



Chapter 1: Bootstrapping the Project

 **QUARKUS** 2.X
io.quarkus.platform < Back to quarkus.io Available with Enterprise Support





CONFIGURE YOUR APPLICATION

Group	com.example.fullstack	Version	1.0.0-SNAPSHOT
Artifact	reactive	Java Version	17
Build Tool	Maven	Starter Code	Yes

 0 [Generate your app](#)


Filters ▼

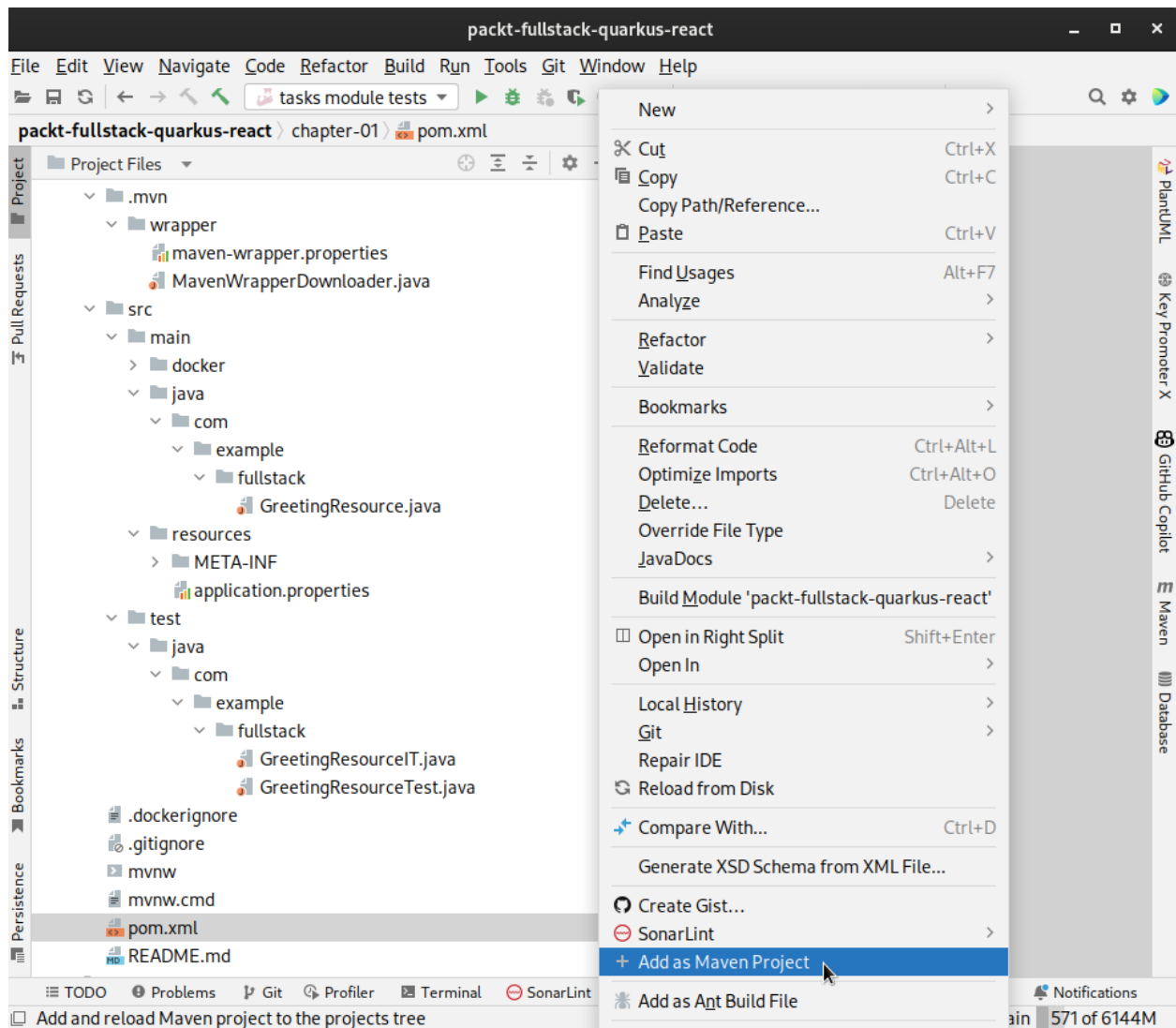
Web

- ☐ **RESTEasy JAX-RS** [quarkus-resteasy]  [CODE](#) ▼
REST endpoint framework implementing JAX-RS and more
- ☐ **RESTEasy Jackson** [quarkus-resteasy-jackson]  ▼
Jackson serialization support for RESTEasy
- ☐ **RESTEasy JSON-B** [quarkus-resteasy-jsonb]  ▼
JSON-B serialization support for RESTEasy
- ☐ **Eclipse Vert.x GraphQL** [quarkus-vertx-graphql]  ▼
Query the API using GraphQL

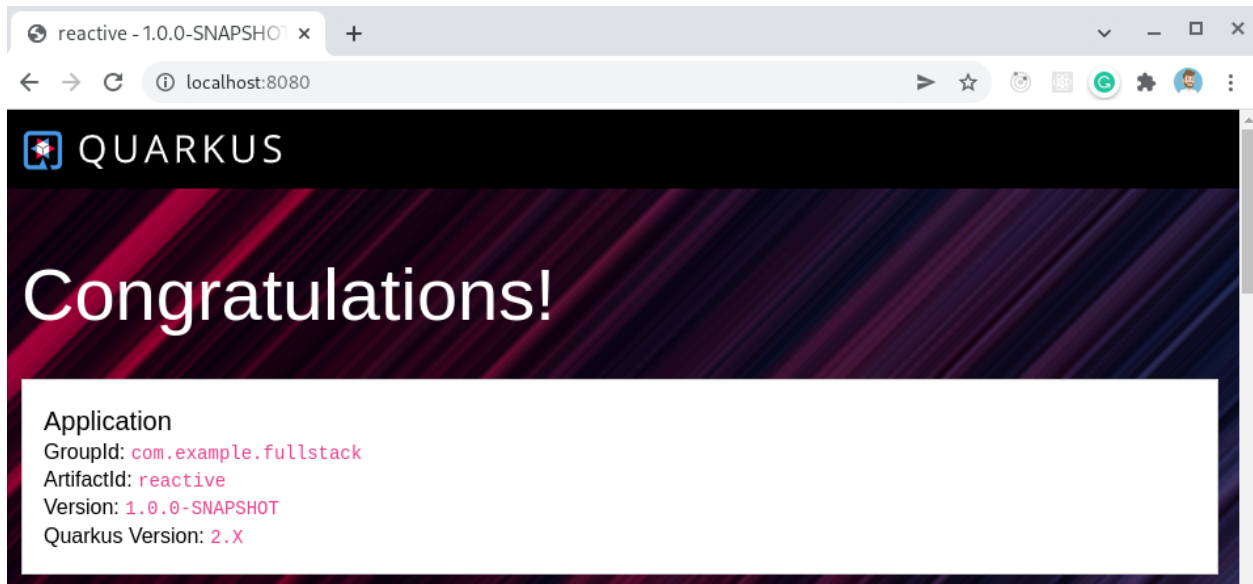
Filters ▼

Extensions found by origin: 7 Platform 0 Other [Clear filters](#)

- ☒ **RESTEasy Reactive** [quarkus-resteasy-reactive]  [CODE](#) ▼
Reactive implementation of JAX-RS with additional features. This extension is not compatible with the quarkus-resteasy extension, or any of the extensions that depend on it.



```
88      <profiles>
89      <profile>
90      <id>native</id>
91      <activation>
92      <property>
93      <name>native</name>
94      </property>
95      </activation>
```

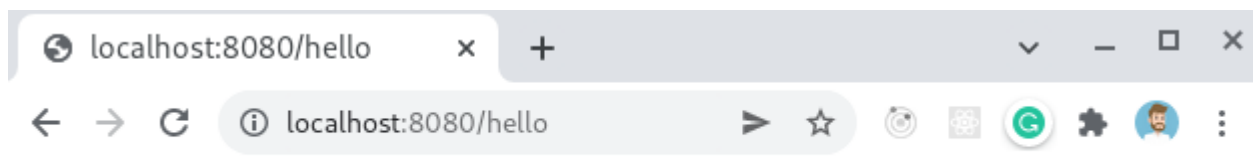


```
Terminal: Local x + v
Listening for transport dt_socket at address: 5005

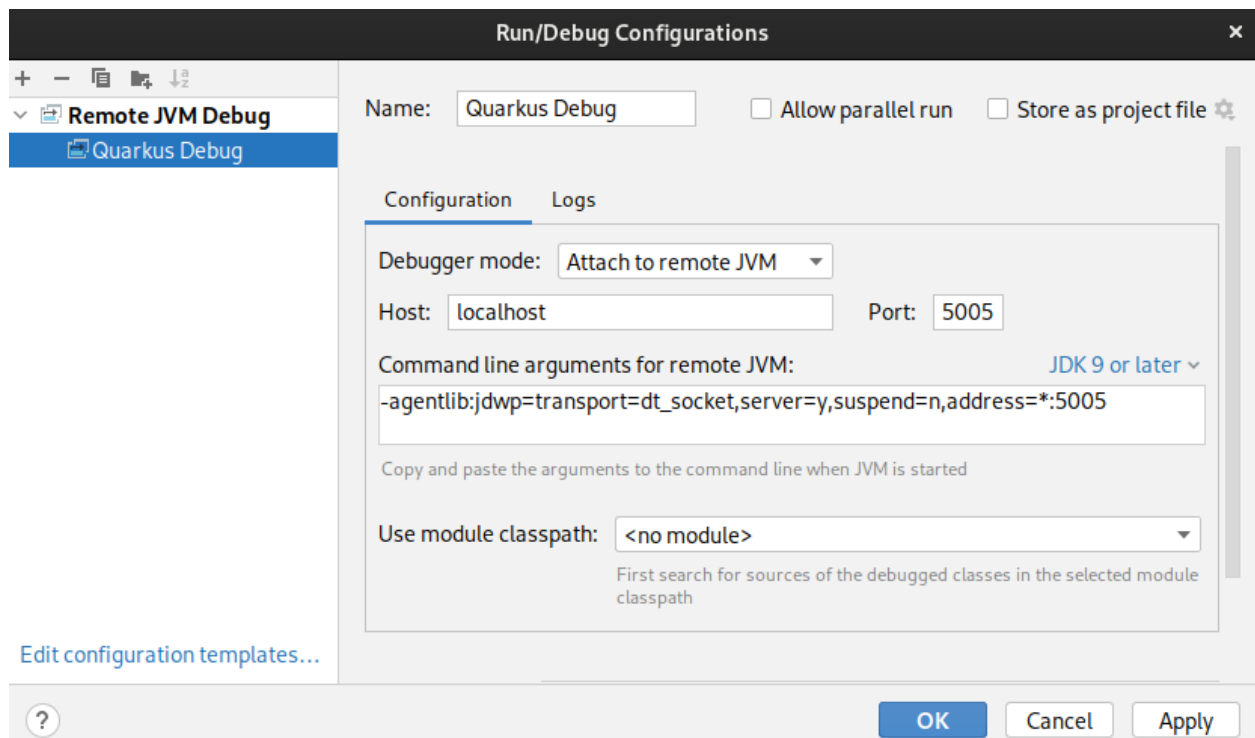
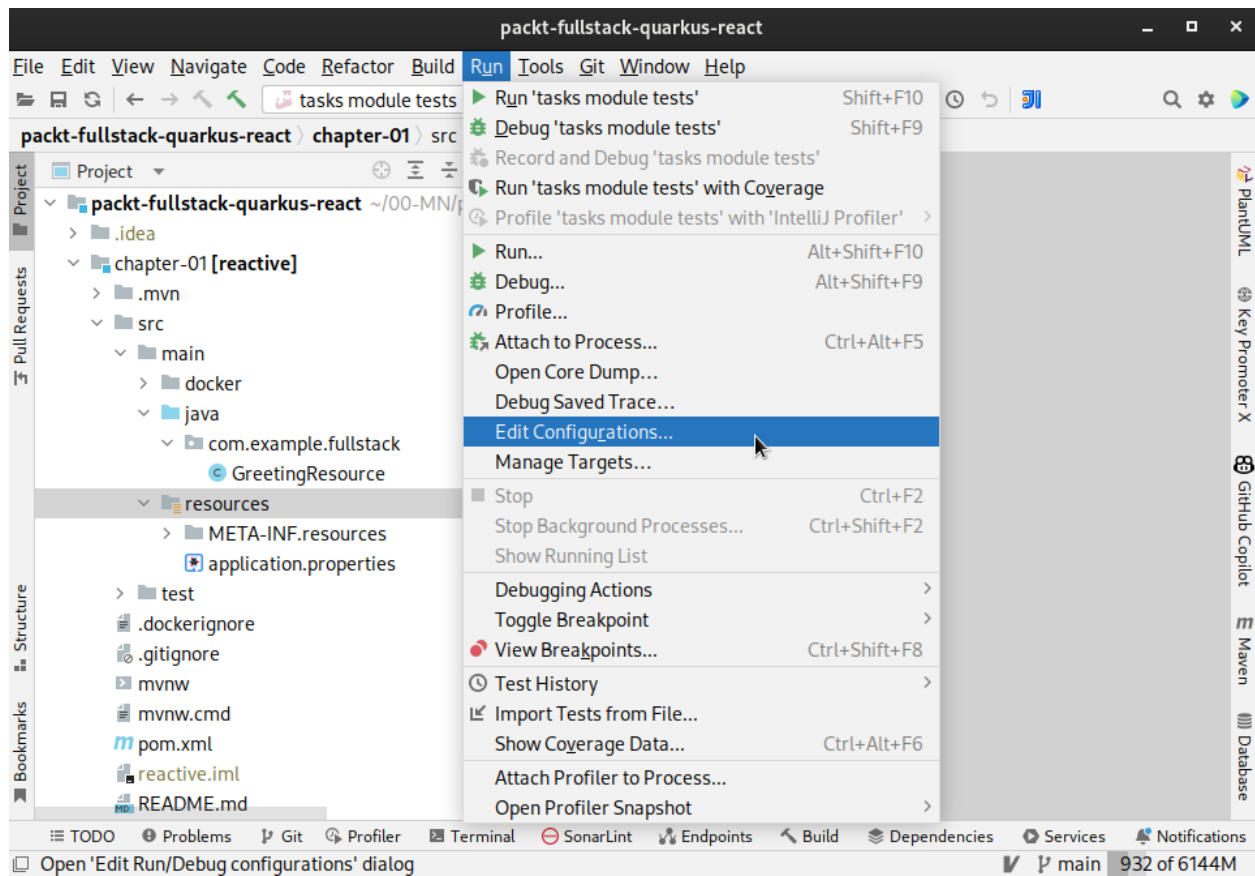
-- -- -- -- --
--/ _ \ / / / _ \ / _ \ / / / / _ \
-/ / / / / _ \ / _ \ / _ \ / _ \
--\ _ \ _ \ _ \ / _ \ / _ \ / _ \
2022-02-23 15:03:09,905 INFO [io.quarkus] (Quarkus Main Thread) reactive 1.0.0-SNAPSHOT on JVM (powered by Quarkus 2.7.2.Final)
started in 1.256s. Listening on: http://localhost:8080

2022-02-23 15:03:09,917 INFO [io.quarkus] (Quarkus Main Thread) Profile dev activated. Live Coding activated.
2022-02-23 15:03:09,918 INFO [io.quarkus] (Quarkus Main Thread) Installed features: [cdi, resteasy-reactive, smallrye-context-p
ropagation, vertx]

--
Tests paused
Press [r] to resume testing, [o] Toggle test output, [:] for the terminal, [h] for more options>
```



