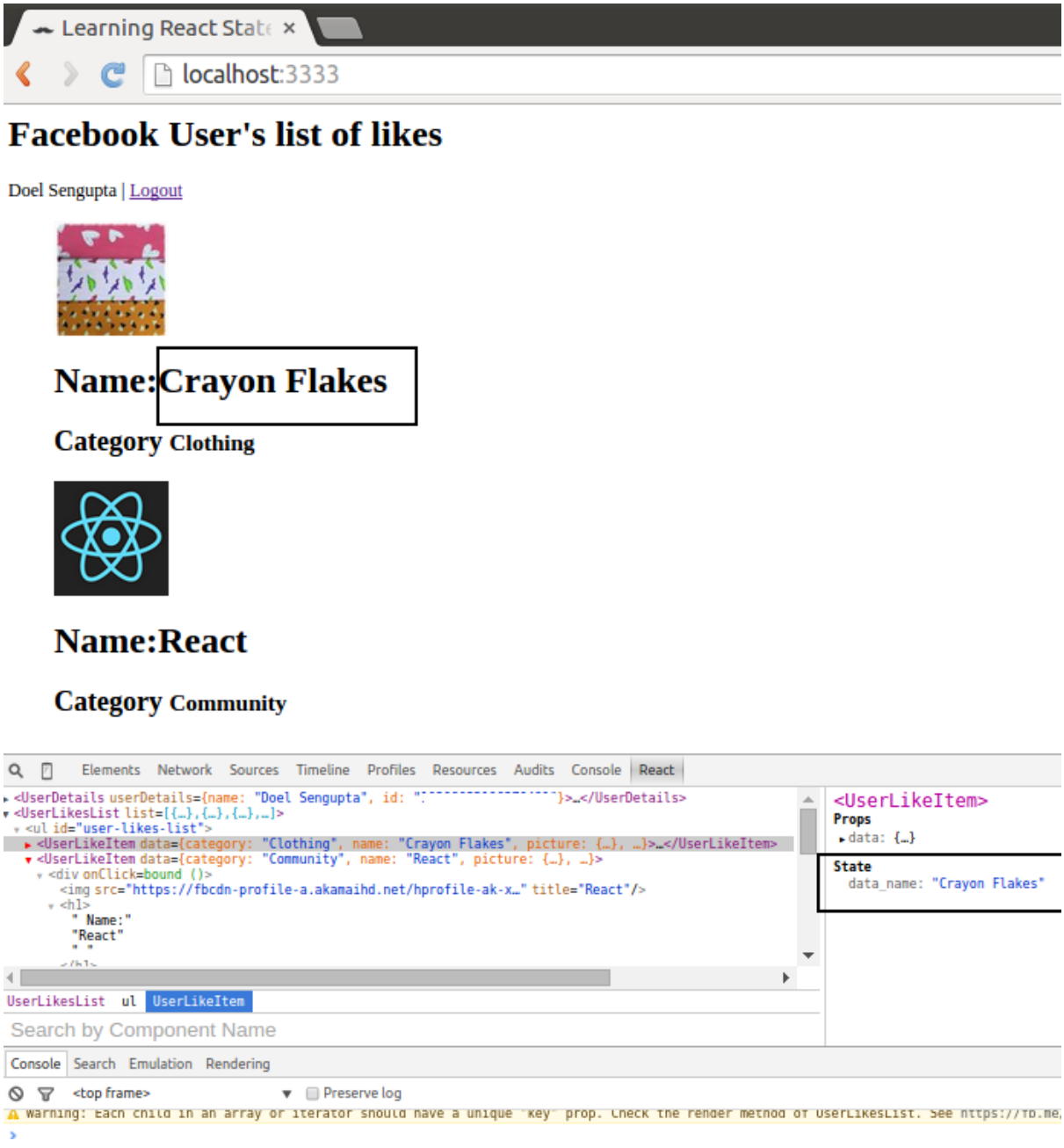

React SyntheticEvent - Chromium
localhost:3333
Hi
blur
Elements Network Sources Timeline Profiles Resources Audits Console React
<EventBox>

<textarea onKeyDown=bound setInContext() onKeyPress=bound setInContext() onCopy=bound setInContext()…/>
<h1>blur</h1>

</EventBox>
<EventBox> ($r in the console)
Props Empty object
State
e: "blur"
EventBox
Search by Component Name
Console Search Emulation Rendering
<top frame>
Preserve log
You are using the in-browser JSX transformer. Be sure to precompile your JSX for production - http://facebook.github.io/react/docs/tooling-integration.html#jsx
JSXTransformer.js:314


React DOM attributes - Chromium
localhost:3333
My Browser Window current Inner Width is: 1311 pixels
My Browser Window current height is 681 pixels


Chromium Web Browser
11:23 PM
React DOM attributes - Chromium
localhost:3333
My Browser Window current Inner Width is: 497 pixels
My Browser Window current height is 219 pixels
React Book

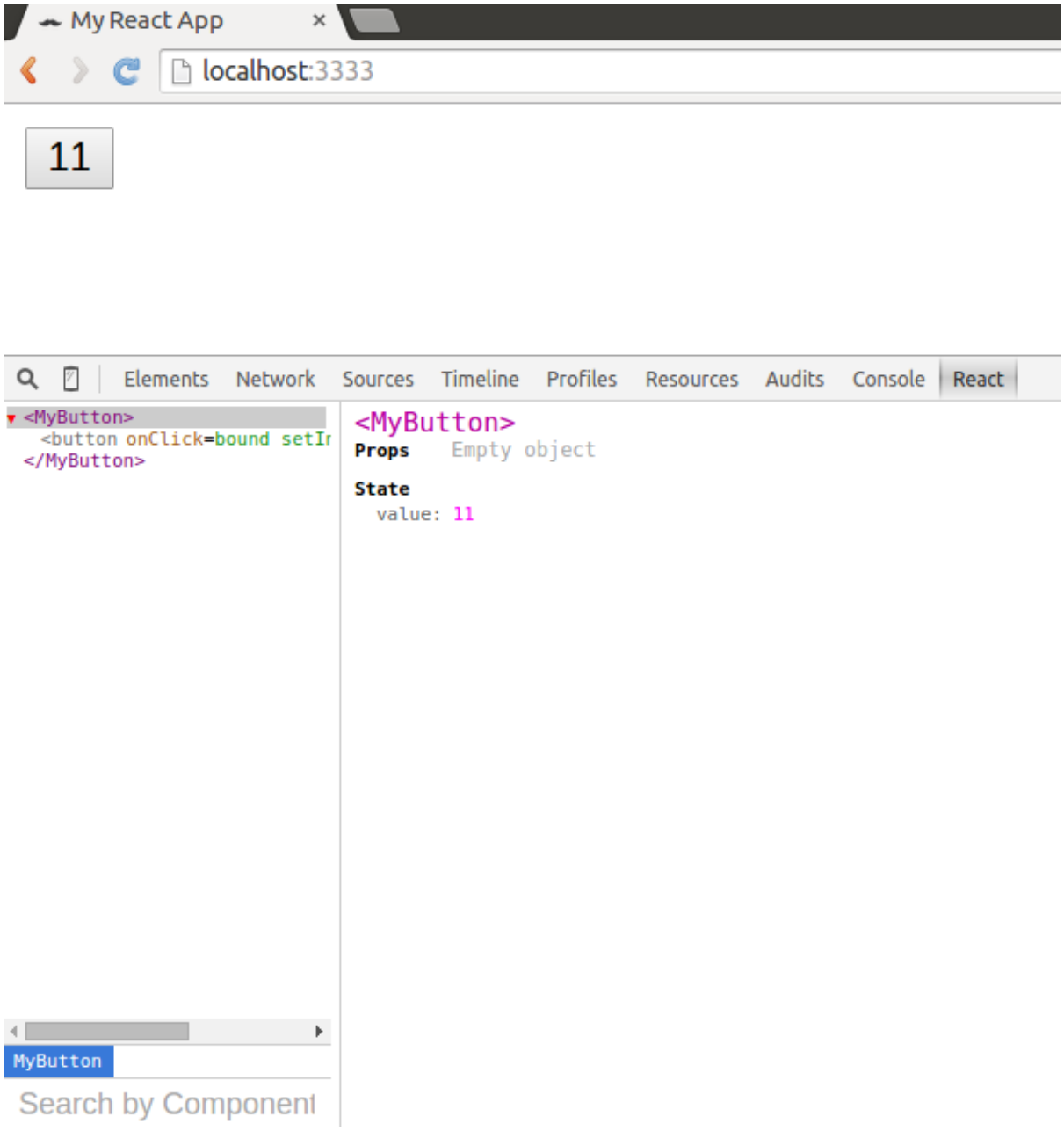

Learning React State
localhost:3333
Facebook User's list of likes
Doel Sengupta | Logout
Name:Crayon Flakes
Category Clothing
Name:React
Category Community
Elements Network Sources Timeline Profiles Resources Audits Console React
<UserDetails userDetails={name: "Doel Sengupta", id: "..."}>…</UserDetails>
<UserLikesList list={[…],[…],[…],…]>
<ul id="user-likes-list">
<UserLikeItem data={category: "Clothing", name: "Crayon Flakes", picture: {…}, …}>…</UserLikeItem>
<UserLikeItem data={category: "Community", name: "React", picture: {…}, …}>
<div onClick=bound ()>

