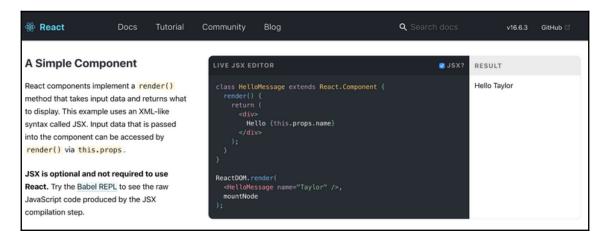
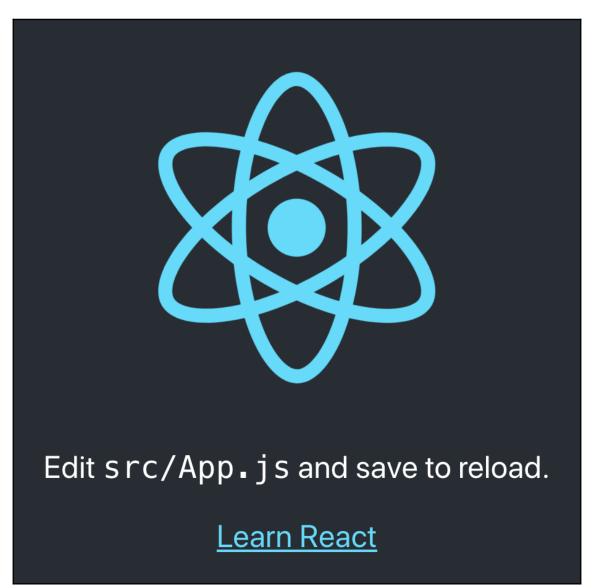
Chapter 1: Taking Your First Steps with React