Hello RESTEasy Reactive

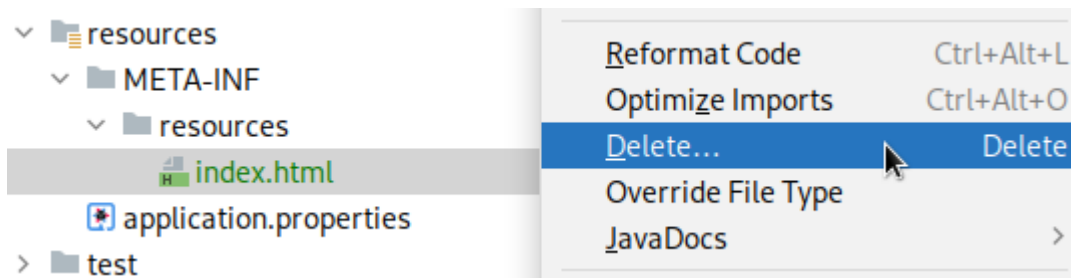
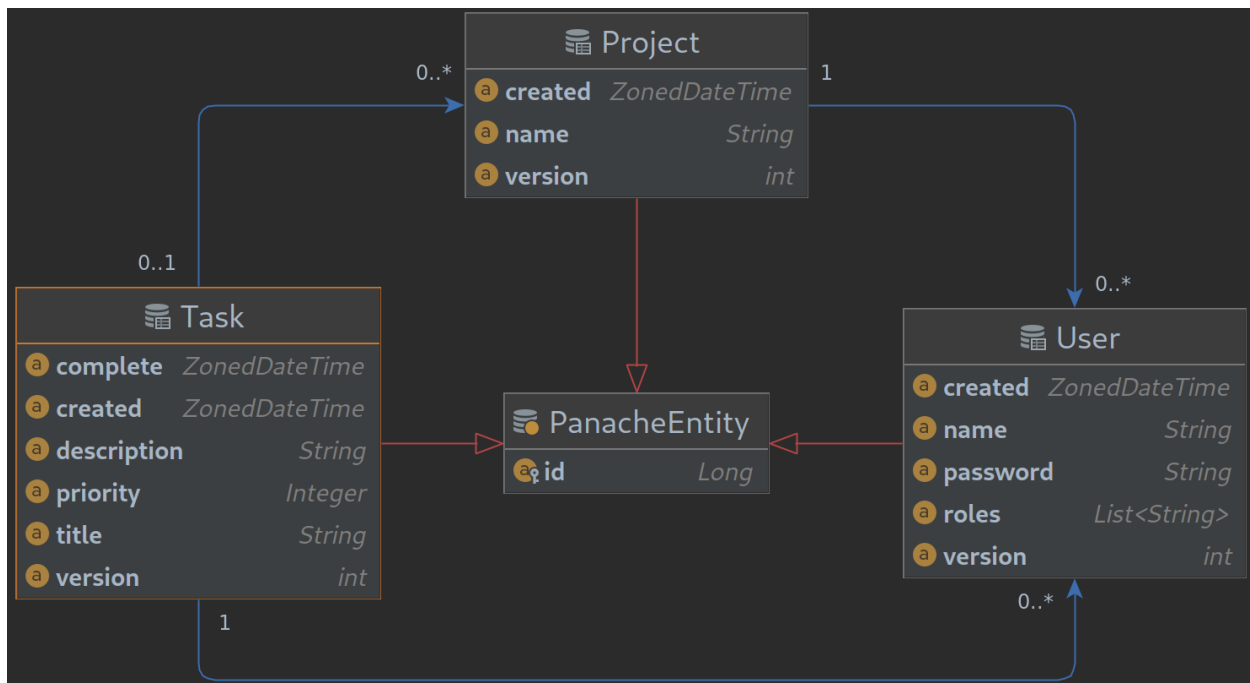


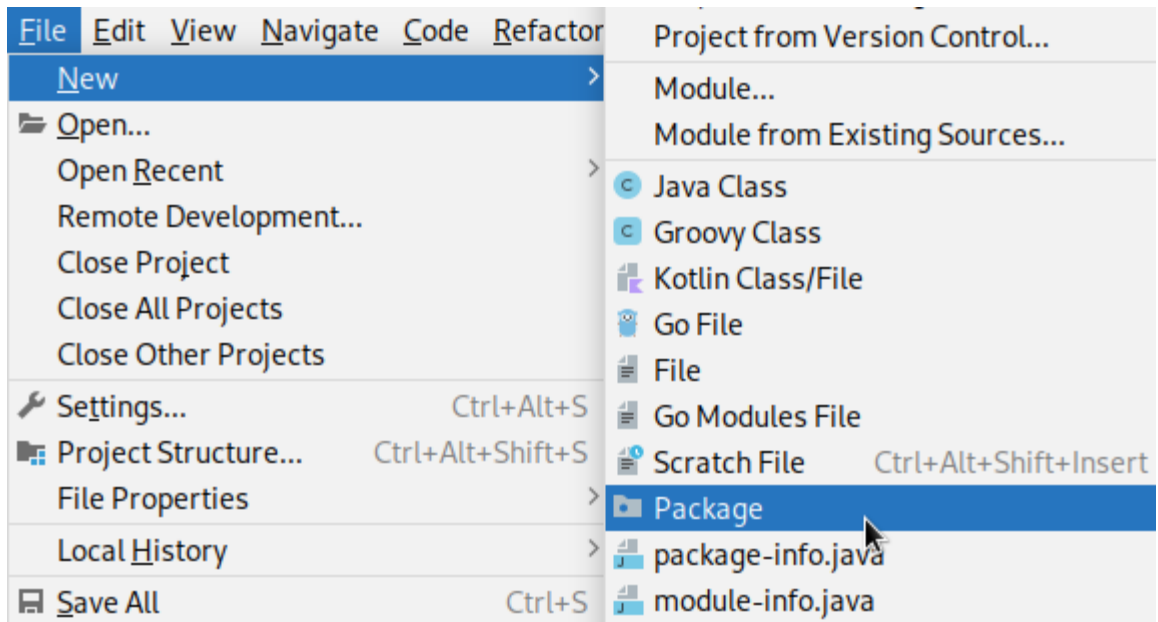
```
--  
1 test failed (0 passing, 0 skipped), 1 test was run in 2053ms. Tests completed at 08:56:03.  
Press [r] to re-run, [:] for the terminal, [h] for more options>
```

```
All 1 test is passing (0 skipped), 1 test was run in 268ms. Tests completed at 08:59:52 due to changes to ReactiveGreetingResou  
rceTest.class.  
Press [r] to re-run, [:] for the terminal, [h] for more options>
```

Chapter 2: Adding Persistence

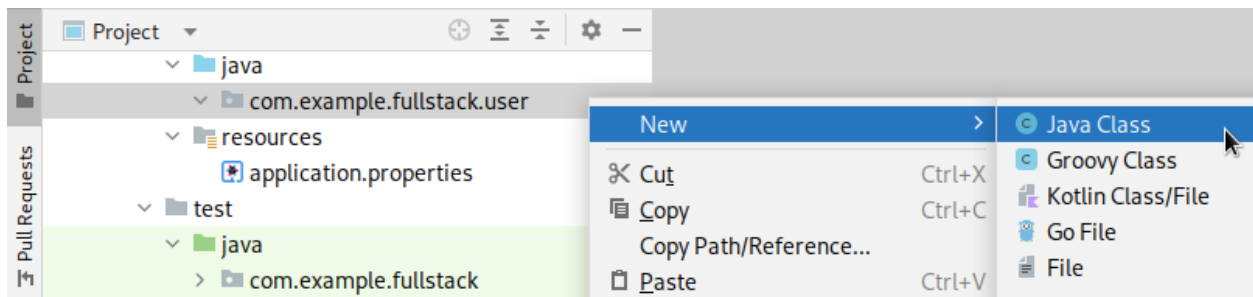
```
[INFO] --- quarkus-maven-plugin:2.7.2.Final:add-extension (default-cli) @ reactive ---  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-elytron-security-common has been installed  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-hibernate-reactive-panache has been installed  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-reactive-pg-client has been installed
```