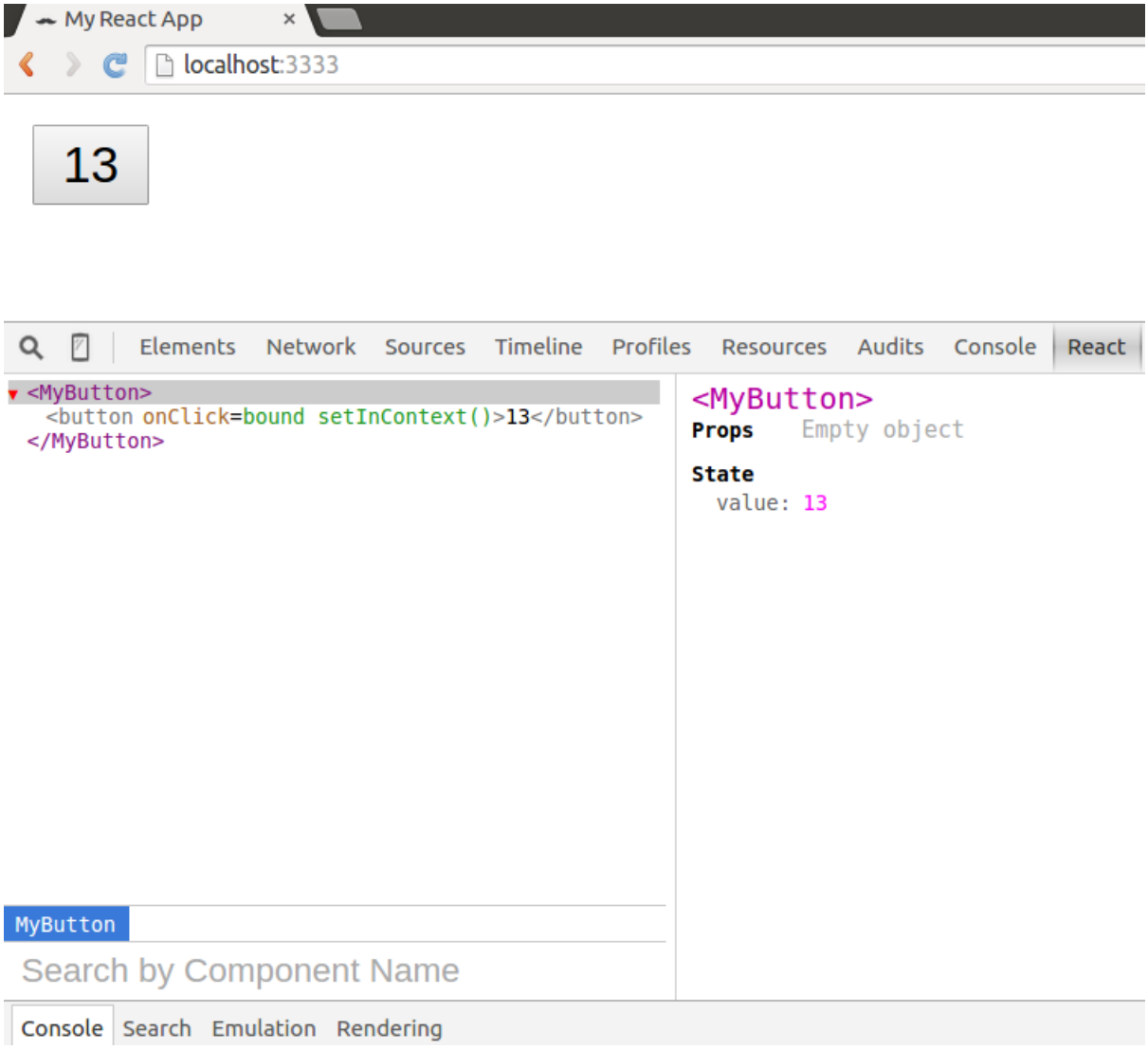
<h1>
" Name:"
"React"
" "
<UserLikeItem>
Props
data: {…}
State
data_name: "Crayon Flakes"
UserLikesList ul UserLikeItem
Search by Component Name
Console Search Emulation Rendering
<top frame>
Preserve log
Warning: Each child in an array or iterator should have a unique "key" prop. Check the render method of UserLikesList. See https://fb.me/

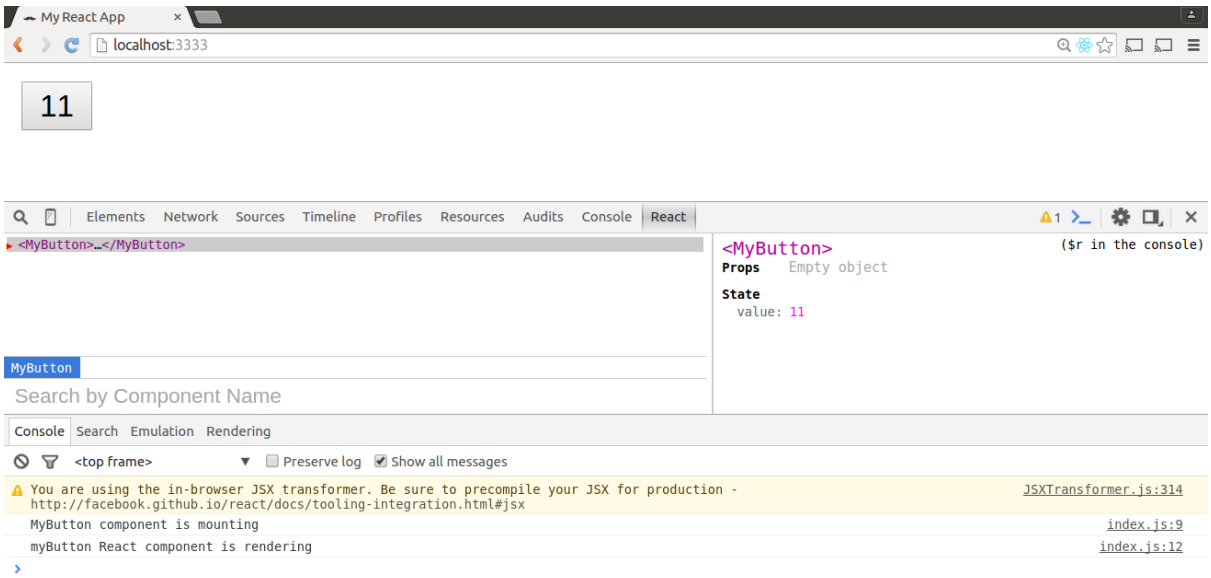
Learning React State
localhost:3333
Facebook User's list of likes
Doel Sengupta | Logout
Name:I liked it
Category Clothing
Name:React
Category Community
Elements Network Sources Timeline Profiles Resources Audits Console React
<UserDetails userDetails={name: "Doel Sengupta", id: "10208025196370481"}>…</UserDetails>
<UserLikesList list=[{…},{…},{…},…]>
<ul id="user-likes-list">
<UserLikeItem data={category: "Clothing", name: "Crayon Flakes", picture: {…}, …}>
<div onClick=bound setInContext()>

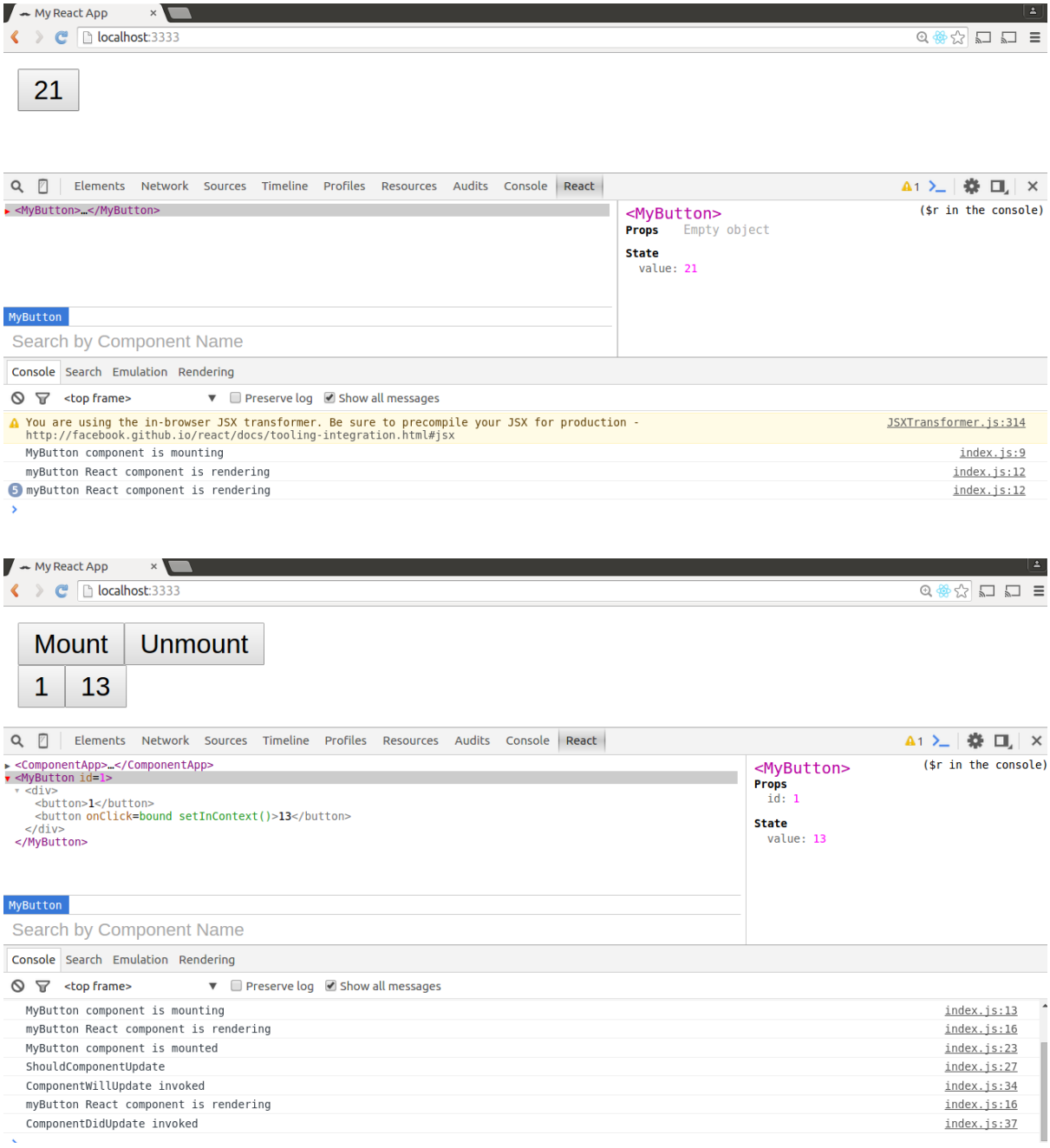
<h1>
" Name:"
"I liked it"
</h1>
UserLikesList ul UserLikeItem
Search by Component Name
<UserLikeItem>
Props
data: {…}
State
data_name: "I liked it"
Console Search Emulation Rendering
<top frame>
Preserve log