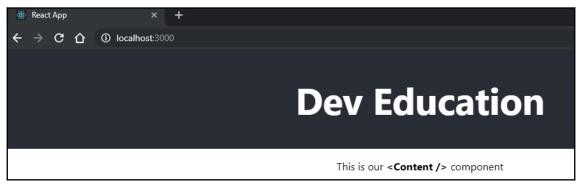
Chapter 2: Clean Up Your Code

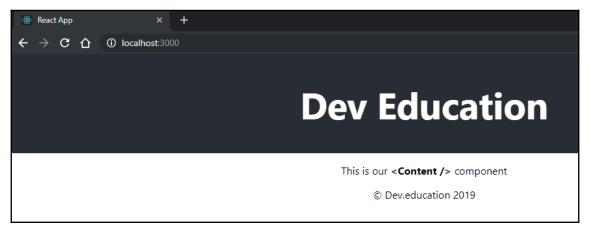


Chapter 3: Creating Truly Reusable Components

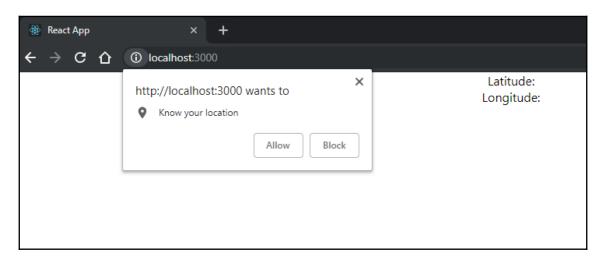






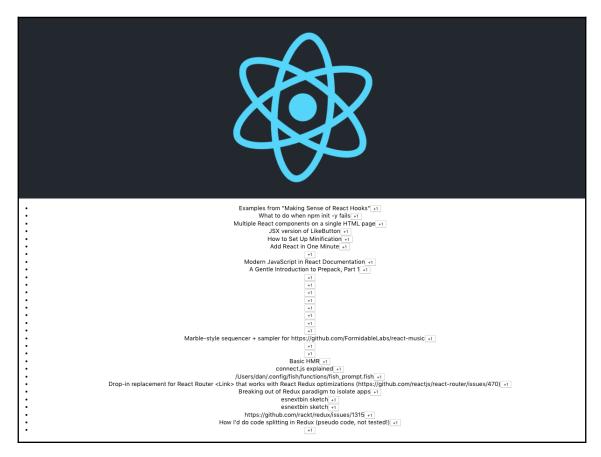


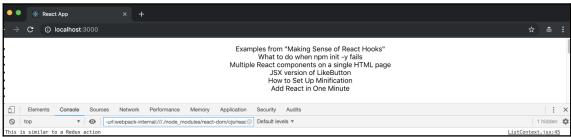
Chapter 4: Compose All the Things



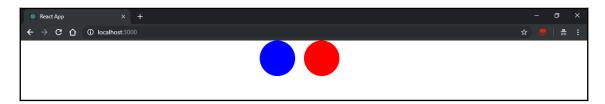


Chapter 5: Proper Data Fetching





Chapter 6: Write Code for the Browser



Chapter 8: Server-Side Rendering for Fun and Profit

Chapter 10: About Testing and Debugging

```
→ testing git:(master) × npm test
> geolocation@0.1.0 test /Users/czantany/projects/React-Design-Patterns-and-Best-Practices-2nd-Edition/Chapter10/testing
> jest
PASS src/components/Hello/index.test.js
 HelloWorld

✓ should render Home component (3ms)

✓ should render by default Hello World (1ms)

✓ should render the name prop

✓ should has .Home class (4ms)
Test Suites: 1 passed, 1 total
            4 passed, 4 total
          0 total
Snapshots:
Time:
            1.472s, estimated 2s
Ran all test suites
```

```
→ testing git:(master) × npm test
> geolocation@0.1.0 test /Users/czantany/projects/React-Design-Patterns-and-Best-Practices-2nd-Edition/Chapter10/testing
> jest
FAIL src/components/Hello/index.test.js
 Hello
   X should render Home component (4ms)

✓ should render by default Hello World (1ms)

✓ should render the name prop

✓ should has .Home class (2ms)
  • Hello > should render Home component
    expect(received).toBe(expected) // Object.is equality
    Expected: 0
    Received: 1
      11 |
               it('should render Home component', () => {
    > 13
                expect(wrapper.length).toBe(0);
      15 I
      16 |
               it('should render by default Hello World', () => {
      at Object.toBe (src/components/Hello/index.test.js:13:30)
Test Suites: 1 failed, 1 total
           1 failed, 3 passed, 4 total
Tests:
Snapshots: 0 total
             1.466s, estimated 2s
Ran all test suites.
npm ERR! Test failed. See above for more details.
```

```
→ testing git:(master) × npm run test:coverage
> geolocation@0.1.0 test:coverage /Users/czantany/projects/React-Design-Patterns-and-Best-Practices-2nd-Edition/Chapter10/testing
> iest --coverage
PASS src/components/Hello/index.test.js
 Hello

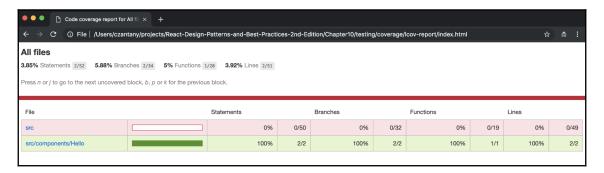
✓ should render Home component (2ms)

✓ should render by default Hello World

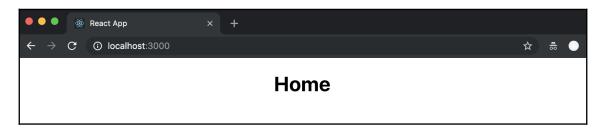
✓ should render the name prop (1ms)

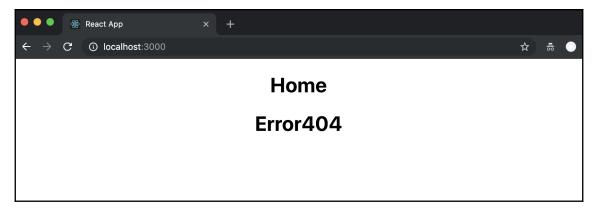
✓ should has .Home class (3ms)

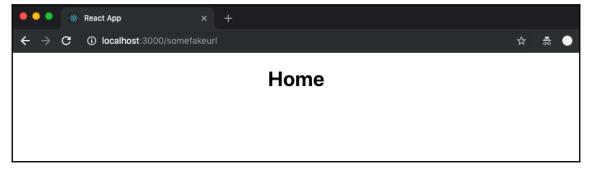
File
                        % Stmts | % Branch |
                                              % Funcs
                                                         % Lines | Uncovered Line #s
All files
                            3.85
                                       5.88
                                                             3.92
src
                                                     0
 App.js
                               0 i
                                        100
                                                                0 i
                                                                                    3
 client.js
                                       100
                                                                0 i
                               0 |
                                                  100
                                                                                    5
                                                                0 | ... 12,13,14,17,18
 server.js
                               A |
                                       100
                                                    ø
 serviceWorker.js
                                                                0 | ... 23,130,131,132
                               A I
                                         A
                                                     A
 template.js
                               a I
                                        100
                                                     a
                                                                0 1
                                                                                    1
src/components/Hello
                            100 |
                                       100
                                                  100
                                                              100
 index.js
                            100
                                       100
                                                  100
                                                              100
Test Suites: 1 passed, 1 total
           4 passed, 4 total
Tests:
            0 total
Snapshots:
            2.551s
Time:
```