New Package

com.example.fullstack.user



New Java Class

User

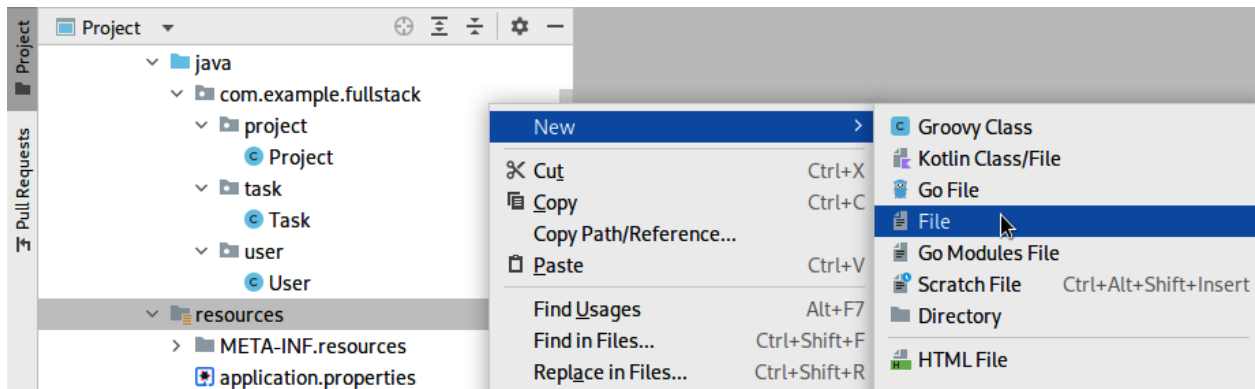
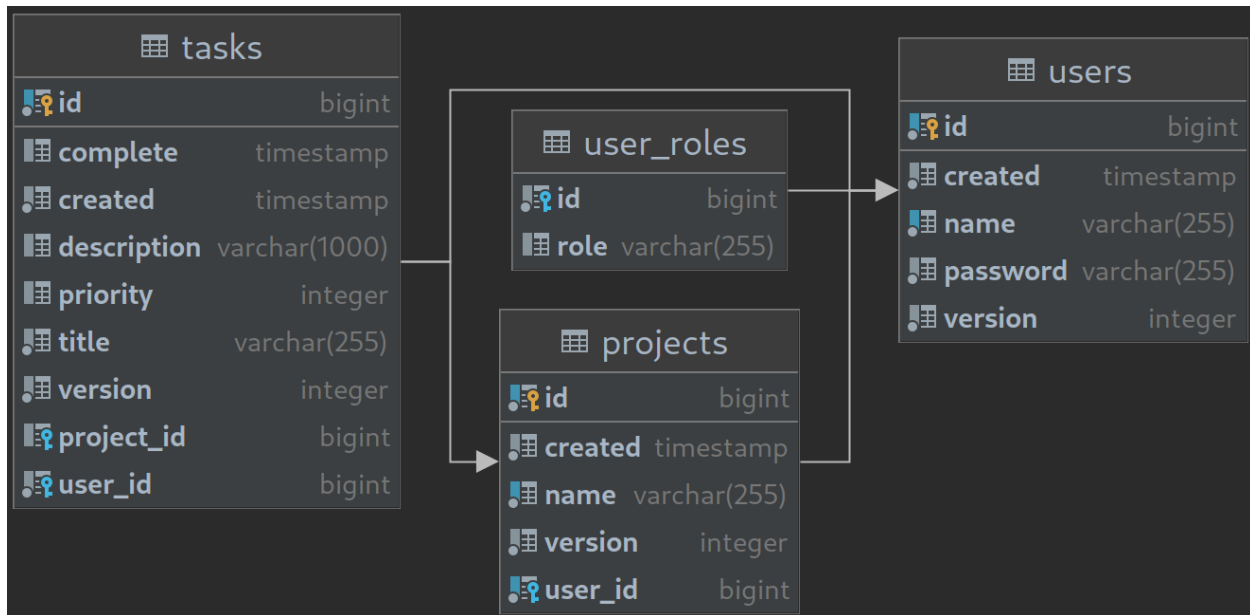
Class

Interface

Record

Enum

Annotation



New File

import.sql

```

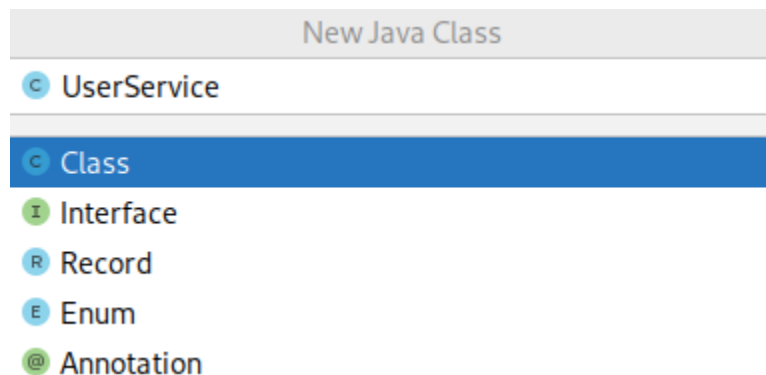
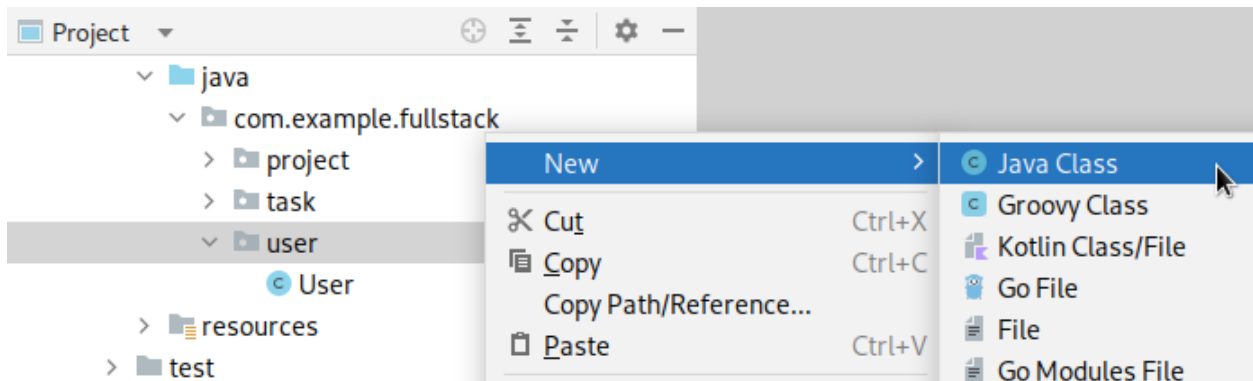
INFO [io.qu.da.de.de.DevServicesDatasourceProcessor] (build-35) Dev Services for the default datasource (postgresql) started.

--/  _ \ / / / / _ \ / / / / / / / /
-/ / / / / / / _ \ / / / / / / / /
--\ _ \ \ _ \ / / / / / / / / / / /

INFO [or.hi.re.pr.im.ReactiveIntegrator] (JPA Startup Thread: default-reactive) HR000001: Hibernate Reactive
  
```


Chapter 3: Creating the HTTP API

```
[INFO] --- quarkus-maven-plugin:2.7.2.Final:add-extension (default-cli) @ reactive ---  
[INFO] [SUCCESS] Extension io.quarkus:quarkus-resteasy-reactive-jackson has been installed
```



```
$ curl localhost:8080/api/v1/users  
[{"id":0,"name":"admin","created":"2022-04-03T10:21:04.804908+02:00","version":0,"roles":["admin","user"]},  
{"id":1,"name":"user","created":"2022-04-03T10:21:04.810769+02:00","version":0,"roles":["user"]}]
```

```
$ curl localhost:8080/api/v1/users/0  
{"id":0,"name":"admin","created":"2022-04-03T10:21:04.804908+02:00","version":0,"roles":["admin","user"]}
```

```
$ curl -X DELETE -i localhost:8080/api/v1/users/1  
HTTP/1.1 204 No Content
```

```
$ curl -X POST -d'{"name":"packt","password":"pass"}' -H "Content-Type: application/json" localhost:8080/api/v1/users  
{"id":2,"name":"packt","created":"2022-04-03T13:42:22.255684853+02:00","version":0,"roles":null}
```

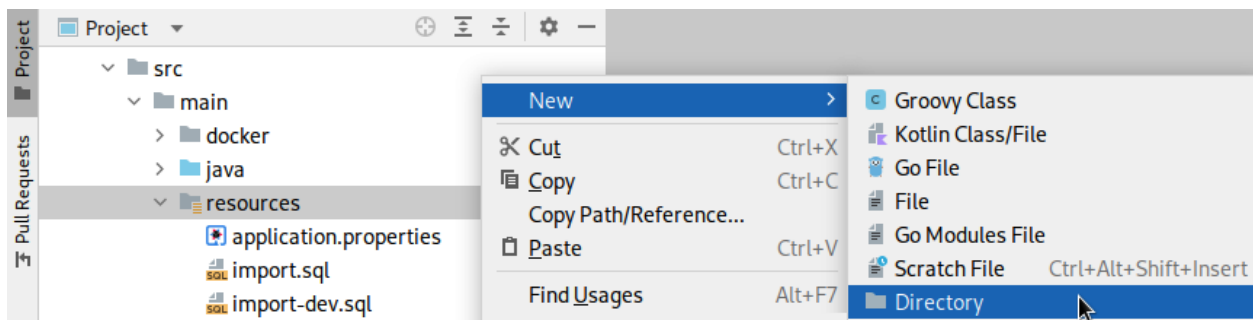
```
$ curl -i localhost:8080/api/v1/users/1337
HTTP/1.1 404 Not Found
Content-Type: application/json
content-length: 52

No row with the given identifier exists: [User#1337]
```

```
$ curl -i -X POST -d '{"name":"admin","password":"pass"}' -H "Content-Type: application/json" localhost:8080/api/v1/users
HTTP/1.1 409 Conflict
Content-Type: application/json
content-length: 0
```

Chapter 4: Securing the Application

```
[INFO] --- quarkus-maven-plugin:2.7.2.Final:add-extension (default-cli) @ reactive ---  
[INFO] Looking for the newly published extensions in registry.quarkus.io  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-smallrye-jwt-build has been installed  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-smallrye-jwt has been installed
```

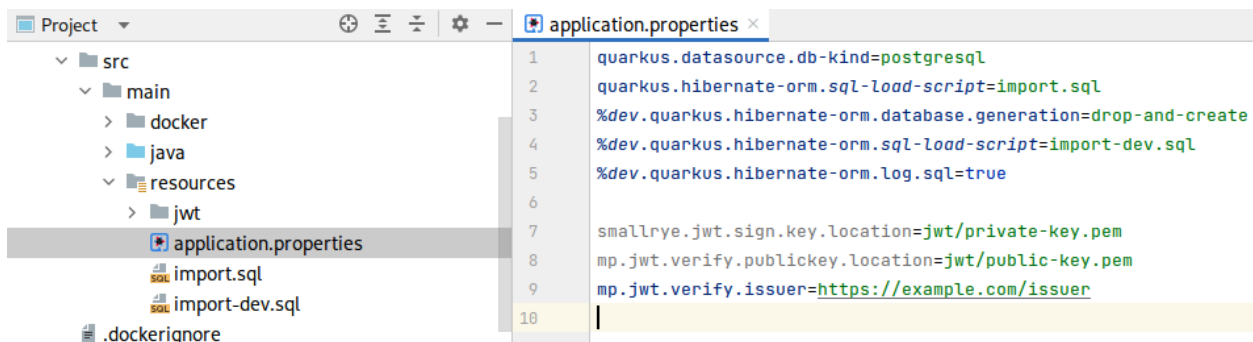


New Directory

jwt

```
$ openssl genrsa -out rsa-private-key.pem 2048  
Generating RSA private key, 2048 bit long modulus (2 primes)  
.....+++++  
..+++++  
e is 65537 (0x010001)
```

```
$ openssl rsa -pubout -in rsa-private-key.pem -out public-key.pem  
writing RSA key
```