;


My React App
localhost:3333
11
Elements
Network
Sources
Timeline
Profiles
Resources
Audits
Console
React
<MyButton>
<button onClick=bound setIr
</MyButton>
<MyButton>
Props
Empty object
State
value: 11
MyButton
Search by Component

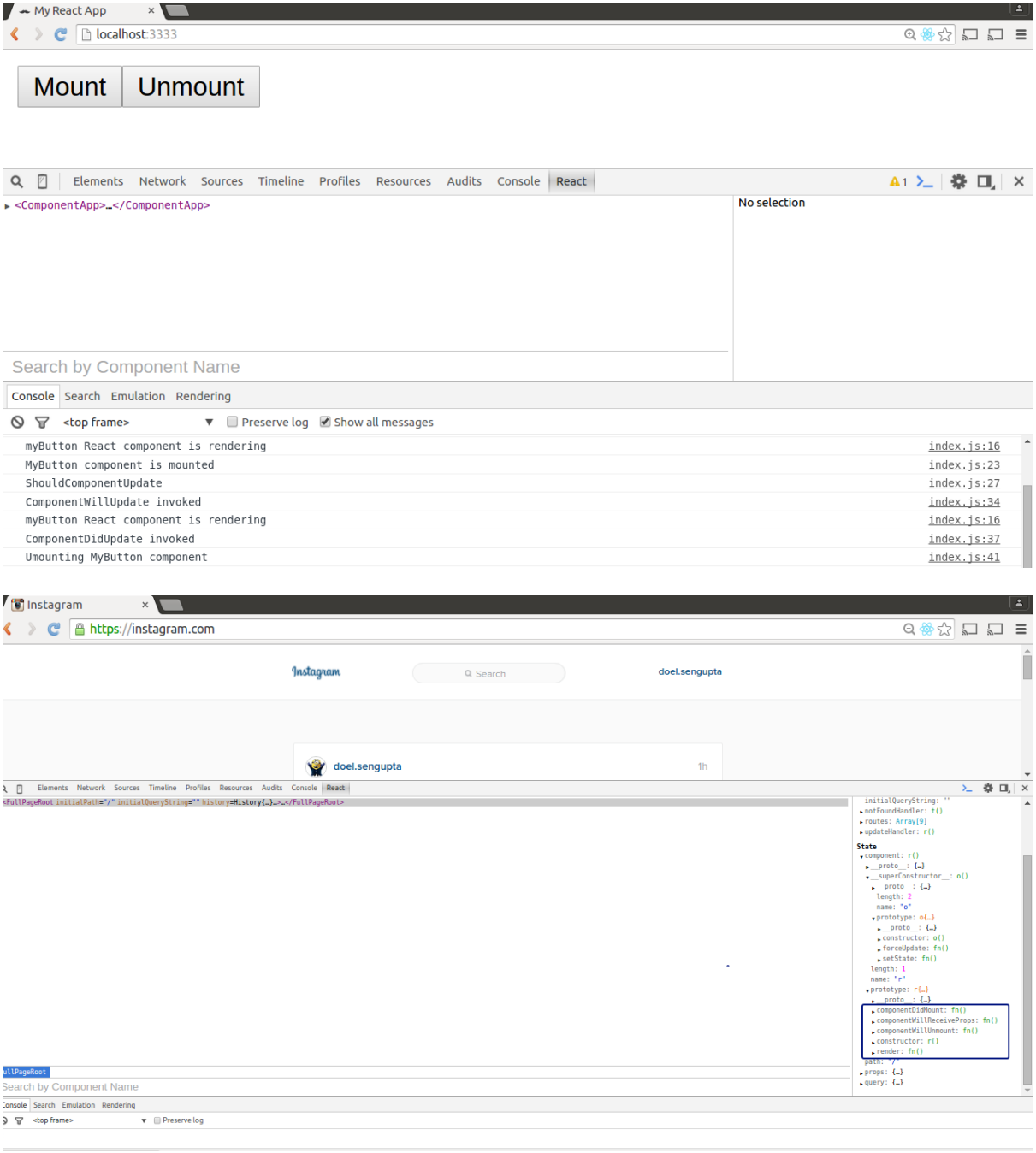

My React App
localhost:3333
13
Elements
Network
Sources
Timeline
Profiles
Resources
Audits
Console
React
<MyButton>
<button onClick=bound setInContext()>13</button>
</MyButton>
<MyButton>
Props
Empty object
State
value: 13
MyButton
Search by Component Name
Console
Search
Emulation
Rendering


My React App
localhost:3333
11
Elements
Network
Sources
Timeline
Profiles
Resources
Audits
Console
React
<MyButton>…</MyButton>
<MyButton>
Props
Empty object
State
value: 11
($r in the console)
MyButton
Search by Component Name
Console
Search
Emulation
Rendering
<top frame>
Preserve log
Show all messages
You are using the in-browser JSX transformer. Be sure to precompile your JSX for production - http://facebook.github.io/react/docs/tooling-integration.html#jsx
JSXTransformer.js:314
MyButton component is mounting
index.js:9
myButton React component is rendering
index.js:12


My React App
localhost:3333
21
Elements Network Sources Timeline Profiles Resources Audits Console React
<MyButton>…</MyButton>
<MyButton>
Props Empty object
State
value: 21
($r in the console)
MyButton
Search by Component Name
Console Search Emulation Rendering
<top frame>
Preserve log
Show all messages
You are using the in-browser JSX transformer. Be sure to precompile your JSX for production - http://facebook.github.io/react/docs/tooling-integration.html#jsx
JSXTransformer.js:314
MyButton component is mounting
index.js:9
myButton React component is rendering
index.js:12
myButton React component is rendering
index.js:12
My React App
localhost:3333
Mount
Unmount
1
13
Elements Network Sources Timeline Profiles Resources Audits Console React
<ComponentApp>…</ComponentApp>
<MyButton id=1>

<button>1</button>
<button onClick=bound setInContext()>13</button>

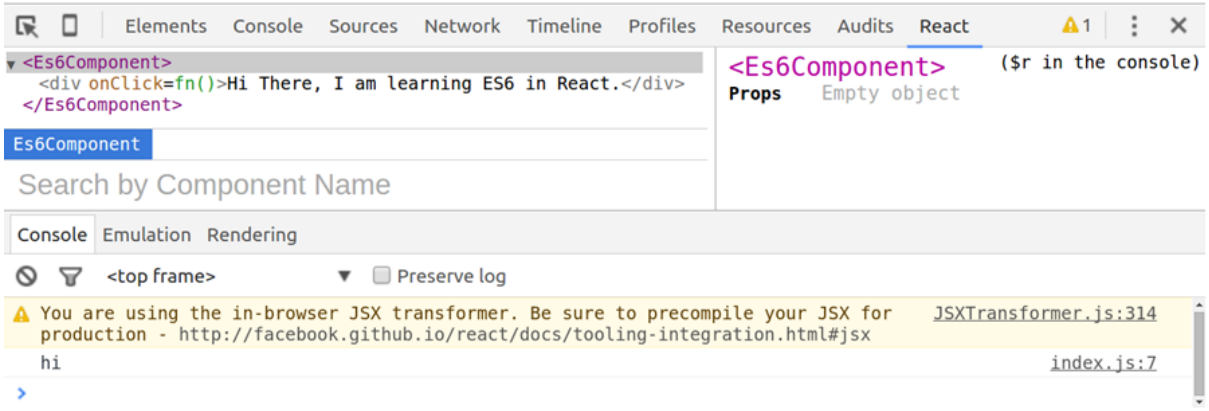
</MyButton>
<MyButton>
Props
id: 1
State
value: 13
($r in the console)
MyButton
Search by Component Name
Console Search Emulation Rendering
<top frame>
Preserve log
Show all messages
MyButton component is mounting
index.js:13
myButton React component is rendering
index.js:16
MyButton component is mounted
index.js:23
ShouldComponentUpdate
index.js:27
ComponentWillUpdate invoked
index.js:34
myButton React component is rendering
index.js:16
ComponentDidUpdate invoked
index.js:37