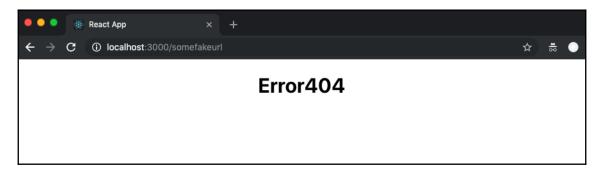


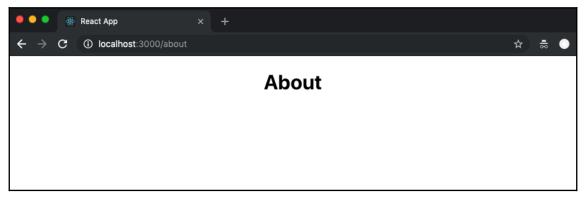
Chapter 11: React Router

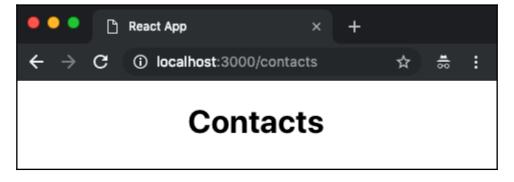


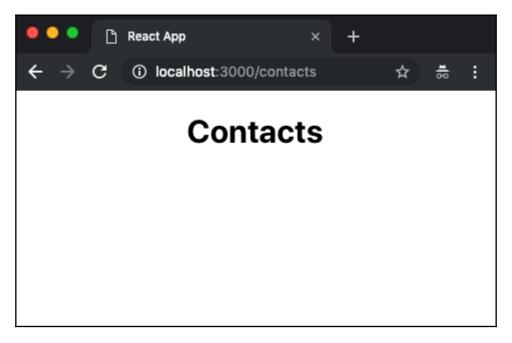


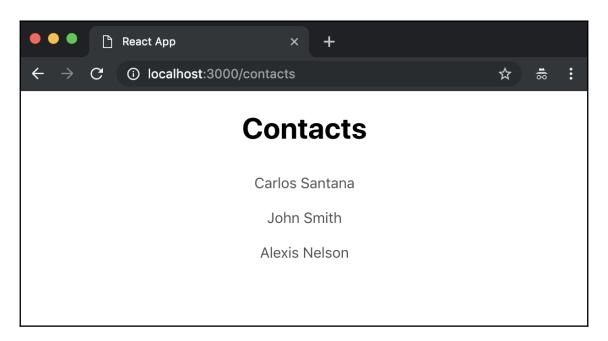


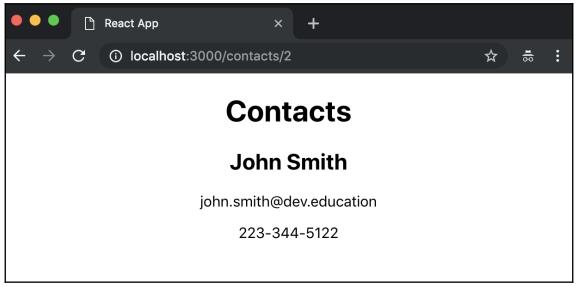


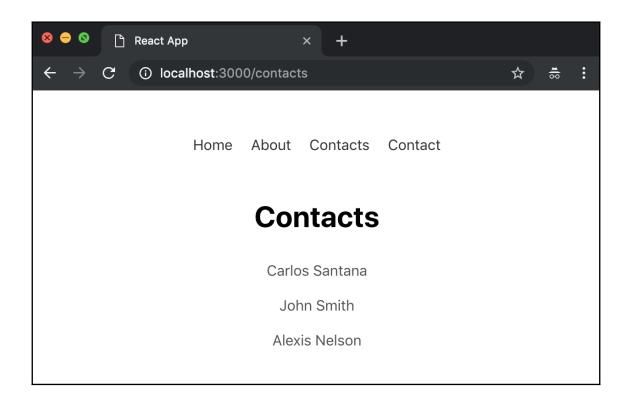




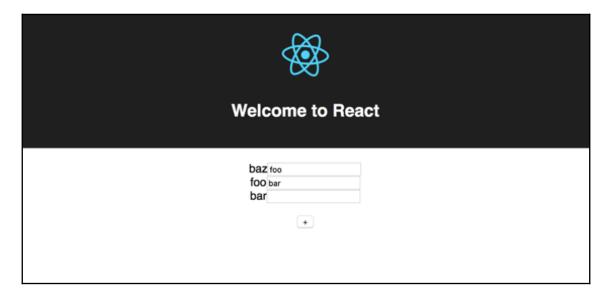




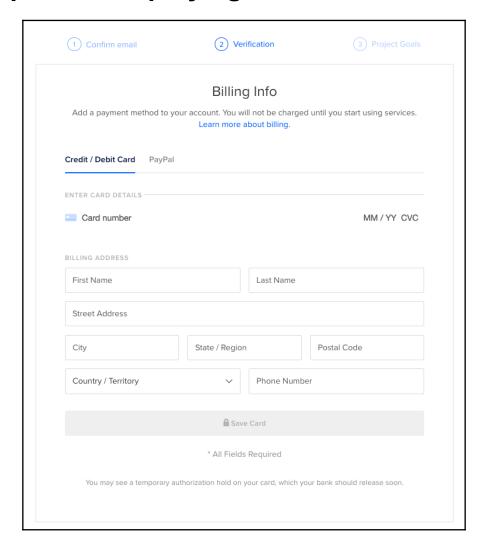


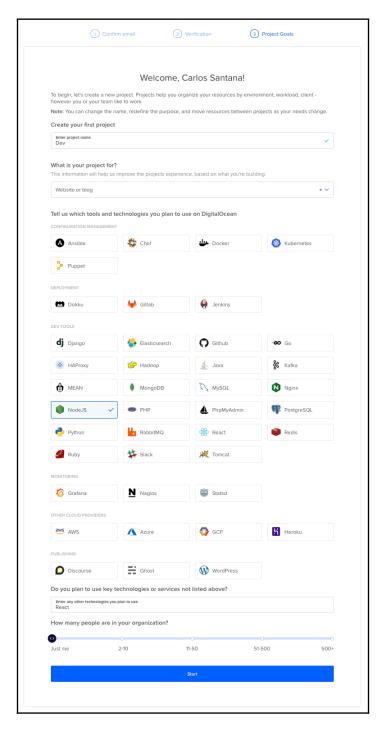


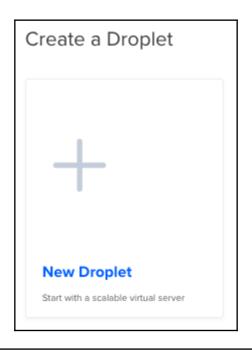
Chapter 12: Anti-Patterns to be Avoided

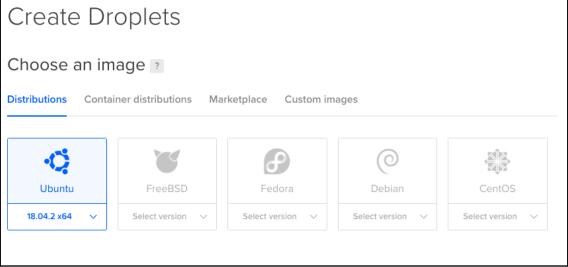


Chapter 13: Deploying to Production



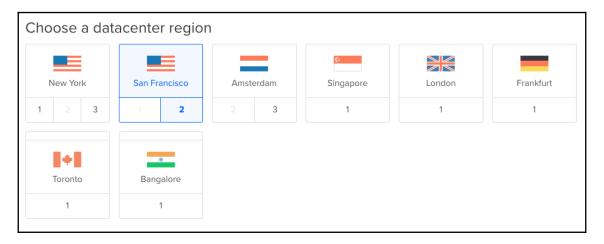


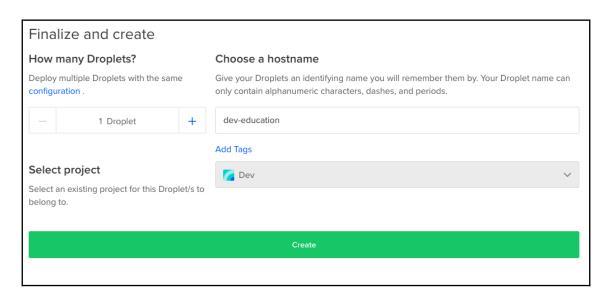


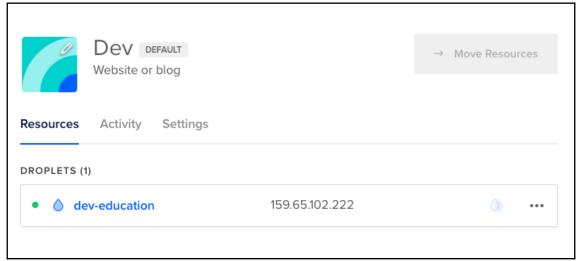




Standard virtual machines with a mix of memory and compute resources. Best for small projects that can handle variable levels of CPU performance, like blogs, web apps and dev/test environments. \$5/mo \$10/mo \$15/mo \$15/mo \$15/mo \$20/mo \$0.007/hour \$0.015/hour \$0.022/hour \$0.022/hour \$0.030/hour \$0.022/hour 1 GB / 1 CPU 2 GB / 1 CPU 3 GB / 1 CPU 2 GB / 2 CPUs 1GB/3CPUs 4 GB / 2 CPUs 25 GB SSD disk 50 GB SSD disk 60 GB SSD disk 60 GB SSD disk 60 GB SSD disk 80 GB SSD disk 1000 GB transfer 2 TB transfer 3 TB transfer 3 TB transfer 3 TB transfer 4 TB transfer Show all plans







Your new Droplet is all set to go! You can access it using the following credentials:

Droplet Name: dev-education IP Address: 159.65.102.222

Username: root

Password: fa56d554709792b7a84cc1a4a4

For security reasons, you will be required to change this Droplet's root password when you login. You should choose a strong password that will be easy for you to remember, but hard for a computer to guess. You might try creating an alpha-numerical phrase from a memorable sentence (e.g. "I won my first spelling bee at age 7," might become "lwm#1sbaa7"). Random strings of common words, such as "Mousetrap Sandwich Hospital Anecdote," tend to work well, too.

As an added security measure, we also strongly recommend adding an SSH key to your account. You can do that here: https://cloud.digitalocean.com/settings/security?i=deb226