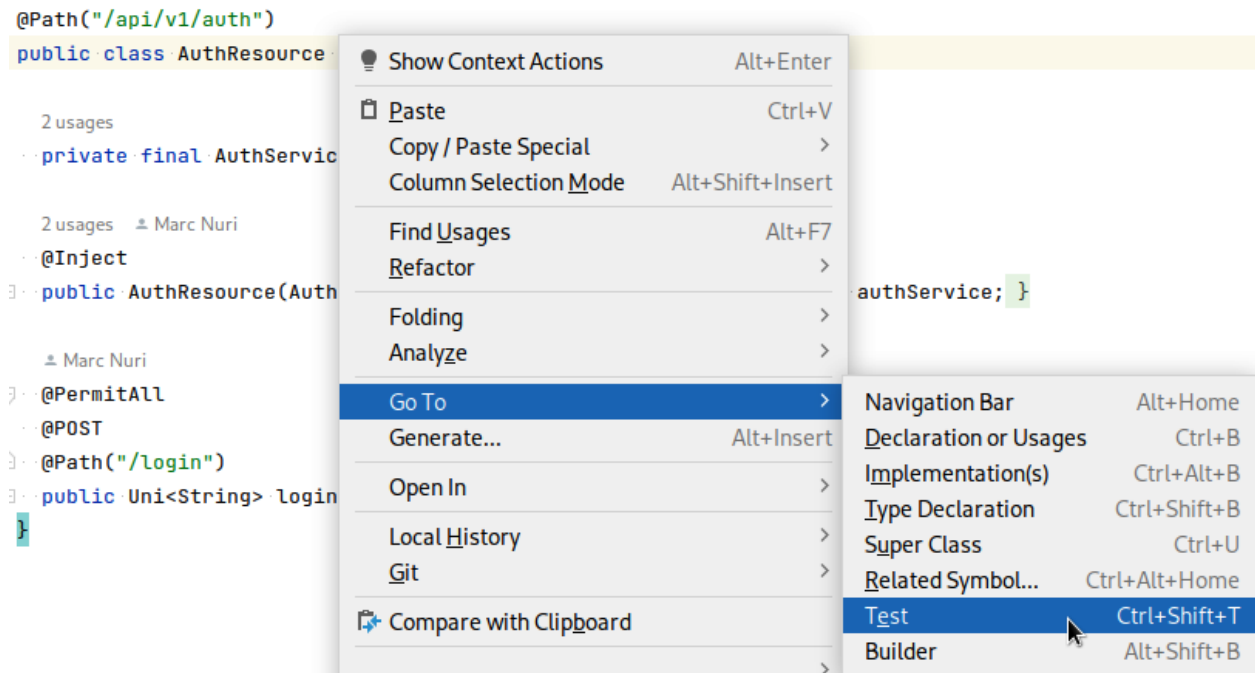
```
$ curl -X POST -d '{"name":"user","password":"invalid"}' -H "Content-Type: application/json" -i localhost:8080/api/v1/auth/login
HTTP/1.1 401 Unauthorized
Content-Type: text/plain; charset=UTF-8
www-authenticate: Bearer
content-length: 0
```

```
$ curl -X PUT -d '{"currentPassword":"quarkus","newPassword":"changed"}' -H "Content-Type: application/json" -H "Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJ3c3MiOiJodHRwczovL2V4YW1wbGUuY29tL2lzc3VlciIsInVwbiI6InVzZXIiLCJncm91cHM0I0tsidXNlciJdLCJpYXQ0IjE2NTA0NzIyNTIiImV4cCI6MTY1MDQ3NTg1MiwianRpIjoizDI1NDUxOTktZTE3NC00NTk2LWJjImZqtOE5MDllMmZiNTg2In0.VSfNoDx5NQg4rY1fn1MT7AnwthrZKZD7VAKZSehn0BMVUurt8aRLQBLgHtUU8YPpfZhLk6CArapVuyK6beVRiPLW_6LkgfuacdDetjJqDwv580Q5FPh4QF7esnwept07TCZDorMPfPtRWzeRefeIZH2Af7DRgyDyrFsKeua5Hu6te5Fn0B4LkvYuSqaNiNZC6Ek_t8r7lqCreUVQRIrLME_LsdLyH6wKnChvSBVcc-YI2YixbRqXT8NLfnprSrJAP6St4Kzggv0R07Zdb2x0vLT6FCm2R-0qz7uBKI60yYCaxcmN4B3-FizWVvFjCG4HA64263D04cHhtvM0Kg6_BA" localhost:8080/api/v1/users/self/password {"id":1,"name":"user","created":"2022-04-20T16:29:37.133359+02:00","version":1,"roles":["user"]}
```

```
$ curl -i localhost:8080/api/v1/users
HTTP/1.1 401 Unauthorized
www-authenticate: Bearer
content-length: 0
```

Chapter 5: Testing your backend

```
[INFO] --- quarkus-maven-plugin:2.7.2.Final:add-extension (default-cli) @ reactive ---  
[INFO] [SUCCESS] ✓ Extension io.quarkus:quarkus-test-security-jwt has been installed
```



Choose Test for **AuthResource** (0 found)

Create New Test...

Create Test

×

Testing library:

JUnit5

Class name:

AuthResourceTest

Superclass:

▼

...

Destination package:

com.example.fullstack.auth

▼

...

Generate:

☐ setUp/@Before

☐ tearDown/@After

Generate test methods for:

☐ Show inherited methods

Member

?

OK

Cancel

AuthResourceTest.java ×

11 @QuarkusTest

12

13

14

15

16

17

18

Run 'AuthResourceTest' Ctrl+Shift+F10

Debug 'AuthResourceTest'

Run 'AuthResourceTest' with Coverage

Profile 'AuthResourceTest' with 'IntelliJ Profiler'

Modify Run Configuration...

body(s: "{\"name\":\"admin\",\"password\":\"quarkus\"}")

contentType(ContentType.JSON)

Run: AuthResourceTest ×

✓ Tests passed: 2 of 2 tests – 3 sec 331 ms

✓ AuthResourceTest (com.example.fullstack.auth)	3 sec 331 ms	Process finished with exit code 0
✓ loginValidCredentials()	3 sec 9 ms	
✓ loginInvalidCredentials()	322 ms	

```
[INFO] Results:
[INFO]
[INFO] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

```
[INFO] Results:
[INFO]
[INFO] Tests run: 29, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

Chapter 6: Building a native image

```
$ gu install native-image
Downloading: Component catalog from www.graalvm.org
Processing Component: Native Image
Downloading: Component native-image: Native Image from github.com
Installing new component: Native Image (org.graalvm.native-image, version 22.1.0)
```

```
$ java -version
openjdk version "17.0.3" 2022-04-19
OpenJDK Runtime Environment GraalVM CE 22.1.0 (build 17.0.3+7-jvmci-22.1-b06)
OpenJDK 64-Bit Server VM GraalVM CE 22.1.0 (build 17.0.3+7-jvmci-22.1-b06, mixed mode, sharing)
```

```
Produced artifacts:
/home/user/00-MN/projects/manusa/packt-fullstack-quarkus-react/chapter-06/target/reactive-1.0.0-SNAPSHOT-native-image-so
urce-jar/reactive-1.0.0-SNAPSHOT-runner (executable)
/home/user/00-MN/projects/manusa/packt-fullstack-quarkus-react/chapter-06/target/reactive-1.0.0-SNAPSHOT-native-image-so
urce-jar/reactive-1.0.0-SNAPSHOT-runner.build_artifacts.txt
=====
Finished generating 'reactive-1.0.0-SNAPSHOT-runner' in 2m 40s.
[INFO] [io.quarkus.deployment.pkg.steps.NativeImageBuildRunner] objcopy --strip-debug reactive-1.0.0-SNAPSHOT-runner
[INFO] [io.quarkus.deployment.QuarkusAugmentor] Quarkus augmentation completed in 165576ms
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

```

--/ __ \ / / / _ | | _ \ / / / / / _/
-/ / / / / / _ | | , < / / / \
--\_\_\_\_\_\_ / / | / / | / | \_\_\_\_\_\_ /

2022-05-08 09:29:04,685 INFO [org.hib.rea.pro.imp.ReactiveIntegrator] (JPA Startup Thread: default-reactive)
HR000001: Hibernate Reactive
2022-05-08 09:29:04,740 INFO [io.quarkus] (main) reactive 1.0.0-SNAPSHOT native (powered by Quarkus 2.8.3.Fin
al) started in 0.085s. Listening on: http://0.0.0.0:8080
2022-05-08 09:29:04,740 INFO [io.quarkus] (main) Profile prod activated.
2022-05-08 09:29:04,740 INFO [io.quarkus] (main) Installed features: [cdi, hibernate-orm, hibernate-reactive,
hibernate-reactive-panache, reactive-pg-client, reactive-routes, resteasy-reactive, resteasy-reactive-jackson
, security, smallrye-context-propagation, smallrye-jwt, vertx]

```

```
$ curl -X POST -d '{"name":"admin","password":"quarkus"}' -H "Content-Type: application/json" localhost:8080/api/v1/auth/login
```



```
# Printing build artifacts to: /project/reactive-1.0.0-SNAPSHOT-runner.build_artifacts.txt
[INFO] [io.quarkus.deployment.pkg.steps.NativeImageBuildRunner] docker run --env LANG=C --rm --user 1000:1000 -v /home/user/00-
MN/projects/manusa/packt-fullstack-quarkus-react/chapter-06/target/reactive-1.0.0-SNAPSHOT-native-image-source-jar:/project:z -
-entrypoint /bin/bash quay.io/quarkus/ubi-quarkus-mandrel:21.3-java17 -c objcopy --strip-debug reactive-1.0.0-SNAPSHOT-runner
[INFO] [io.quarkus.deployment.QuarkusAugmentor] Quarkus augmentation completed in 169132ms
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

Chapter 7: Bootstrapping the React Project

```
Success! Created frontend at /home/user/00-MN/projects/manusa/packt-fullstack-quarkus-react/chapter-07/src/main/frontend
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd frontend
  npm start

Happy hacking!
```

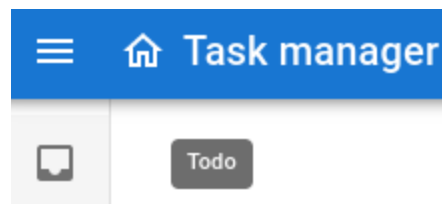
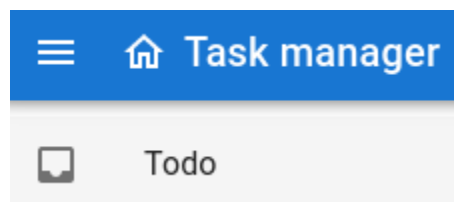
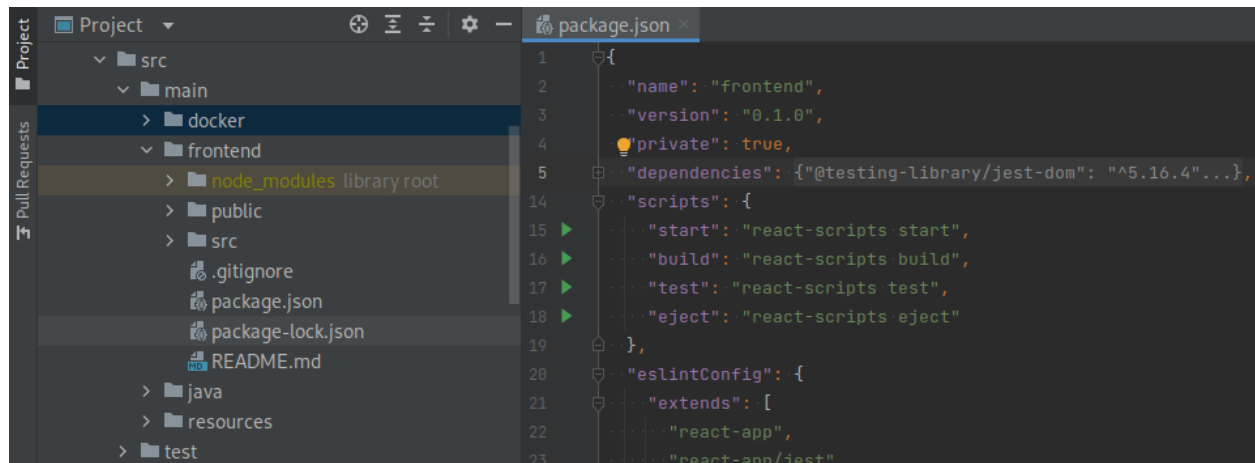
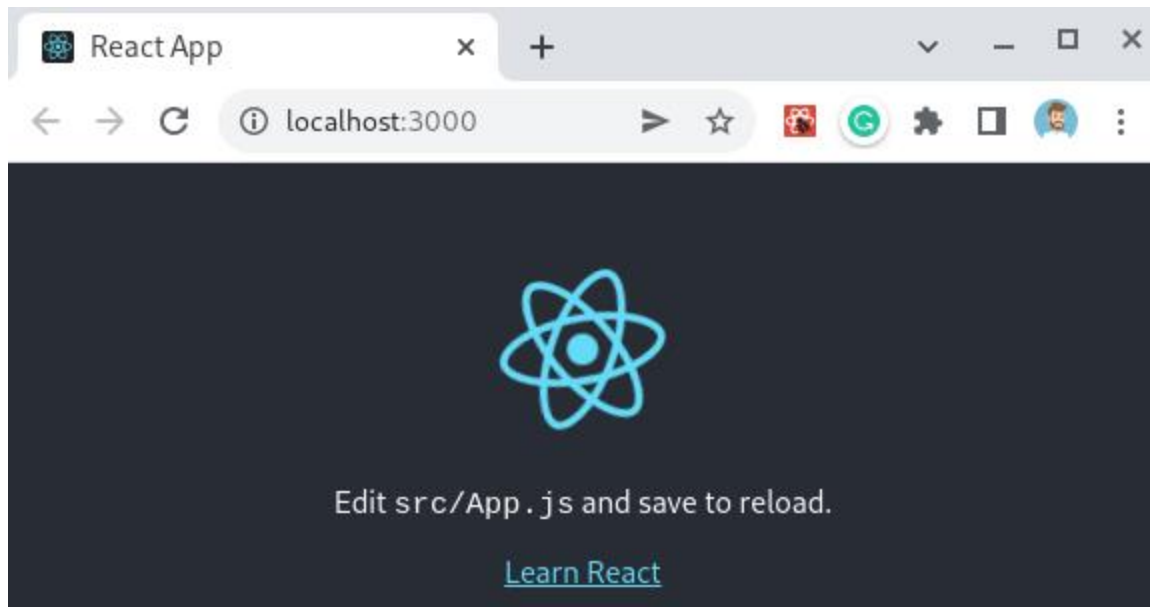
```
Starting the development server...
Compiled successfully!

You can now view frontend in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.10.9:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

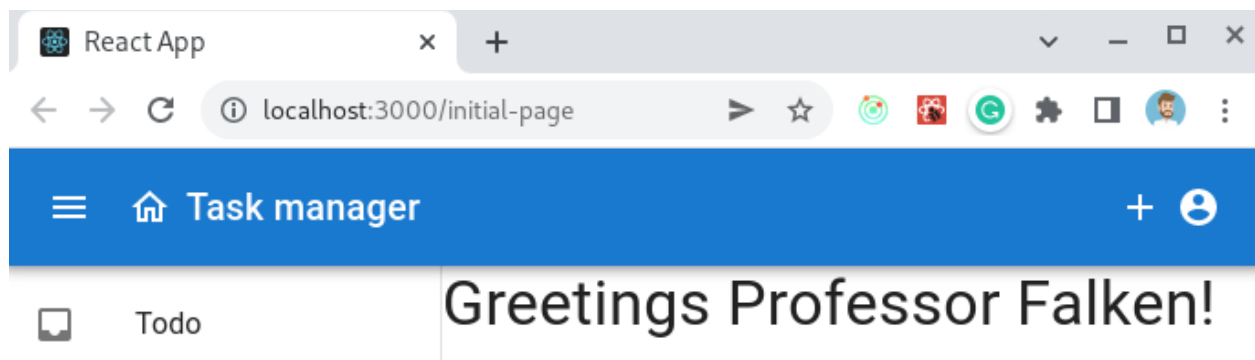


packt-fullstack-quarkus-react > chapter-07 > src > main > frontend > src > index.js