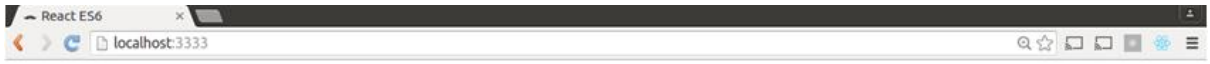

My React App
localhost:3333
Mount
Unmount
Elements Network Sources Timeline Profiles Resources Audits Console React
<ComponentApp>…</ComponentApp>
No selection
Search by Component Name
Console Search Emulation Rendering
<top frame>
Preserve log
Show all messages
myButton React component is rendering index.js:16
MyButton component is mounted index.js:23
ShouldComponentUpdate index.js:27
ComponentWillUpdate invoked index.js:34
myButton React component is rendering index.js:16
ComponentDidUpdate invoked index.js:37
Umounting MyButton component index.js:41

Instagram
https://instagram.com
Instagram
Search
doel.sengupta
doel.sengupta
1h
componentDidMount: fn()
componentWillReceiveProps: fn()
componentWillUnmount: fn()
constructor: r()
render: fn()

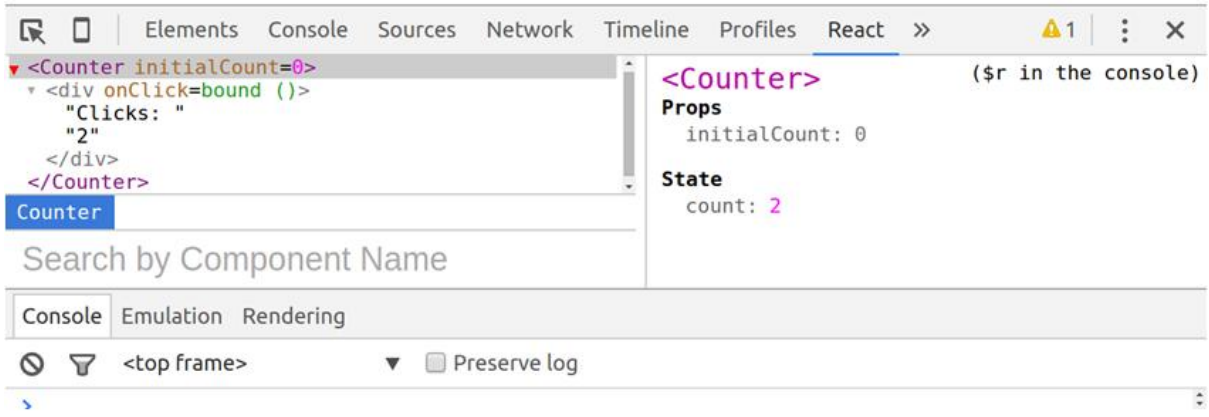
ok

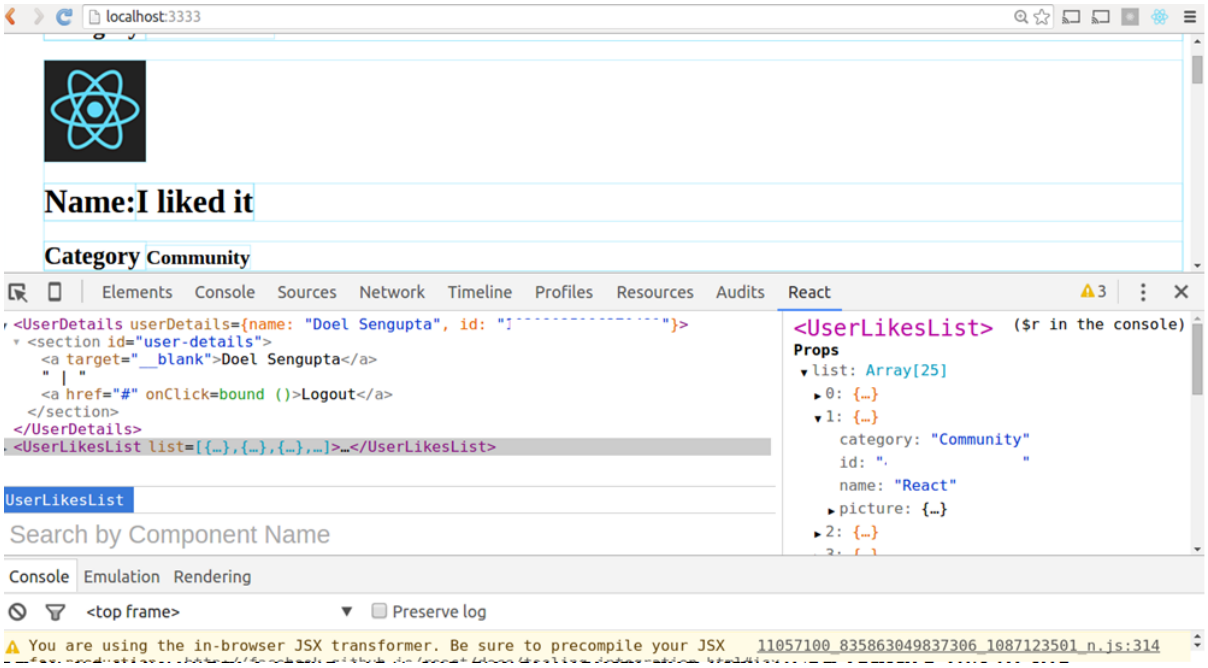
Hi There, I am learning ES6 in React.



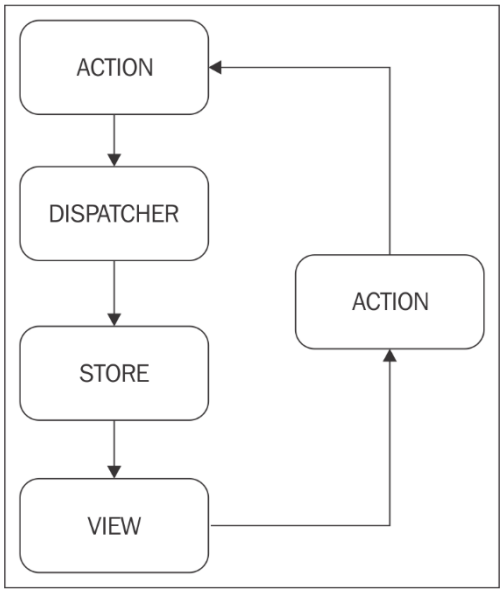


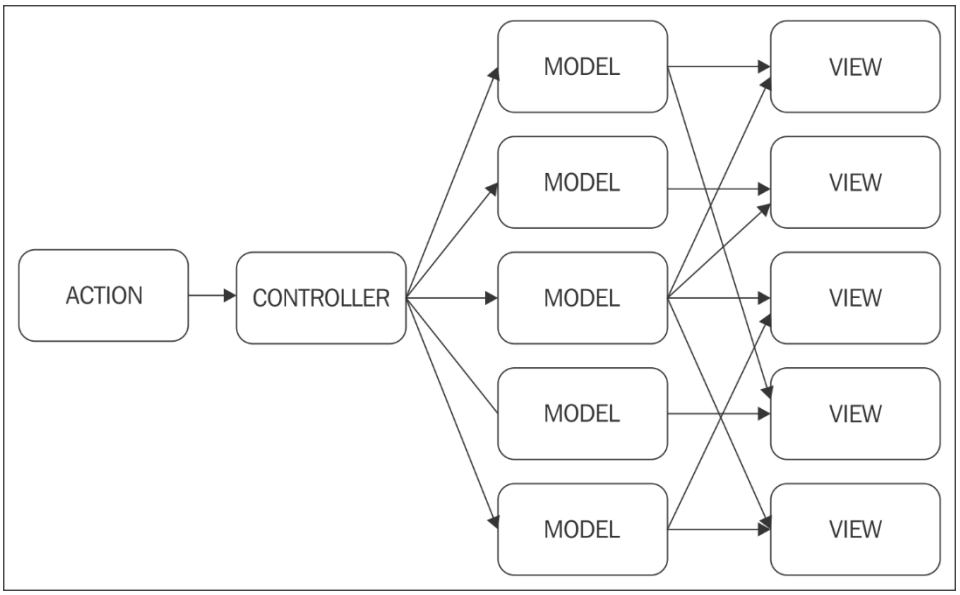
Clicks: 2




localhost:3333
Name:I liked it
Category Community
Elements Console Sources Network Timeline Profiles Resources Audits React
<UserDetails userDetails={name: "Doel Sengupta", id: "
<section id="user-details">
Doel Sengupta
" | "
Logout
</section>
</UserDetails>
<UserLikesList list=[{…},{…},{…},…]>…</UserLikesList>
UserLikesList
Search by Component Name
<UserLikesList> ($r in the console)
Props
list: Array[25]
0: {…}
1: {…}
category: "Community"
id: "
name: "React"
picture: {…}
2: {…}
Console Emulation Rendering
<top frame>
Preserve log
You are using the in-browser JSX transformer. Be sure to precompile your JSX
11057100_835863049837306_1087123501_n.js:314