Once added, you can select your SSH key and use it when creating future Droplets. This eliminates the need for root passwords altogether, and makes your Droplets much less vulnerable to attack

Happy Coding, Team DigitalOcean

```
Last login: Fri Mar 8 10:41:33 on console
 ~ ssh root@159.65.102.222
The authenticity of host '159.65.102.222 (159.65.102.222)' can't be established.
ECDSA key fingerprint is SHA256:/DBwYKX88DDJlyYvtOPy1LKz+ODR0Q0gLsMjNbMvllA.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '159.65.102.222' (ECDSA) to the list of known hosts.
root@159.65.102.222's password:
You are required to change your password immediately (root enforced)
Welcome to Ubuntu 18.04.2 LTS (GNU/Linux 4.15.0-45-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management:
                  https://landscape.canonical.com
* Support:
                  https://ubuntu.com/advantage
  System information as of Sun Mar 10 08:25:27 UTC 2019
  System load: 0.0
                                                       83
                                 Processes:
 Usage of /: 5.0% of 24.06GB Users logged in:
                                                       0
                                IP address for eth0: 159.65.102.222
 Memory usage: 12%
  Swap usage:
  Get cloud support with Ubuntu Advantage Cloud Guest:
    http://www.ubuntu.com/business/services/cloud
48 packages can be updated.
30 updates are security updates.
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
Changing password for root.
```

(current) UNIX password:

```
root@dev-education:~# ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:S89wOBZXesI0o0P1S/0gDXoMFWkQahgXpENo1DLMa8g root@dev-education
The key's randomart image is:
+---[RSA 2048]----+
   +.0. 0.0+=0
    B... * Xo +
 . o ++ 0 *.B +
  Eo * = = ool
    . . S . . . |
        οВ
 ----[SHA256]----+
```

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC7IZfQe4TKFDcvvJfDkyLQqFj09mK7sawMDX
BeB3h8t5j9b5LijsIXrZ2nvwSQteDrfYzokjQhUjO3eopHoQc8l0y36ry+omyvurX3qg5IhfPw
BHbbP/yMoAASV+vyjmgT+dRee8NCGcQqFnw9pswVoVJlZVx2L+OHk9o3z4Gm/ZG6pb+dXkAUgd
5Q+kgSRmtwnzGul+gwKyuUTjryfAVkRLVv2ebQ7rO6f8ESP8xgFJQxSUb+7mxc1y5NDC8L0fJx
lsfdSN8+WKpr1xH4MSgkaYM1pVSznsaYW10NfgVZp4XrrleB8+gi/bmsW6b4tkYJ+Z1puylYx1
fUnYZMm/b9 root@dev-education