```
10
11 const root = ReactDOM.createRoot(document.getElementById('root'));
12 root.render(
13   <React.StrictMode>
14     <Provider store={store}>
15       <ThemeProvider theme={theme}>
16         <CssBaseline />
17         <App />
18       </ThemeProvider>
19     </Provider>
20   </React.StrictMode>
21 );
22
23 // If you want to start measuring performance in your app, pass a function
24 // to log results (for example: reportWebVitals(console.log))
25 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
26 reportWebVitals();
27
```

Project > src > layout > index.js, Layout.js, MainDrawer.js, redux.js, TopBar.js; styles > theme.js, App.css, App.js, App.test.js, index.css, index.js, InitialPage.js, logo.svg, reportWebVitals.js, setupTests.js, store.js

StrictMode > Provider > ThemeProvider > App



Chapter 8: Creating the Login page



Sign in

Username *

Password *

SIGN IN



Sign in

Username *

not-valid



Password *

.....

SIGN IN

Invalid credentials

Users

Name	Created	Roles	
admin	6/5/2022	admin, user	
user	6/5/2022	user	



Sign in

Username *

Password *

SIGN IN



Task manager



Todo



Users

Greetings Professor Falken!

React App x +



localhost:3000/users

Task manager

Todo

Users

Users

Name	Created	Roles	
admin	6/5/2022	admin, user	
user	6/5/2022	user	

React App x +

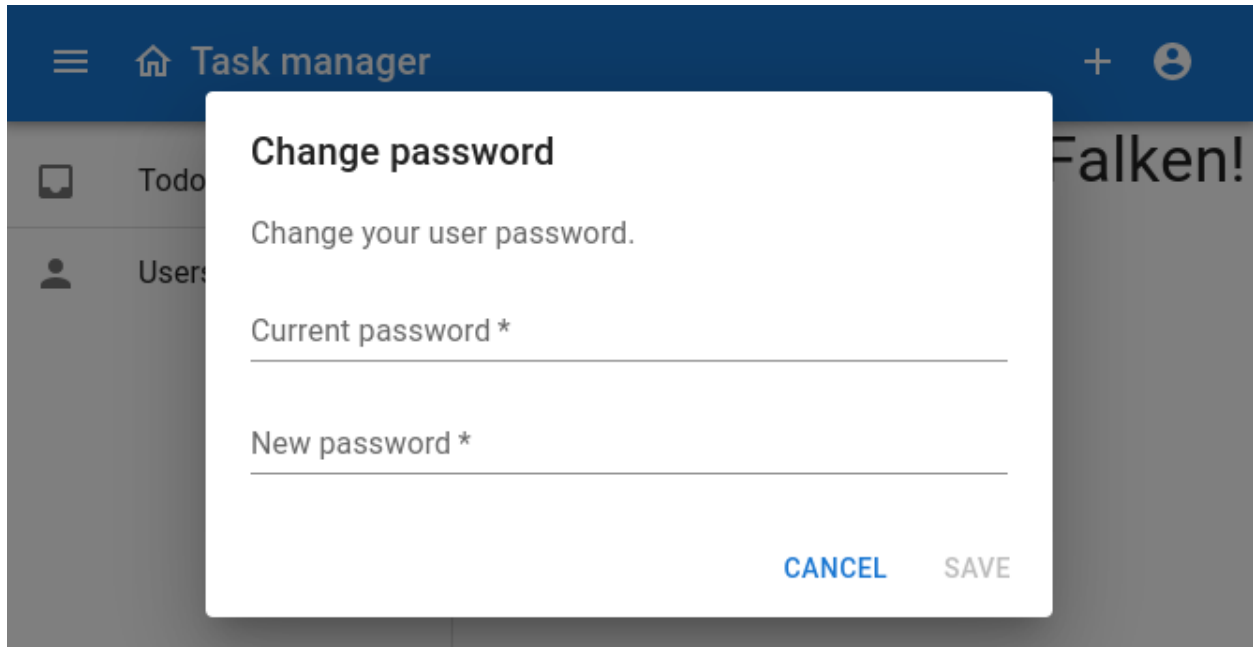
localhost:3000/initial-page

Task manager

Todo

Greetings Professor Falken!

Chapter 9: Creating the Login page



The screenshot shows a 'Task manager' application interface with a dark blue header. A white modal dialog titled 'Change password' is centered. It contains the instruction 'Change your user password.' followed by two text input fields: 'Current password *' and 'New password *'. At the bottom right of the dialog are two buttons: 'CANCEL' and 'SAVE'.

Task manager

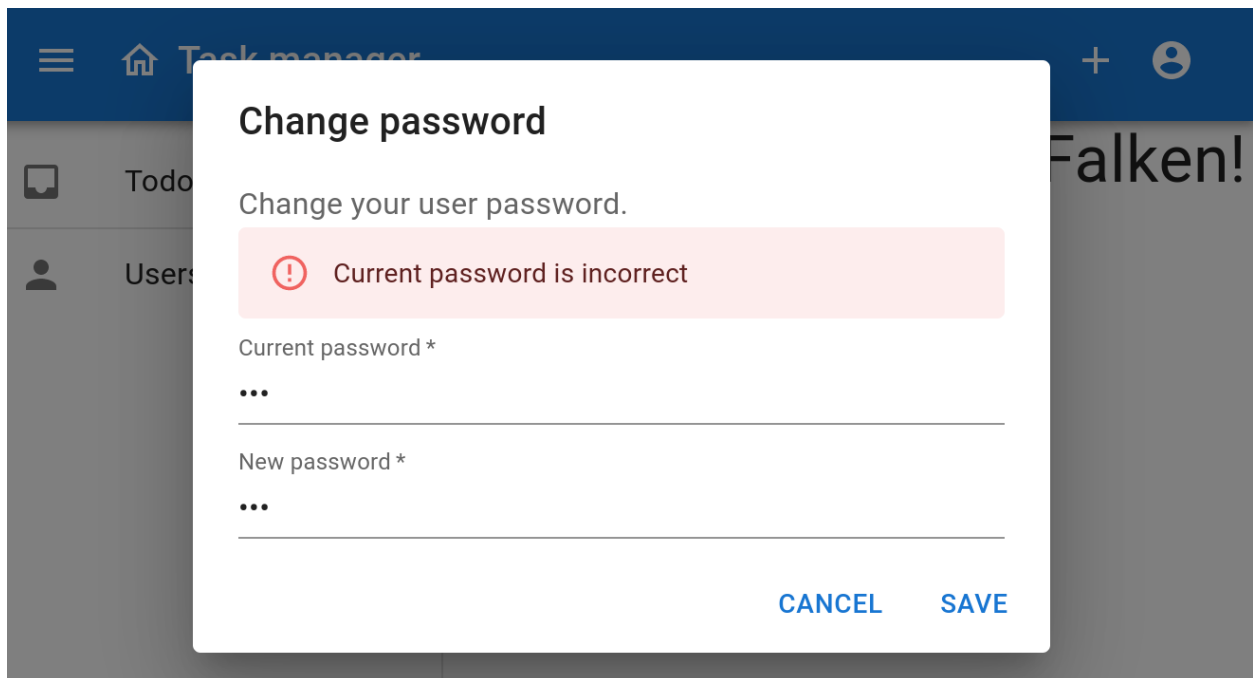
Change password

Change your user password.

Current password *

New password *

CANCEL SAVE



This screenshot shows the same 'Change password' dialog box, but with an error state. A red error message 'Current password is incorrect' is displayed in a light red box above the 'Current password' input field. The input fields now contain three dots '...' to indicate they are masked. The 'CANCEL' and 'SAVE' buttons remain at the bottom right.

Task manager

Change password

Change your user password.

❗ Current password is incorrect

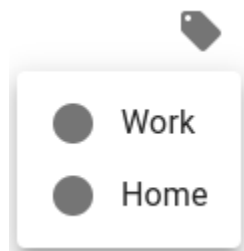
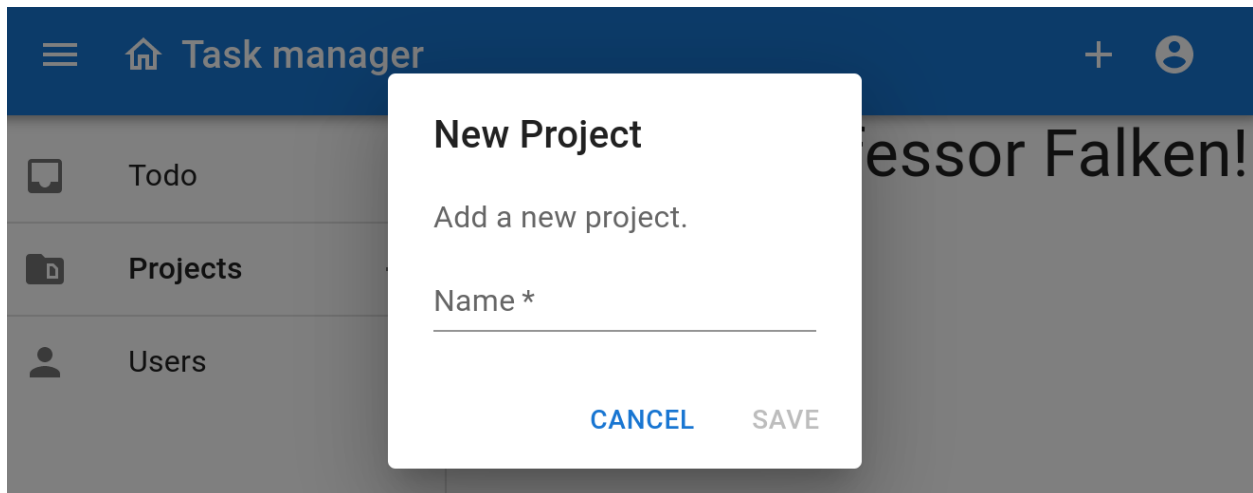
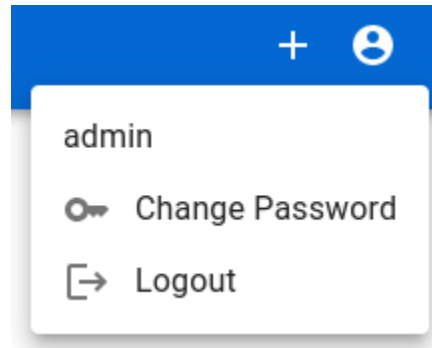
Current password *

...

New password *

...

CANCEL SAVE





New Task



SAVE

Title *

Description





Edit Task



SAVE

Title *

Renew Packt subscription

Description

Renew the annual Packt subscription

<https://subscribe.packtpub.com/>

Home





Edit Task



SAVE

Title *

Renew Packt subscription

Description

Renew the annual Packt subscription

<https://subscribe.packtpub.com/>



7/5/2022

Home



7/5/2022

Home



Priority 1



Priority 2



Priority 3



No Priority

Task manager

Todo

Completed

All

Projects

Home

Work

Users

Todo

Home

Grocery shopping

Work

User interface for task manager

Work

File expenses

ADD TASK

Task manager

Todo

Completed

All

Projects

Home

Work

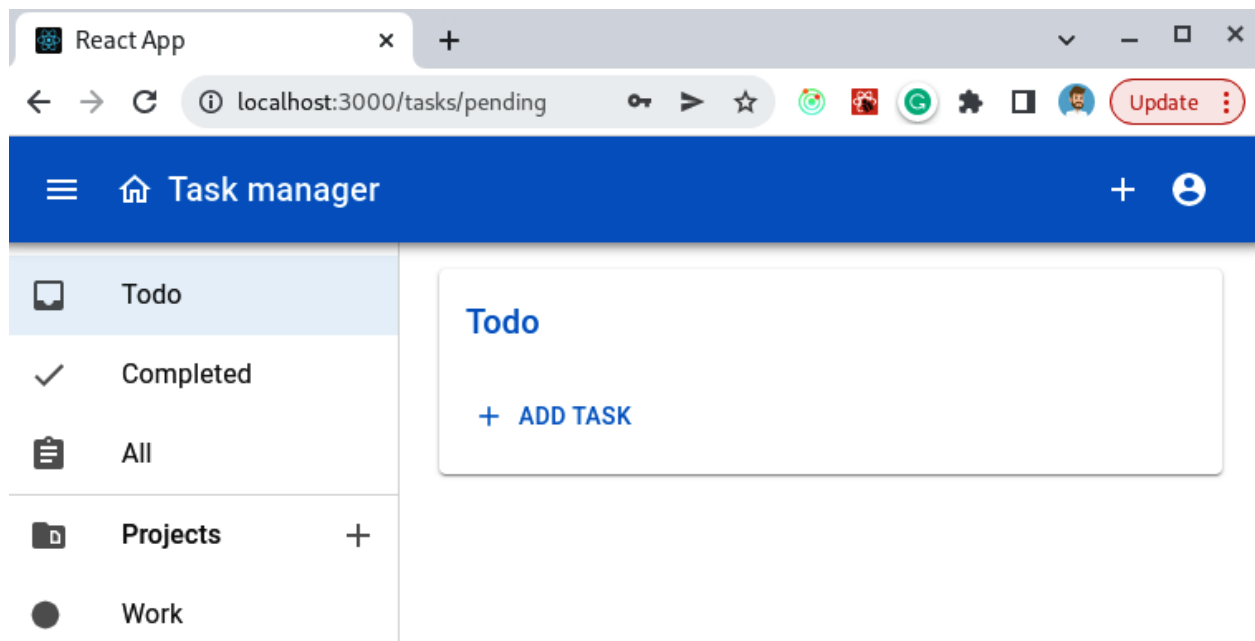
Users

Home

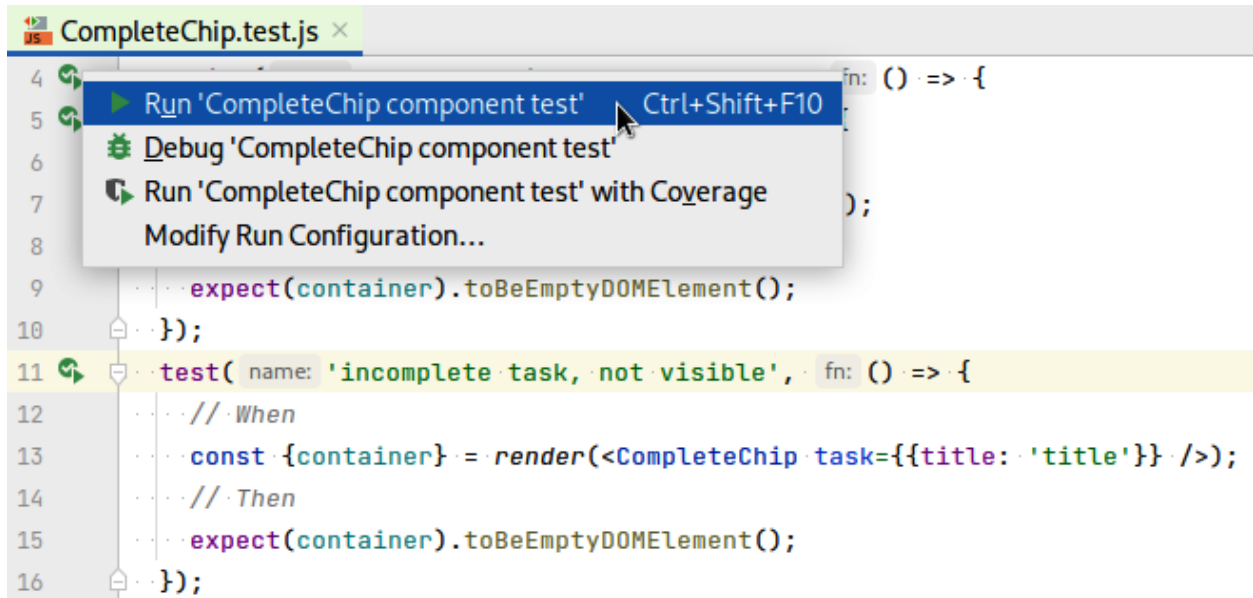
Grocery shopping

Renew Packt subscription

ADD TASK

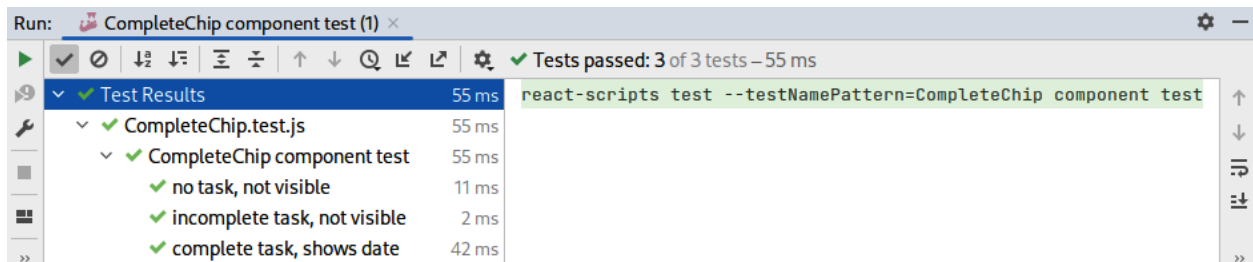


Chapter 10: Testing your frontend



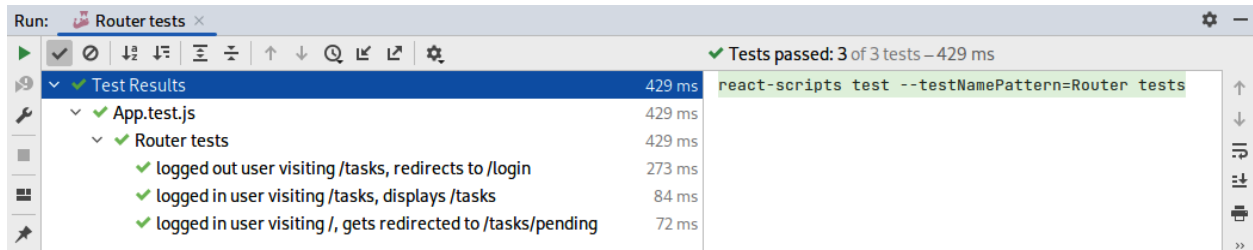
The screenshot shows the VS Code editor with a file named `CompleteChip.test.js`. A context menu is open over the file, showing options: `Run 'CompleteChip component test' Ctrl+Shift+F10`, `Debug 'CompleteChip component test'`, `Run 'CompleteChip component test' with Coverage`, and `Modify Run Configuration...`. The code in the background includes a `test` function with a `name` property and a `fn` property.