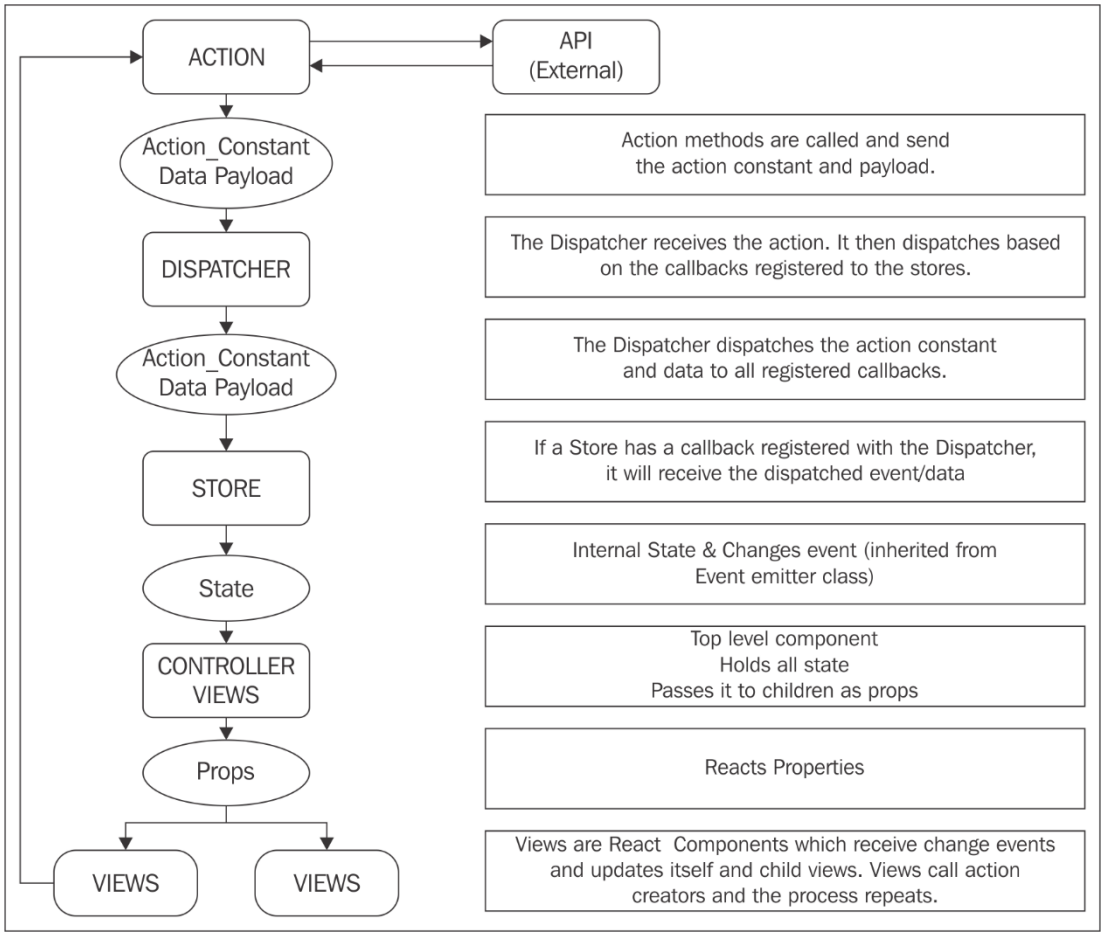
Chapter 6: Reacting with Flux

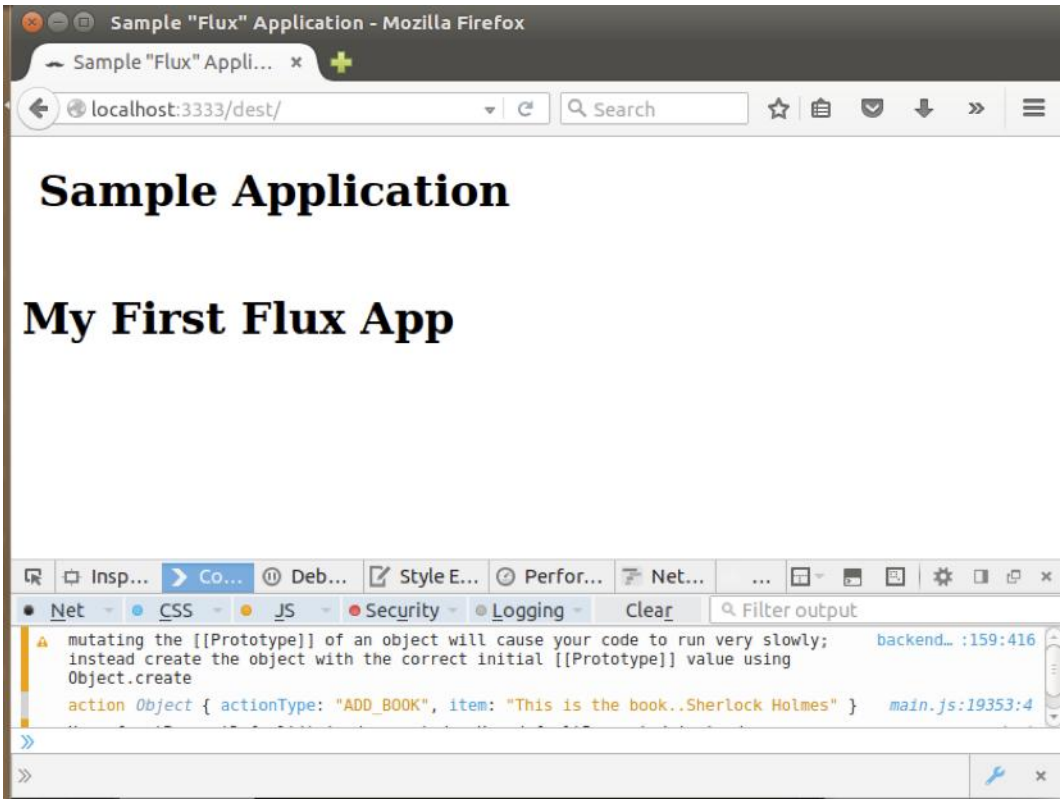




js
actions
app-actions.js
components
app-addbooktolibrary.js
app-booklist.js
app-readinglist.js
app-removefromreadinglist.js
app.js
constants
app-constants.js
dispatchers
app-dispatchers.js
stores
app-stores.js
main.js

index.html


ACTION
API
(External)
Action_Constant
Data Payload
Action methods are called and send
the action constant and payload.
DISPATCHER
The Dispatcher receives the action. It then dispatches based
on the callbacks registered to the stores.
Action_Constant
Data Payload
The Dispatcher dispatches the action constant
and data to all registered callbacks.
STORE
If a Store has a callback registered with the Dispatcher,
it will receive the dispatched event/data
State
Internal State & Changes event (inherited from
Event emitter class)
CONTROLLER
VIEWS
Top level component
Holds all state
Passes it to children as props
Props
Reacts Properties
VIEWS
VIEWS
Views are React Components which receive change events
and updates itself and child views. Views call action
creators and the process repeats.


Sample "Flux" Application - Mozilla Firefox
Sample "Flux" Appli...
localhost:3333/dest/
Search
Sample Application
My First Flux App
Insp...
Co...
Deb...
Style E...
Perfor...
Net...
Net
CSS
JS
Security
Logging
Clear
Filter output
mutating the [[Prototype]] of an object will cause your code to run very slowly;
instead create the object with the correct initial [[Prototype]] value using
Object.create
backend... :159:416
action Object { actionType: "ADD_BOOK", item: "This is the book..Sherlock Holmes" }
main.js:19353:4