SSH keys / Add new

Title

Dev Education Droplet

Key

ssh-rsa

AAAAB3NzaC1yc2EAAAADAQABAAABAQC7IZfQe4TKFDcvvJfDkyLQqFj09mK7sawMDXBeB3h8t5j9b5LijsIXrZ2 nvwSQteDrfYzokjQhUjO3eopHoQc8l0y36ry+omyvurX3qg5lhfPwBHbbP/yMoAASV+vyjmgT+dRee8NCGcQqFn w9pswVoVJIZVx2L+OHk9o3z4Gm/ZG6pb+dXkAUgd5Q+kgSRmtwnzGul+gwKyuUTjryfAVkRLVv2ebQ7rO6f8ES P8xgFJQxSUb+7mxc1y5NDC8L0fJxlsfdSN8+WKpr1xH4MSgkaYM1pVSznsaYW10NfgVZp4XrrleB8+gi/bmsW6b 4tkYJ+Z1puylYx1fUnYZMm/b9 root@dev-education

Add SSH key



Dev Education Droplet

a0:90:72:33:7b:18:42:06:22:c6:35:7b:eb:6f:b9:9a

Delete

SSH

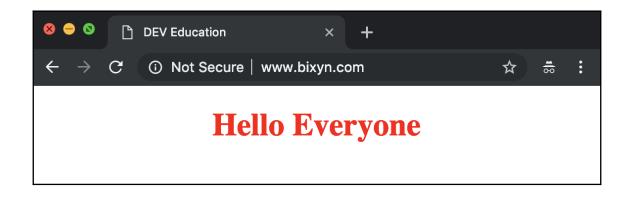
Added on Mar 10, 2019 Never used — Read/write

root@dev-education:~# git clone git@github.com:D3vEducation/production.git Cloning into 'production'...

The authenticity of host 'github.com (192.30.255.112)' can't be establishe d.

RSA key fingerprint is SHA256:nThbg6kXUpJWGl7E1IGOCspRomTxdCARLviKw6E5SY8. Are you sure you want to continue connecting (yes/no)?

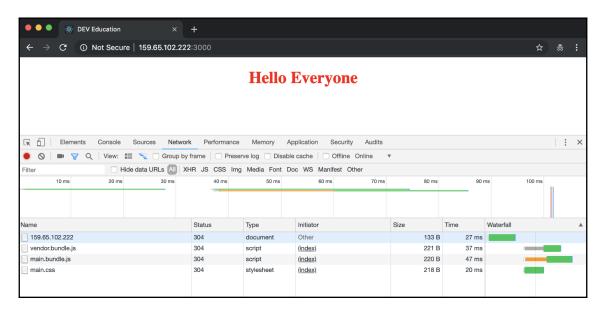
Warning: Permanently added 'github.com,192.30.255.112' (RSA) to the list of known hosts. remote: Enumerating objects: 18, done. remote: Counting objects: 100% (18/18), done. remote: Compressing objects: 100% (18/18), done. remote: Total 18 (delta 0), reused 18 (delta 0), pack-reused 0 Receiving objects: 100% (18/18), 146.84 KiB | 3.50 MiB/s, done.