```
4
5
6
7
8
9 ... expect(container).toBeEmptyDOMElement();
10 ... });
11 test( name: 'incomplete task, not visible', fn: () => {
12 ... // When
13 ... const {container} = render(<CompleteChip task={{title: 'title'}} />);
14 ... // Then
15 ... expect(container).toBeEmptyDOMElement();
16 ... });
```



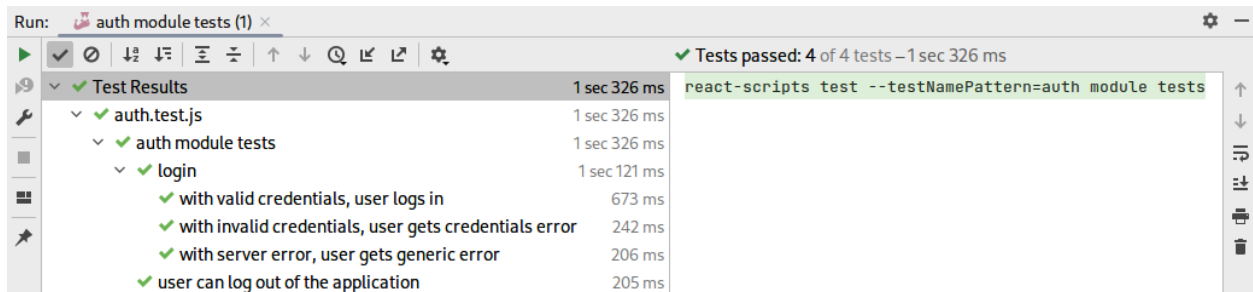
The screenshot shows the VS Code Run and Debug console. The top bar indicates "Run: CompleteChip component test (1)". The console shows the command `react-scripts test --testNamePattern=CompleteChip component test` and the results of the test run.

Test Results	55 ms
CompleteChip.test.js	55 ms
CompleteChip component test	55 ms
no task, not visible	11 ms
incomplete task, not visible	2 ms
complete task, shows date	42 ms



The screenshot shows the VS Code Run and Debug console. The top bar indicates "Run: Router tests". The console shows the command `react-scripts test --testNamePattern=Router tests` and the results of the test run.

Test Results	429 ms
App.test.js	429 ms
Router tests	429 ms
logged out user visiting /tasks, redirects to /login	273 ms
logged in user visiting /tasks, displays /tasks	84 ms
logged in user visiting /, gets redirected to /tasks/pending	72 ms



The screenshot shows the VS Code Run and Debug console. The top bar indicates "Run: auth module tests (1)". The console shows the command `react-scripts test --testNamePattern=auth module tests` and the results of the test run.

Test Results	1 sec 326 ms
auth.test.js	1 sec 326 ms
auth module tests	1 sec 326 ms
login	1 sec 121 ms
with valid credentials, user logs in	673 ms
with invalid credentials, user gets credentials error	242 ms
with server error, user gets generic error	206 ms
user can log out of the application	205 ms

Run: tasks module tests x

Tests passed: 9 of 9 tests – 4 sec 805 ms

Test Results 4 sec 805 ms

- tasks.test.js 4 sec 805 ms
 - tasks module tests 4 sec 805 ms
 - users can create tasks 2 sec 918 ms
 - from top bar 1 sec 157 ms
 - from tasks page 551 ms
 - with priority 617 ms
 - with project 593 ms
 - users can list tasks 249 ms
 - pending 82 ms
 - completed 50 ms
 - for project 117 ms
 - users can edit tasks 1 sec 638 ms
 - to change text fields 1 sec 86 ms
 - to change priority 552 ms

react-scripts test --testNamePattern=tasks module tests

package.json x