Sherlock Library

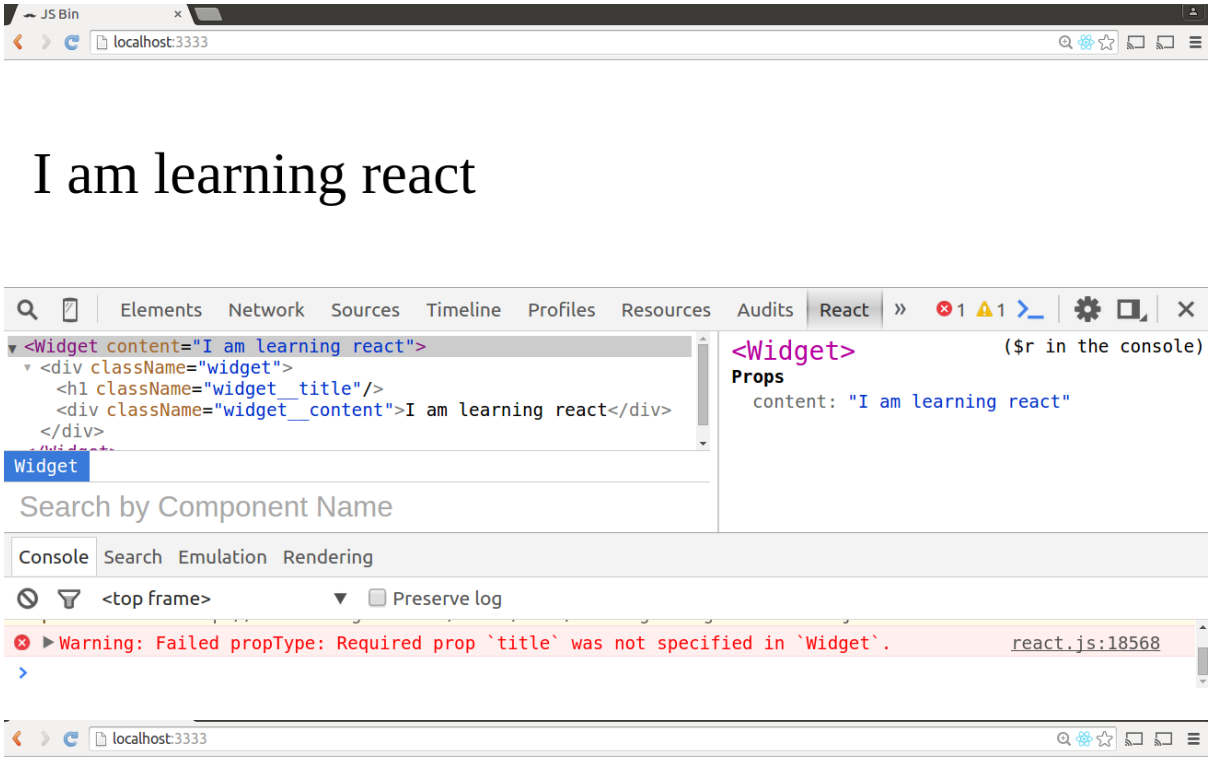
Book List

Sherlock Holmes Story 1	I want to borrow
Sherlock Holmes Story 2	I want to borrow
Sherlock Holmes Story 3	I want to borrow
Sherlock Holmes Story 4	I want to borrow
Sherlock Holmes Story 5	I want to borrow

Reading List

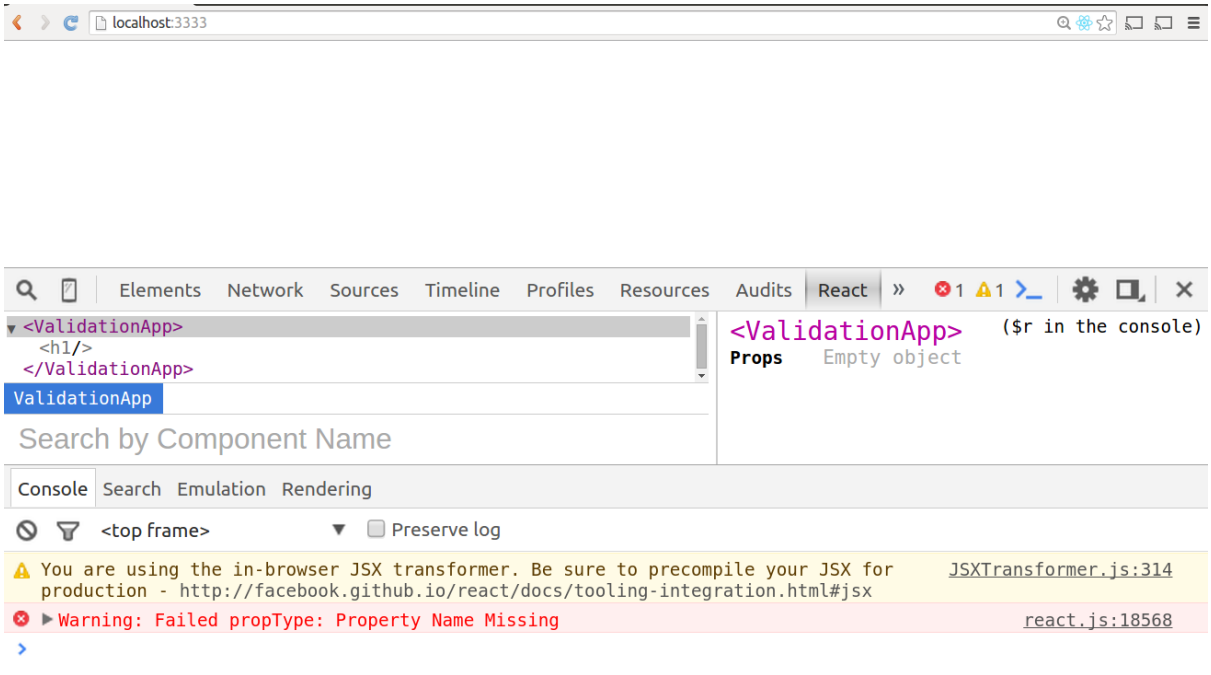
	Book Name	Qty
Book Completed	Sherlock Holmes Story 3	1
Book Completed	Sherlock Holmes Story 4	1

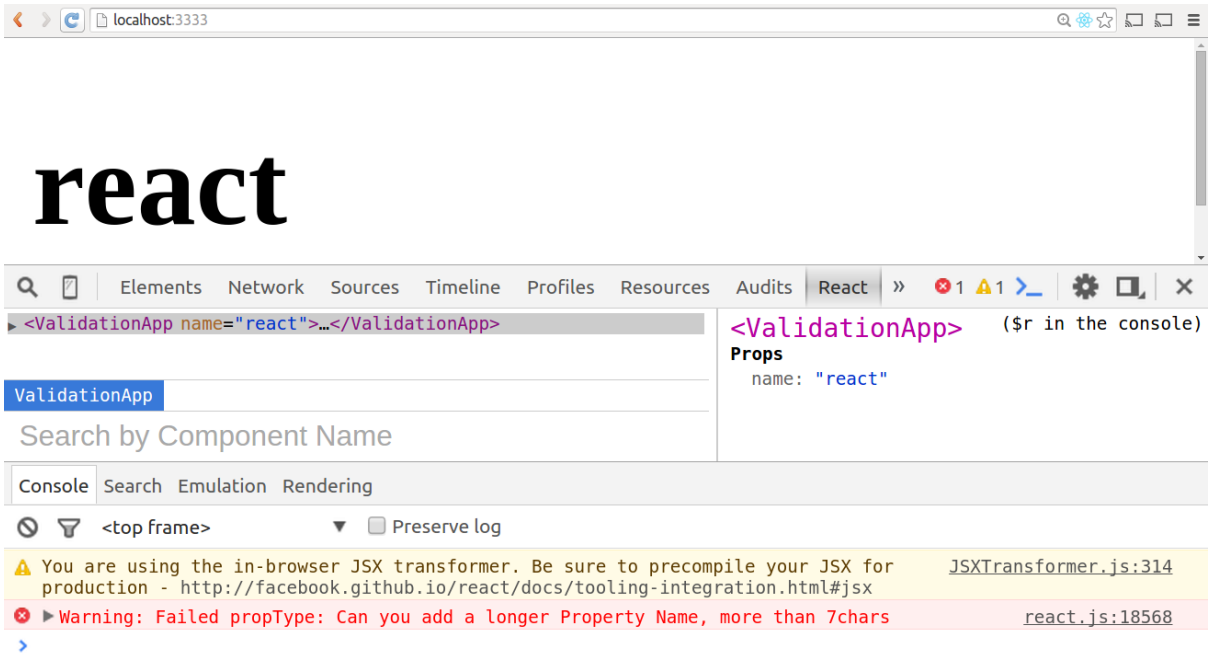
Chapter 7: Making Your Component Reusable


JS Bin
localhost:3333
I am learning react
Elements Network Sources Timeline Profiles Resources Audits React
<Widget content="I am learning react">

<h1 className="widget__title"/>
I am learning react

Widget
Search by Component Name
<Widget> ($r in the console)
Props
content: "I am learning react"
Console Search Emulation Rendering
<top frame>
Preserve log
Warning: Failed propType: Required prop `title` was not specified in `Widget`.
react.js:18568


localhost:3333
Elements Network Sources Timeline Profiles Resources Audits React
<ValidationApp>
<h1/>
</ValidationApp>
ValidationApp
Search by Component Name
<ValidationApp> ($r in the console)
Props Empty object
Console Search Emulation Rendering
<top frame>
Preserve log
You are using the in-browser JSX transformer. Be sure to precompile your JSX for production - http://facebook.github.io/react/docs/tooling-integration.html#jsx
JSXTransformer.js:314
Warning: Failed propType: Property Name Missing
react.js:18568


localhost:3333
react
Elements
Network
Sources
Timeline
Profiles
Resources
Audits
React
<ValidationApp name="react">…</ValidationApp>
<ValidationApp>
($r in the console)
Props
name: "react"
ValidationApp
Search by Component Name
Console
Search
Emulation
Rendering
<top frame>
Preserve log
You are using the in-browser JSX transformer. Be sure to precompile your JSX for production - http://facebook.github.io/react/docs/tooling-integration.html#jsx
JSXTransformer.js:314
Warning: Failed propType: Can you add a longer Property Name, more than 7chars
react.js:18568