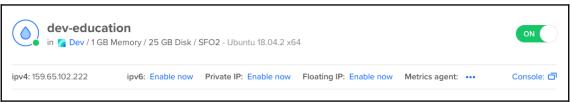


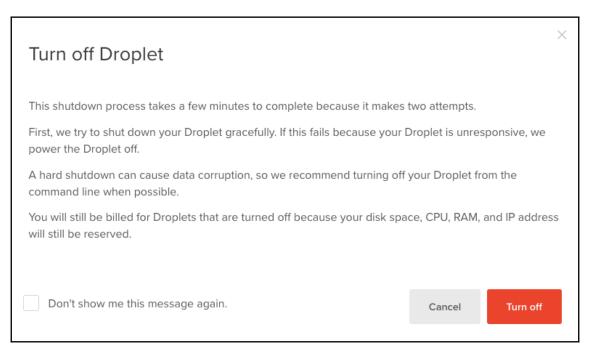
```
^Croot@dev-education:~/production# npm run start:production
  production@1.0.0 start:production /root/production
   npm run stop && npm run build && NODE_ENV=production pm2 start --interpreter babel-node src/backend
  production@1.0.0 stop /root/production
 > pm2 kill
 Runtime Edition
            PM2 is a Production Process Manager for Node.js applications with a built-in Load Balancer.
                        Start and Daemonize any application:

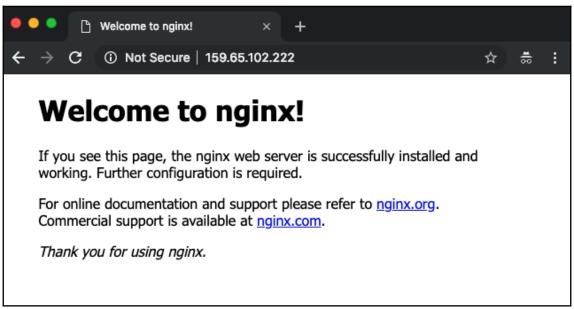
$ pm2 start app.js
                         Load Balance 4 instances of api.js:
                         $ pm2 start api.js -i 4
                         Monitor in production:
                         $ pm2 monitor
                         Make pm2 auto-boot at server restart:
                         $ pm2 startup
                         To go further checkout:
                         http://pm2.io/
 [PM2] Spawning PM2 daemon with pm2_home=/root/.pm2
 [PM2] PM2 Successfully daemonized
[PM2] [v] Modules Stopped
  PM21[WARN] No process found
[PM2] [v] All Applications Stopped
[PM2] [v] PM2 Daemon Stopped
 production@1.0.0 build /root/production
> NODE_ENV=production node -r @babel/register node_modules/.bin/webpack --progress --display-modules --config webpack.config.js
Hash: 6561e493277e6c3b30ee
Version: webpack 4.29.6
Time: 3646ms
Built at: 03/13/2019 3:17:29 AM
Asset Size Chunks
../css/main.css 77 bytes 6
main.bundle.js 4.6 KiB 6
vendor.bundle.js 117 KiB 1
                                                                          Chunk Names
                                             0 [emitted] main
0 [emitted] main
1 [emitted] vendor
 [0] /root/production/node_modules/react/index.js 190 bytes {1} [built]
[6] /root/production/node_modules/react/index.js 190 bytes (1) [built]
[1] /root/production/node_modules/boject-assign/index.js 2.06 KiB (1) [built]
[2] /root/production/node_modules/react-dom/index.js 1.33 KiB (1) [built]
[3] /root/production/node_modules/prop-types/index.js 710 bytes (1) [built]
[4] ./components/Hello/Hello.scss 104 bytes (0) [built]
[5] multi ./index.jsx 28 bytes (0) [built]
[6] /root/production/node_modules/react/cjs/react-production.min.js 6.67 KiB (1) [built]
[7] /root/production/node_modules/react-dom/cjs/react-dom.production.min.js 106 KiB (1) [built]
[8] /root/production/node_modules/scheduler/index.js 198 bytes (1) [built]
[9] /root/production/node_modules/scheduler/index.js 198 bytes (1) [built]
[88] /roox/production/node_modules/scheduler/index.js 198 bytes (1) [built]
[9] /root/production/node_modules/scheduler/ig/scheduler_production/moin.js 4.88 KiB (1) [built]
[180] (webpack)/buildin/global.js 472 bytes (1) [built]
[111] /root/production/node_modules/prop-types/factoryWithThrowingShims.js 1.58 KiB (1) [built]
[121] /root/production/node_modules/prop-types/lib/ReactPropTypesSecret.js 314 bytes (1) [built]
[131] ./index.jsx + 2 modules 6.08 KiB (0) [built]
[141] ./index.jsx 309 bytes [built]
           ./App.jsx 2.71 KiB [built]
          ./components/Hello/index.jsx 2.99 KiB [built]
         1 hidden module
Child mini-css-extract-plugin ../../node_modules/css-loader/dist/cjs.js??ref--5-1!../../node_modules/sass-loader/lib/loader.js!components/Hello/Hello.
scss:
      Entrypoint mini-css-extract-plugin =
[0] /root/production/node_modules/css-loader/dist/cjs.js??ref--5-1!/root/production/node_modules/sass-loader/lib/loader.js!./components/Hello/Hell o.scss 306 bytes {0} [built]
      [1] /root/production/node_modules/css-loader/dist/runtime/api.js 2.35 KiB {0} [built]
[PM2] Spawning PM2 daemon with pm2_home=/root/.pm2
[PM2] PM2 Successfully daemonized
 [PM2] Starting /root/production/src/backend in fork_mode (1 instance)
  App name
                   id
                           version
                                           mode
                                                      pid
                                                                   status
                                                                                 restart
                                                                                                 uptime
                                                                                                               cpu
                                                                                                                         mem
                                                                                                                                            user
                                                                                                                                                       watching
                                           fork 28161
   backend
                   0
                           1.0.0
                                                                   online
                                                                                 0
                                                                                                 0s
                                                                                                               9%
                                                                                                                         33.0 MB
                                                                                                                                           root
                                                                                                                                                      disabled
```

[28]