```

21   "scripts": {
22     "start": "react-scripts start",
23     "build": "react-scripts build",
24     "test": "react-scripts test",
25     "eject": "react-scripts eject"
26   },

```

No tests found related to files changed since last commit.
Press 'a' to run all tests, or run Jest with '--watchAll'.

Watch Usage

- > Press a to run all tests.
- > Press f to run only failed tests.
- > Press q to quit watch mode.
- > Press p to filter by a filename regex pattern.
- > Press t to filter by a test name regex pattern.
- > Press Enter to trigger a test run.

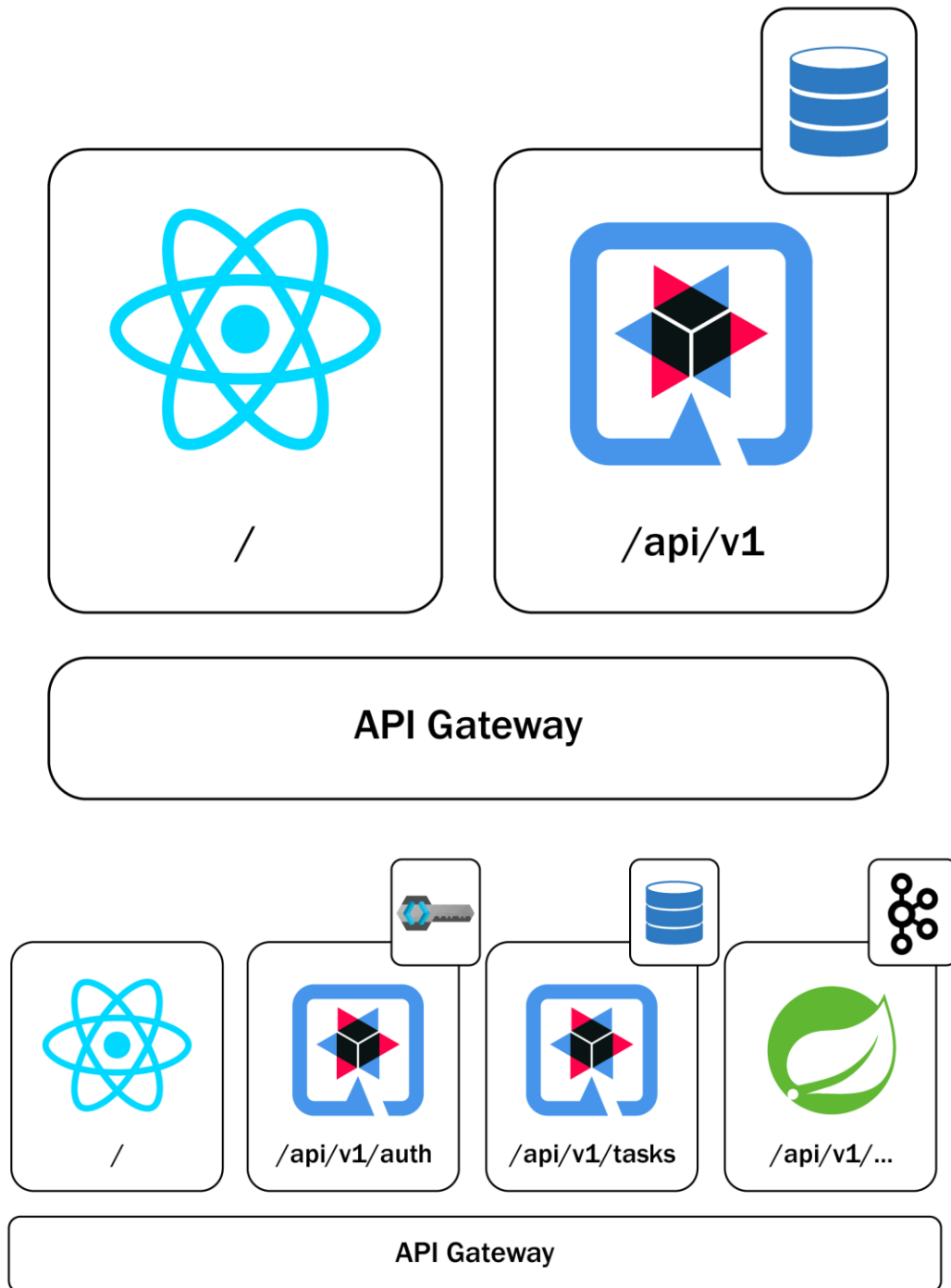
```

Test Suites: 6 passed, 6 total
Tests:       24 passed, 24 total
Snapshots:   0 total
Time:        11.91 s
Ran all test suites.

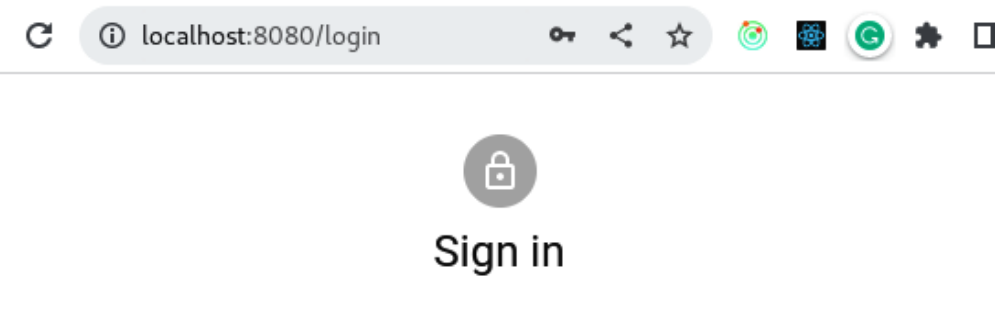
```


File	% Stmts	% Branch	% Funcs	% Lines	Uncovered Line #s
All files	87.71	73.14	84.12	87.5	
src	72.5	28.57	83.33	71.79	
App.js	100	100	100	100	
index.js	0	100	100	0	11-26
reportWebVitals.js	0	0	0	0	1-8
store.js	100	100	100	100	
useForm.js	100	0	100	100	3

Chapter 11: Quarkus integration




```
--/ _ _ \ / / / _ | / - \ / / / / / _ \
- / / / / / / _ \ | , _ , < / / / \ \
--_ _ _ _ _ _ _ _ _ _ / _ \ / _ \ / _ \ _ _ _ _ _
2022-09-16 13:17:31,774 INFO [org.hib.rea.pro.imp.ReactiveIntegrator] (JPA Startup Thread: default-reactive) HR000001: Hibernate Reactive
2022-09-16 13:17:32,167 INFO [io.quarkus] (main) reactive 1.0.0-SNAPSHOT on JVM (powered by Quarkus 2.10.2.Final) started in 1.453s. List
ening on: http://0.0.0.0:8080
2022-09-16 13:17:32,168 INFO [io.quarkus] (main) Profile prod activated.
2022-09-16 13:17:32,168 INFO [io.quarkus] (main) Installed features: [cdi, hibernate-orm, hibernate-reactive, hibernate-reactive-panache,
reactive-pg-client, reactive-routes, resteasy-reactive, resteasy-reactive-jackson, security, smallrye-context-propagation, smallrye-jwt,
vertx]
```




The screenshot shows a web browser window with a single tab titled 'React App'. The address bar displays 'localhost:8080/login'. The page content features a central 'Sign in' heading with a lock icon above it. Below the heading are two text input fields: 'Username *' and 'Password *'. At the bottom of the form is a prominent blue button labeled 'SIGN IN'.



Chapter 12: Deploying your application to Kubernetes

```
🌞 minikube v1.26.0 on Fedora 35
  ▪ MINIKUBE_HOME=/home/user/00-MN/bin/minikube-v1.26
🌟 Automatically selected the docker driver. Other choices: kvm2, ssh, qemu2 (experimental)
🚧 Using Docker driver with root privileges
👍 Starting control plane node minikube in cluster minikube
🚚 Pulling base image ...
🔥 Creating docker container (CPUs=2, Memory=7900MB) ...
🌊 Preparing Kubernetes v1.24.1 on Docker 20.10.17 ...
  ▪ Generating certificates and keys ...
  ▪ Booting up control plane ...
  ▪ Configuring RBAC rules ...
🔍 Verifying Kubernetes components...
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟 Enabled addons: storage-provisioner, default-storageclass
🏡 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

```
  ▪ Using image k8s.gcr.io/ingress-nginx/controller:v1.2.1
  ▪ Using image k8s.gcr.io/ingress-nginx/kube-webhook-certgen:v1.1.1
  ▪ Using image k8s.gcr.io/ingress-nginx/kube-webhook-certgen:v1.1.1
🔍 Verifying ingress addon...
🌟 The 'ingress' addon is enabled
```



Explore Repositories Organizations Help Upgrade marcnnuri ▼

Repositories Create Using 0 of 1 private repositories. [Get more](#)

Create Repository


marcnnuri ▼


task-manager

Awesome Task Manager built with Quarkus and React

Visibility

Using 0 of 1 private repositories. [Get more](#)

☒ Public  Appears in Docker Hub search results

☐ Private  Only visible to you

Cancel Create

```
[INFO] --- kubernetes-maven-plugin:1.8.0:build (default-cli) @ reactive ---
[INFO] k8s: Running in Kubernetes mode
[INFO] k8s: Building Docker image in Kubernetes mode
[INFO] k8s: Running generator quarkus
[INFO] k8s: quarkus: Using Docker image quay.io/jkube/jkube-java:0.0.15 as base / builder
[INFO] k8s: [marcnuri/task-manager:latest] "quarkus": Created docker-build.tar in 340 milliseconds
[INFO] k8s: [marcnuri/task-manager:latest] "quarkus": Built image sha256:795f0
[INFO] k8s: [marcnuri/task-manager:latest] "quarkus": Tag with latest
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

```
user@localhost ~$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID,
head over to https://hub.docker.com to create one.
Username: marcnuri
Password:
Login Succeeded
```

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 marcnuri

marcnuri
Repositories
task-manager
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[General](#)
[Tags](#)
[Builds](#)
[Collaborators](#)
[Webhooks](#)
[Settings](#)

marcnuri/task-manager

Description

Awesome Task Manager built with Quarkus and React

Last pushed: a few seconds ago

Docker commands
[Public View](#)

To push a new tag to this repository,

```
docker push marcnuri/task-manager:tagname
```

Tags and Scans

VULNERABILITY SCANNING - DISABLED
[Enable](#)

This repository contains 1 tag(s).

TAG	OS	PULLED	PUSHED
latest		---	a few seconds ago

[See all](#)
[Go to Advanced Image Management](#)

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

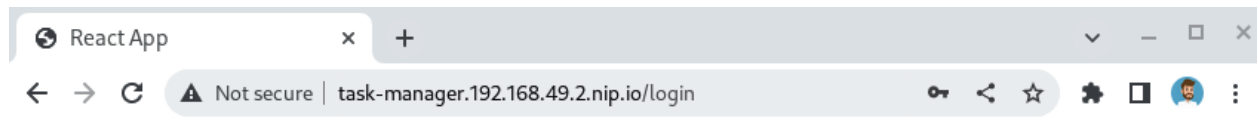
Available with Pro, Team and Business subscriptions.

[Upgrade](#)
[Learn more](#)