Chapter 8: Testing React Components

```
> JSApp@1.0.0 test /home/doel/reactjs/testing_jest_ch8/app2_mocha_chai
> mocha src/index.test.js



  random
    ✓ should work!
    ✓ return my Name


  2 passing (17ms)
```

```
> @ test /home/doel/reactjs/testing_jest_ch8/jest1
> jest

Using Jest CLI v0.8.2, jasmine1
 FAIL  __tests__/greetings-test.js (0.024s)
● greetings › it greets the name
  - ReferenceError: greetings is not defined
        at Object.eval (greetings.js:5:18)
        at Spec.eval (__tests__/greetings-test.js:6:16)
1 test failed, 0 tests passed (1 total in 1 test suite, run time 1.168s)
npm ERR! Test failed.  See above for more details.
```

```
doel@doel-Vostro-3500:~/reactjs/testing_jest_ch8/jest1$ npm test

> @ test /home/doel/reactjs/testing_jest_ch8/jest1
> jest

Using Jest CLI v0.8.2, jasmine1
 PASS  __tests__/greetings-test.js (0.03s)
1 test passed (1 total in 1 test suite, run time 1.967s)
```

```
doel@doel-Vostro-3500:~/reactjs/testing_jest_ch8/jest1$ jest
Using Jest CLI v0.8.2, jasmine1
 PASS  __tests__/greetings-test.js (0.047s)
1 test passed (1 total in 1 test suite, run time 1.712s)
```

```
doel@doel-Vostro-3500:~/reactjs/testing_jest_ch8/app4_withBabel$ ll
total 28
drwxrwxr-x  4 doel doel 4096 Jan  1 23:32 ./
drwxrwxrwx  9 doel doel 4096 Jan  1 22:12 ../
-rw-rw-r--  1 doel doel   30 Jan  1 23:23 .babelrc
-rwxrwxrwx  1 doel doel   93 Jan  1 03:14 greetings.js*
drwxr-xr-x 15 doel doel 4096 Jan  1 23:32 node_modules/
-rwxrwxrwx  1 doel doel  540 Jan  1 22:57 package.json*
drwxrwxr-x  2 doel doel 4096 Jan  1 23:51 __test__/
```

```
doel@doel-Vostro-3500:~/reactjs/testing_jest_ch8/app4_withBabel$ npm test

> @ test /home/doel/reactjs/testing_jest_ch8/app4_withBabel
> mocha './__test__/*.test.js' --compilers js:babel-core/register



  greetings
    ✓ greets the name

  setup
    ✓ testing the setup is working


  2 passing (17ms)
```

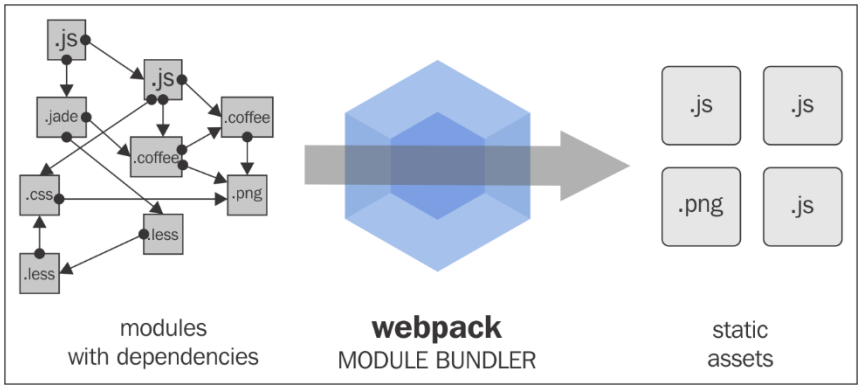
```
 GreetingComponent
{ '$$typeof': Symbol(react.element),
  type: 'div',
  key: null,
  ref: null,
  props: { classname: 'Greeting', children: [ [Object], [Object] ] },
  _owner: null,
  _store: {} }
```

```
  GreetingComponent
[ { '$$typeof': Symbol(react.element),
    type: 'h2',
    key: null,
    ref: null,
    props: { classname: 'heading2', children: 'Hi' },
    _owner: null,
    _store: {} },
  { '$$typeof': Symbol(react.element),
    type: 'span',
    key: null,
    ref: null,
    props: { classname: 'like', children: 'ReactJS' },
    _owner: null,
    _store: {} } ]
```

```
> @ test /home/doel/reactjs/testing_jest_ch8/app5_reactWithTesting
> mocha './__test__/*.test.js' --compilers js:babel-core/register

From Common Code
{ '$$typeof': Symbol(react.element),
  type: 'div',
  key: null,
  ref: null,
  props: { classname: 'Greeting', children: [ [Object], [Object] ] },
  _owner: null,
  _store: {} }


  GreetingComponent
    Common code
h2 component
{ '$$typeof': Symbol(react.element),
  type: 'div',
  key: null,
  ref: null,
  props: { classname: 'Greeting', children: [ [Object], [Object] ] },
  _owner: null,
  _store: {} }
^M      ✓ should greet with the greeting Hi
span component
{ '$$typeof': Symbol(react.element),
  type: 'div',
  key: null,
  ref: null,
  props: { classname: 'Greeting', children: [ [Object], [Object] ] },
  _owner: null,
  _store: {} }
^M      ✓ should return the like as ReactJS

  setup
^M    ✓ testing the setup is working


  3 passing (20ms)
```

```
doel@doel-Vostro-3500:~/reactjs/flux-library-ch6/node_modules/flux/dist$  npm config get prefix
/usr
doel@doel-Vostro-3500:~/reactjs/flux-library-ch6/node_modules/flux/dist$ ll /usr/
total 172
drwxr-xr-x  11 root root  4096 Oct  7 21:11 ./
drwxr-xr-x  25 root root  4096 Feb  2 11:24 ../
drwxr-xr-x   2 doel doel 61440 Feb 17 10:42 bin/
drwxr-xr-x   2 root root  4096 Oct  7 21:11 etc/
drwxr-xr-x   2 root root  4096 Sep 14 14:06 games/
drwxr-xr-x  54 root root 20480 Feb 17 10:40 include/
drwxr-xr-x 174 root root 36864 Feb 17 10:40 lib/
drwxr-xr-x  11 root root  4096 Jul 27  2015 local/
drwxr-xr-x   2 root root 12288 Feb 17 10:41 sbin/
drwxr-xr-x 314 root root 12288 Feb  2 23:10 share/
drwxr-xr-x  34 root root  4096 Feb  2 11:23 src/
```

Chapter 9: Preparing your Code for Deployment



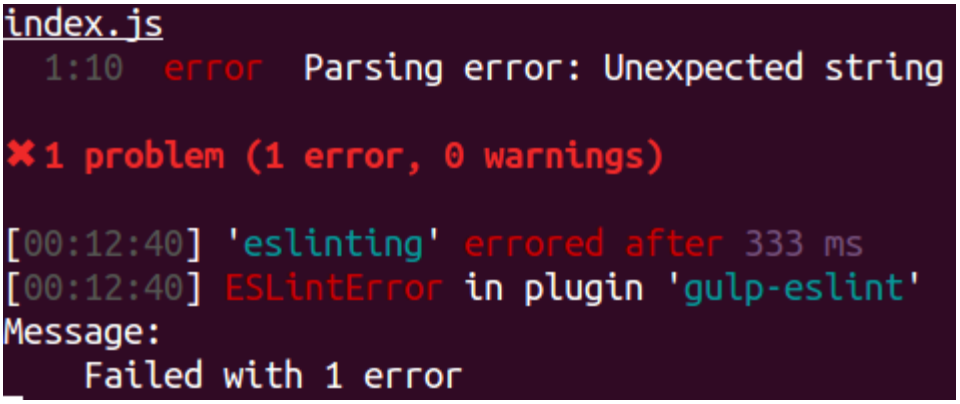

```
doel@doel-Vostro-3500:~/reactjs/app1$ sudo npm install -g webpack
[sudo] password for doel:
npm WARN optional dep failed, continuing fsevents@1.0.6
/usr/bin/webpack -> /usr/lib/node_modules/webpack/bin/webpack.js
webpack@1.12.10 /usr/lib/node_modules/webpack
├── interpret@0.6.6
├── tapable@0.1.10
├── clone@1.0.2
├── esprima@2.7.1
├── async@1.5.2
├── supports-color@3.1.2 (has-flag@1.0.0)
├── enhanced-resolve@0.9.1 (graceful-fs@4.1.2, memory-fs@0.2.0)
├── memory-fs@0.3.0 (errno@0.1.4, readable-stream@2.0.5)
├── optimist@0.6.1 (wordwrap@0.0.3, minimist@0.0.10)
├── mkdirp@0.5.1 (minimist@0.0.8)
├── webpack-core@0.6.8 (source-map@0.4.4, source-list-map@0.1.5)
├── loader-utils@0.2.12 (big.js@3.1.3, json5@0.4.0)
├── uglify-js@2.6.1 (async@0.2.10, uglify-to-browserify@1.0.2, source-map@0.5.3, yargs@3.10.0)
├── watchpack@0.2.9 (graceful-fs@4.1.2, async@0.9.2, chokidar@1.4.2)
└── node-libs-browser@0.5.3 (tty-browserify@0.0.0, https-browserify@0.0.0, path-browserify@0.0.0, constants-b
code@1.4.0, string_decoder@0.10.31, os-browserify@0.1.2, process@0.11.2, assert@1.3.0, domain-browser@1.1.7,
, timers-browserify@1.4.2, events@1.1.0, stream-browserify@1.0.0, vm-browserify@0.0.4, util@0.10.3, console-b
able-stream@1.1.13, url@0.10.3, http-browserify@1.7.0, buffer@3.6.0, browserify-zlib@0.1.4, crypto-browserify
```

```
doel@doel-Vostro-3500:~/reactjs/app1$ ll
total 24
drwxrwxr-x  4 doel doel 4096 Jan  8 21:50 ./
drwxrwxrwx 17 doel doel 4096 Jan  8 17:40 ../
-rw-rw-r--  1 doel doel    0 Jan  8 21:48 bundle.js
-rw-rw-r--  1 doel doel    0 Jan  8 21:49 index.html
drwxrwxr-x  4 doel doel 4096 Jan  8 21:50 node_modules/
-rw-rw-r--  1 doel doel  221 Jan  8 17:45 package.json
drwxrwxr-x  2 doel doel 4096 Jan  8 20:12 src/
-rw-rw-r--  1 doel doel  327 Jan  8 20:13 webpack-config.js
```