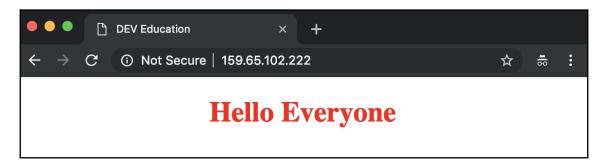


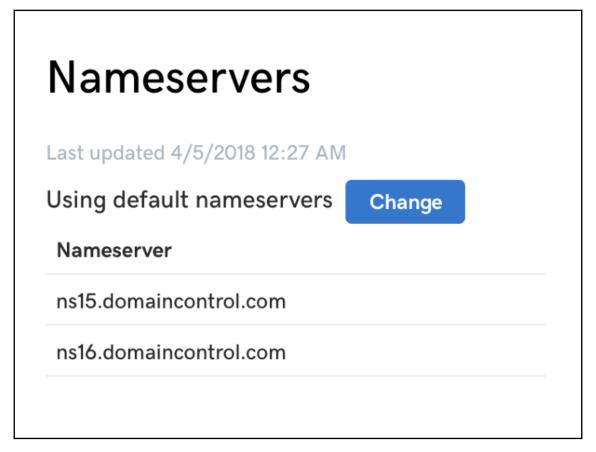


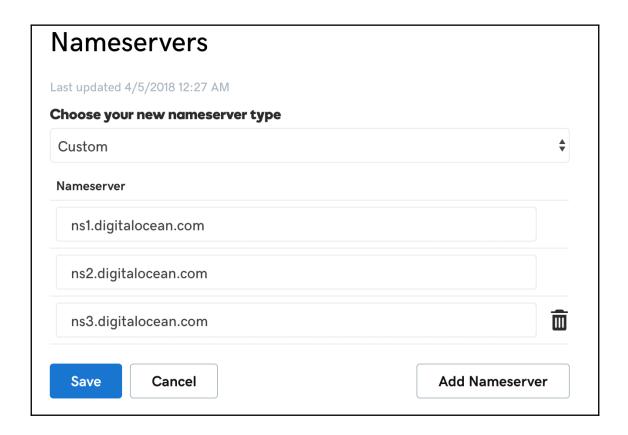


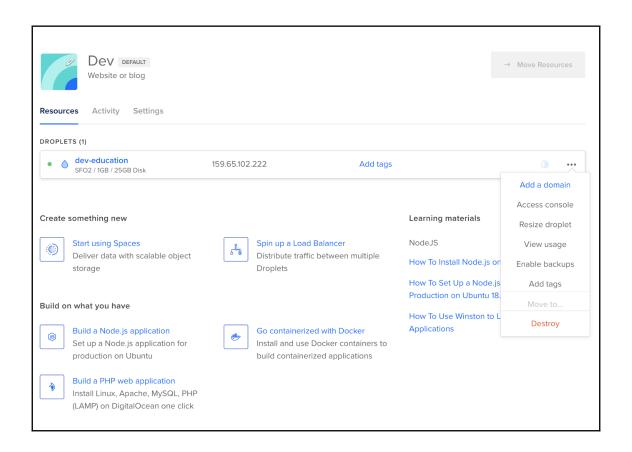
root@dev-education:~# sudo nginx -t

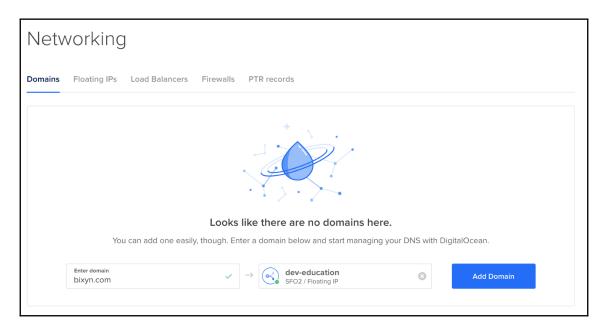
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok nginx: configuration file /etc/nginx/nginx.conf test is successful

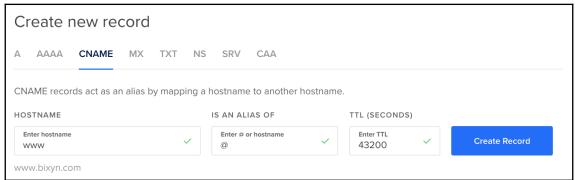


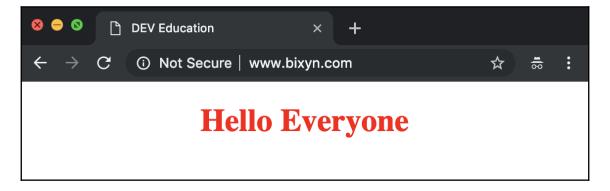


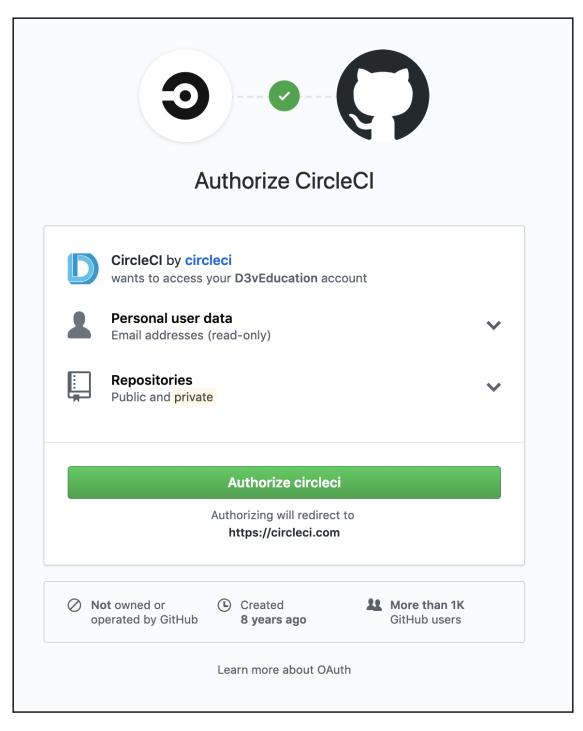


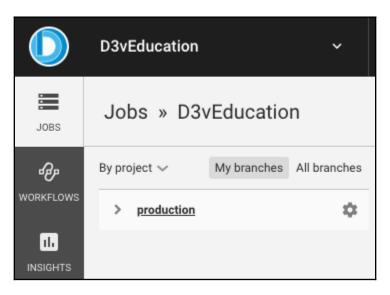


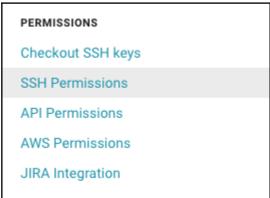


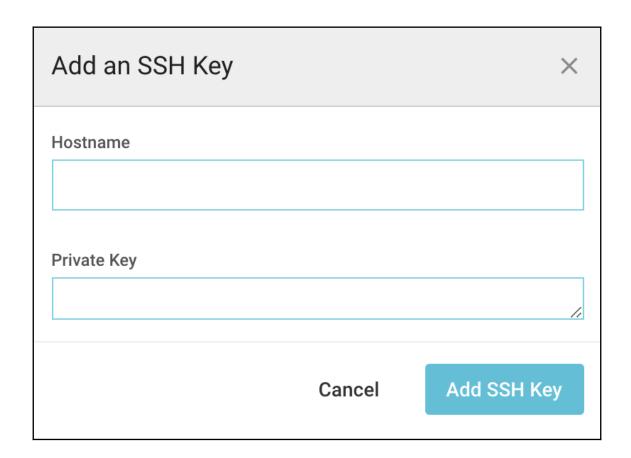


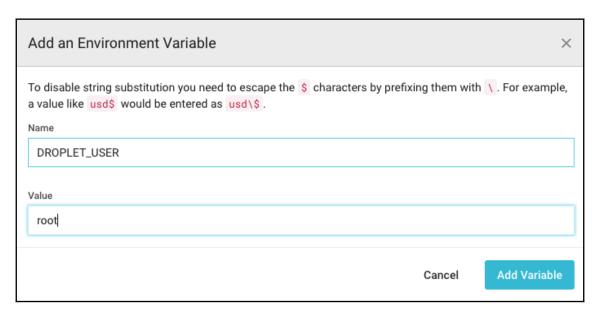


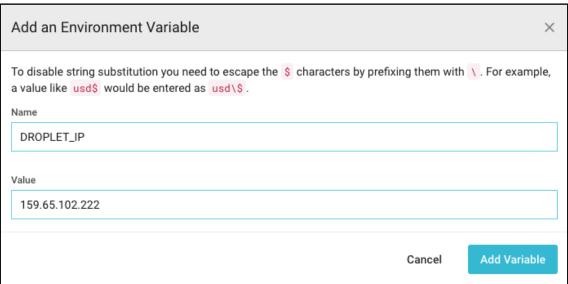












• FAILED	D3vEducation / production / master #3 Adding circleci config.yml	workflowbuild	2 days ago	Ō 00:00 → 48874a4	2.0
• FAILED	D3vEducation / production / master #2 Adding circle.yml	Build Error Build Error	2 days ago	Ū 00:03→ c82038f	2.0
• FAILED	D3vEducation / production / master #1	Build Error Build Error	2 days ago	Ō 00:02 → c393727	2.0

D3vEducation / production / master #7	⊕ workflow	2 days ago	<u> </u>	
Fixing config	• build		-O- cc307cd	2.0

	TEST	
> Spin up Environment		00:03
		00:00
>> npm install		00:18
		00:01
		00:03
>> ssh -o StrictHostKeyChecking=no \$DROPLET_USER	@\$DROPLET_IP 'cd production; git checkout master; git pull; npm install; npm run start:production;'	00:18

```
00:01
                                                          Exit code: 0
 $ #!/bin/bash -eo pipefail
   npm run lint
 > production@1.0.0 lint /home/circleci/tmp
 > eslint --ext .jsx,.js src
00:03
                                                          Exit code: 0
 $ #!/bin/bash -eo pipefail
   npm test
 > production@1.0.0 test /home/circleci/tmp
 > jest --no-cache
  PASS src/frontend/components/Hello/index.test.jsx
   Hello

√ should render Hello component (3ms)

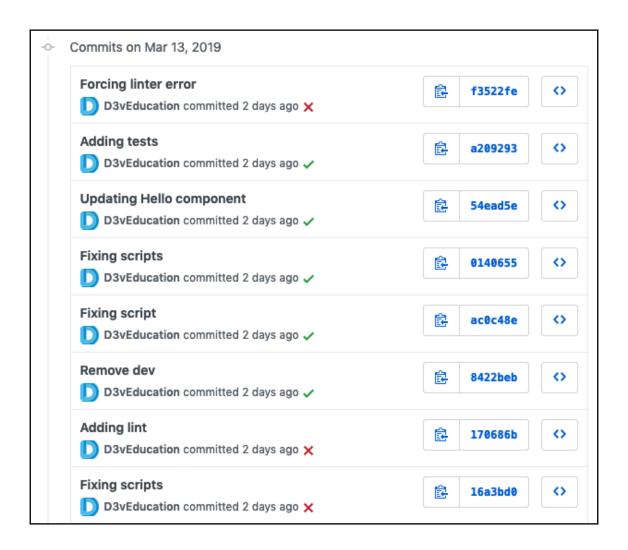
√ should render by default Hello World (1ms)

√ should render the name prop (1ms)

√ should has .Hello class (2ms)

 Test Suites: 1 passed, 1 total
 Tests: 4 passed, 4 total
 Snapshots: 0 total
 Time: 1.755s
 Ran all test suites.
```

```
> Spin up Environment
                                                                                                            00:02
                                                                                                            00:00
> Checkout code
> npm install
                                                                                                            00:13
00:00
 $ #!/bin/bash -eo pipefail
                                                                                                    Exit code: 1
   npm run lint
 > production@1.0.0 lint /home/circleci/tmp
 > eslint --ext .jsx,.js src
  /home/circleci/tmp/src/frontend/components/Hello/index.jsx
   13:58 error Missing semicolon semi
       RR! code ELIFECYCLE
          production@1.0.0 lint: `eslint --ext .jsx,.js src`
          Exit status 1
          Failed at the production@1.0.0 lint script.
          This is probably not a problem with npm. There is likely additional logging output above.
          A complete log of this run can be found in:
              /home/circleci/.npm/_logs/2019-03-13T08_08_25_812Z-debug.log
  Exited with code 1
```



Chapter 14: Next Steps