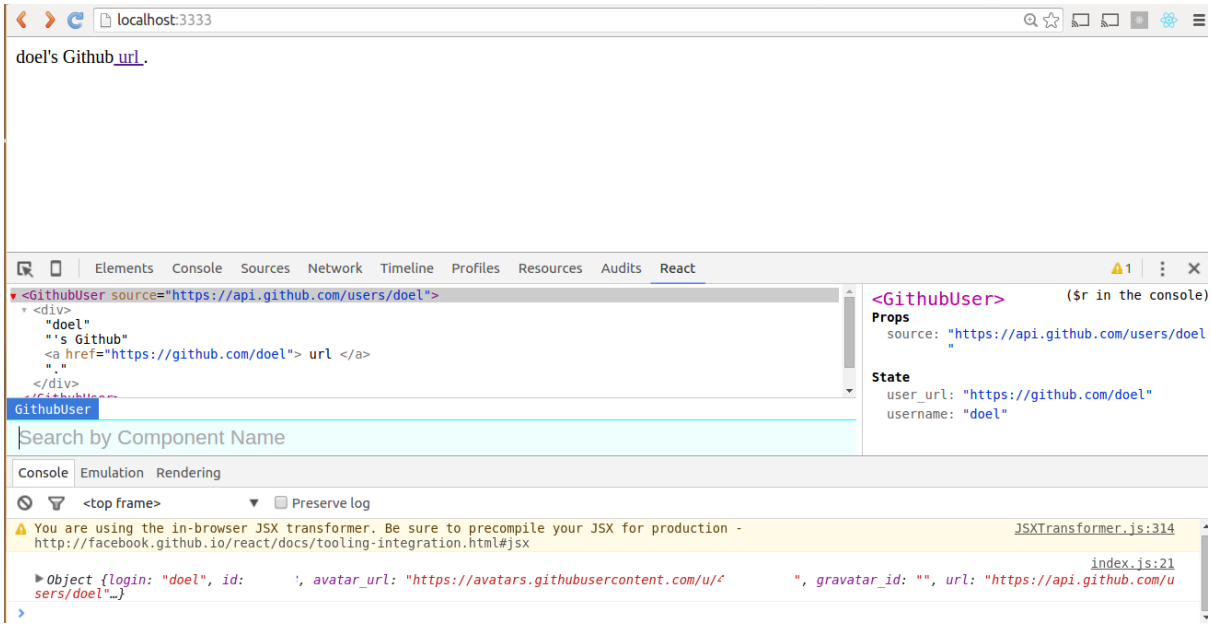
```
doel@doel-Vostro-3500:~/reactjs/webpack_ch9/app1$ sudo webpack -w -v
Hash: 12a3374c336415079893
Version: webpack 1.12.10
Time: 8372ms
          Asset     Size  Chunks             Chunk Names
./src/bundle.js  1.76 kB       0  [emitted]  main
    + 1 hidden modules
Hash: bacafde43d68ac702113
Version: webpack 1.12.10
Time: 590ms
          Asset     Size  Chunks             Chunk Names
./src/bundle.js  3.62 kB       0  [emitted]  main
    + 1 hidden modules
```

```
doel@doel-Vostro-3500:~/reactjs/webpack_ch9/app1$ gulp
[02:22:55] Using gulpfile ~/reactjs/webpack_ch9/app1/gulpfile.js
[02:22:55] Starting 'default'...
[02:22:55] Finished 'default' after 94 µs
```

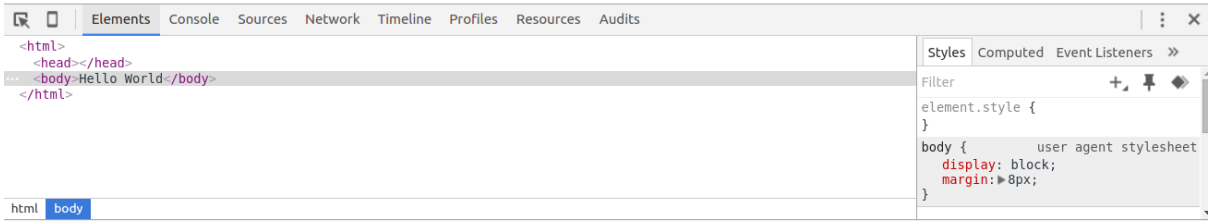
```
doel@doel-Vostro-3500:~/reactjs/webpack_ch9/app1$ gulp
[00:06:16] Using gulpfile ~/reactjs/webpack_ch9/app1/gulpfile.js
[00:06:16] Starting 'eslinting'...
[00:06:16] Starting 'browsersync'...
[00:06:16] Finished 'browsersync' after 45 ms
[00:06:16] Starting 'watch'...
[00:06:16] Finished 'watch' after 18 ms
[BS] Access URLs:
 ----------------------------
 Local: http://localhost:3000
 ----------------------------
    UI: http://localhost:3001
 ----------------------------
[BS] Serving files from: ./
[00:06:17] Finished 'eslinting' after 341 ms
[00:06:17] Starting 'default'...
[00:06:17] Finished 'default' after 14 µs
[BS] Reloading Browsers...
[BS] Reloading Browsers...
```


index.js
1:10 error Parsing error: Unexpected string
✖ 1 problem (1 error, 0 warnings)
[00:12:40] 'eslinting' errored after 333 ms
[00:12:40] ESLintError in plugin 'gulp-eslint'
Message:
Failed with 1 error

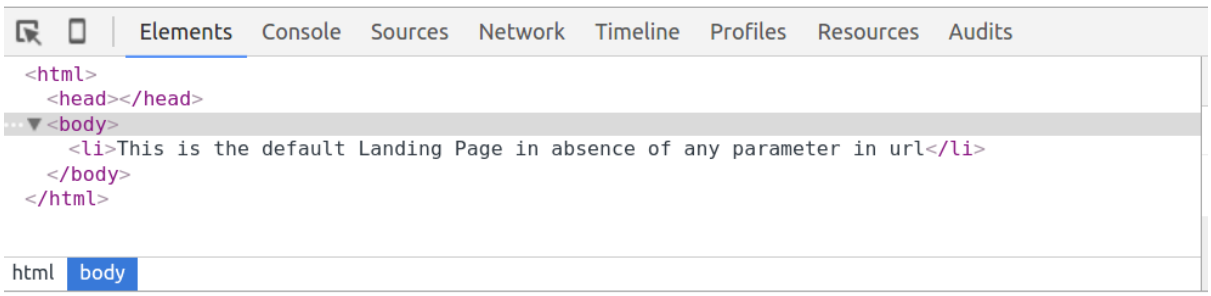
Chapter 10: What's Next



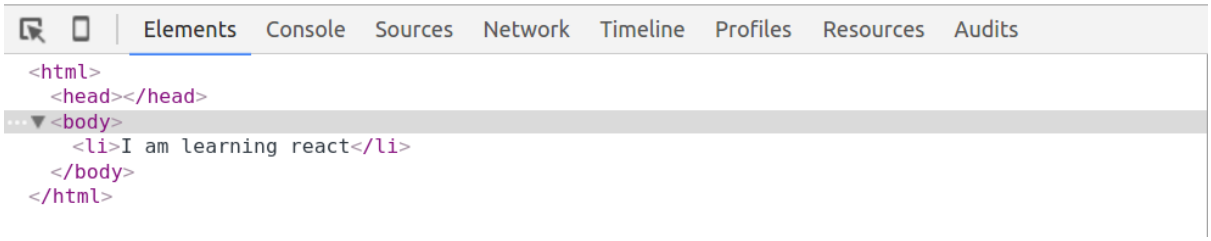
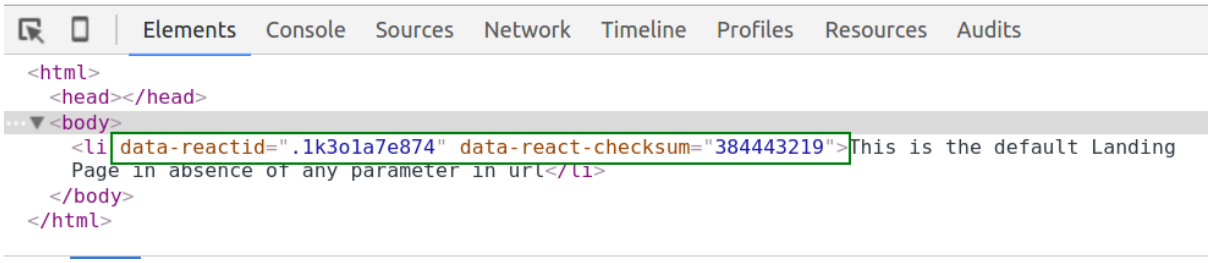
Hello World



- This is the default Landing Page in absence of any parameter in url



- I am learning react



- This is the default Landing Page in absence of any parameter in url