```
[INFO] --- kubernetes-maven-plugin:1.8.0:push (default-cli) @ reactive ---
[INFO] k8s: Running in Kubernetes mode
[INFO] k8s: Building Docker image in Kubernetes mode
[INFO] k8s: Running generator quarkus
[INFO] k8s: quarkus: Using Docker image quay.io/jkube/jkube-java:0.0.15 as base / builder
[INFO] k8s: This push refers to: marcnuri/task-manager:latest
JIB> Containerizing application with the following files:
JIB> Container program arguments set to [/usr/local/s2i/run] (inherited from base image)
JIB> Building a single manifest
JIB> Checking existence of manifest for sha256:14f59cd78b33c064d3b4ae5b0757fb7f9c2f6eefcd19e2d268abd33251594510...
JIB> Skipping manifest existence check; system property set to false
JIB> Pushing manifest for latest...
JIB> [===== ] 90.9% complete > launching manifest list pushers
JIB> [=====] 100.0% complete
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

```
[INFO] --- kubernetes-maven-plugin:1.8.0:resource (default-cli) @ task-manager ---
[INFO] k8s: Running generator quarkus
[INFO] k8s: quarkus: Using Docker image registry.access.redhat.com/ubi8/ubi-minimal:8.1 as base / builder
[INFO] k8s: Using resource templates from /home/user/00-MN/projects/manusa/packit-fullstack-quarkus-react/chapter-12/src/main/jkube
[INFO] k8s: jkube-service: Adding a default service 'task-manager' with ports [8080]
[INFO] k8s: jkube-service-discovery: Using first mentioned service port '8080'
[INFO] k8s: jkube-revision-history: Adding revision history limit to 2
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```

```
[INFO] --- kubernetes-maven-plugin:1.8.0:apply (default-cli) @ task-manager ---
[INFO] k8s: Using Kubernetes at https://192.168.49.2:8443/ in namespace null with manifest /home/user/00-MN/projects/manusa/packit-fullstack-quarkus-react/chapter-12/target/classes/META-INF/jkube/kubernetes.yml
[INFO] k8s: Creating a Secret from kubernetes.yml namespace default name postgresql
[INFO] k8s: Created Secret: target/jkube/applyJson/default/secret-postgresql-2.json
[INFO] k8s: Creating a Service from kubernetes.yml namespace default name postgresql
[INFO] k8s: Created Service: target/jkube/applyJson/default/service-postgresql-2.json
[INFO] k8s: Creating a Service from kubernetes.yml namespace default name task-manager
[INFO] k8s: Created Service: target/jkube/applyJson/default/service-task-manager-2.json
[INFO] k8s: Applying PersistentVolume postgresql from kubernetes.yml
[INFO] k8s: Creating a PersistentVolumeClaim from kubernetes.yml namespace default name postgresql
[INFO] k8s: Created PersistentVolumeClaim: target/jkube/applyJson/default/persistentvolumeclaim-postgresql.json
[INFO] k8s: Creating a Deployment from kubernetes.yml namespace default name postgresql
[INFO] k8s: Created Deployment: target/jkube/applyJson/default/deployment-postgresql-2.json
[INFO] k8s: Creating a Deployment from kubernetes.yml namespace default name task-manager
[INFO] k8s: Created Deployment: target/jkube/applyJson/default/deployment-task-manager-2.json
[INFO] k8s: Applying Ingress task-manager from kubernetes.yml
[INFO] k8s: HINT: Use the command `kubectl get pods -w` to watch your pods start up
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
```


Sign in

Username *


Password *

SIGN IN

Chapter 13: Deploying your application to Fly.io

 **dockerhub**


ExploreRepositoriesOrganizationsHelp

[Upgrade](#)  **marcnuri**


marcnuri > Repositories > **task-manager**


Using 0 of 1 private repositories. [Get more](#)

[General](#)TagsBuildsCollaboratorsWebhooksSettings

 **marcnuri/task-manager**

Description


Awesome Task Manager built with Quarkus and React 

 Last pushed: a minute ago





Docker commands [Public View](#)

To push a new tag to this repository,

```
docker push marcnuri/task-manager:tagname
```

Tags and scans  **VULNERABILITY SCANNING - DISABLED** [Enable](#)

This repository contains 2 tag(s).

TAG	OS	PULLED	PUSHED
 fly		---	a minute ago
 latest		---	5 days ago

[See all](#) [Go to Advanced Image Management](#)

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new Images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions.

[Upgrade](#) [Learn more](#)

Full name

Marc Nuri

Email

xxx@example.com

Password

.....

[Forgot Your Password?](#)

[Have an Account?](#)

Create My Account

Email Address

xxx@example.com

Password

.....

[Forgot Your Password?](#)

[Need an Account?](#)

Sign In

```
$ flyctl launch --image marcnuri/task-manager:fly
Creating app in /home/user/00-MN/projects/manusa/packt-fullstack-quarkus-react/chapter-13
Using image marcnuri/task-manager:fly
? App Name (leave blank to use an auto-generated name): task-manager
```

```

? Select organization: Marc Nuri (personal)
? Select region: mad (Madrid, Spain)
Created app task-manager in organization personal
Wrote config file fly.toml
? Would you like to set up a PostgreSQL database now? Yes
For pricing information visit: https://fly.io/docs/about/pricing/#postgresql-clusters
? Select configuration: [Use arrows to move, type to filter]
> Development - Single node, 1x shared CPU, 256MB RAM, 16B disk
  Production - Highly available, 1x shared CPU, 256MB RAM, 10GB disk
  Production - Highly available, 1x Dedicated CPU, 2GB RAM, 50GB disk
  Production - Highly available, 2x Dedicated CPU's, 4GB RAM, 100GB disk
  Specify custom configuration

```

```

? Would you like to deploy now? No
Your app is ready. Deploy with `flyctl deploy`

```


```

==> Verifying app config
--> Verified app config
==> Building image
Searching for image 'marcnuri/task-manager:fly' remotely...
image found: img_nlo9432z0ezvwxd
==> Creating release
--> release v2 created

--> You can detach the terminal anytime without stopping the deployment
==> Monitoring deployment

1 desired, 1 placed, 1 healthy, 0 unhealthy [health checks: 1 total, 1 passing]
--> v0 deployed successfully

```


Dashboard Resources Account

Organization
Personal
Launch an App
Create Organization
Apps
Billing
Team

Apps
Search (press "/" to focus)

task-manager

v0

1 hour ago · shared-cpu-1x

task-manager-db

v0

1GB · 1 hour ago · shared-cpu-1x

Credits
\$0.00
Current month so far
\$0.00
Last invoice
\$0.00

Dashboard > personal > task-manager > Overview

Running

Overview

Monitoring

Metrics

Certificates

Scale

Activity

Secrets

Volumes

Machines

Settings

Average Data In (1h)

94 B/s

Average Data Out (1h)

251 B/s

Average Memory Used (1h)

126 MB/232 MB

Average Load (1h)

0.00

Application Information

Personal details and application.

Hostname

task-manager.fly.dev

VM size

shared-cpu-1x

Memory

256MB

CPU cores

1.0

IP addresses

137.66.0.103

v4

2a09:8280:11::a:6ade

v6

Activity

Release

by Marc Nuri about 2 hours

Released v0

Secret

by Marc Nuri 1 day

Set secret DATABASE_URL

Digest:

432cd66dd6343ca6b9bc5b53bfd9027f

See all

React App

task-manager.fly.dev/login

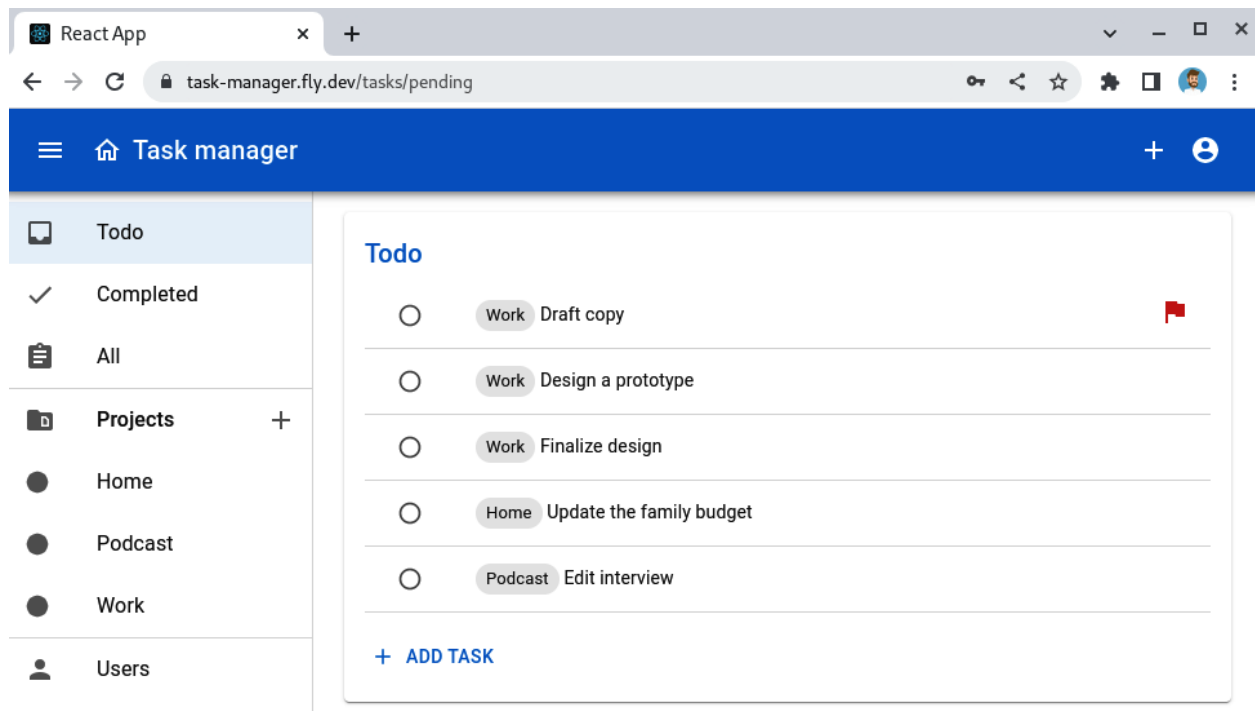


Sign in

Username *

Password *

SIGN IN



Chapter 14: Creating a continuous integration pipeline

The image shows two screenshots from the GitHub website. The top screenshot is the 'New repository' page for a user named 'manusa'. It features a search bar, navigation links for Pulls, Issues, Marketplace, and Explore, and a dropdown menu with options: 'New repository', 'Import repository', 'New gist', 'New organization', and 'New project'. The repository name 'task-manager' is entered and validated with a green checkmark. A hint suggests 'musical-spoon?' as a repository name. The bottom screenshot is the 'New personal access token' page. It includes a sidebar with 'GitHub Apps', 'OAuth Apps', and 'Personal access tokens'. The main content area explains that personal access tokens function like OAuth access tokens. It includes a 'Note' section with a 'GitHub PAT' label and a question 'What's this token for?'. The 'Expiration' section is set to '30 days', with a note that the token will expire on Wednesday, September 21, 2022.

Owner * **Repository name ***

manusa / task-manager ✓

Great repository names are short and memorable. Need inspiration? How about **musical-spoon?**

Description (optional)

https://github.com/new

manusa / README.md

New Personal Access To x +

github.com/settings/tokens/new

GitHub Apps

OAuth Apps

Personal access tokens

New personal access token

Personal access tokens function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).






Note

GitHub PAT


What's this token for?


Expiration *


30 days The token will expire on Wed, Sep 21 2022


 manusa	Initial commit	e9c04cf 2 minutes ago	 1 commit
	.mvn/wrapper	Initial commit	2 minutes ago
	src	Initial commit	2 minutes ago
	.dockerignore	Initial commit	2 minutes ago

No description, website, or topics provided.

 Readme

 0 stars

 1 watching

 0 forks


New Directory

.github/workflows|

Workflows

[New workflow](#)

All workflows

 Build and Test

All workflows

Showing runs from all workflows


1 workflow run

Event


Status


Branch


Actor

 ci: build and test pipeline


Build and Test #1: Commit 02ce63a pushed by manusa


 main

 12 seconds ago

 In progress


...

 ci: build and test pipeline Build and Test #1

[Re-run all jobs](#) 

Summary

Jobs

 Build and test




Triggered via push 17 minutes ago

Status

Total duration

Billable time

Artifacts

 manusa pushed  02ce63a  main

Success


2m 56s

3m




-

build-and-test.yaml

on: push

 Build and test

2m 45s

test: Verify Serialization.clone works with UnmatchedFieldTypeModule E2E Tests #5346

Re-run all jobs



Summary

Jobs

- BuildWithoutTests
- K8S (v1.24.0)
- K8S (v1.23.3)
- K8S (v1.22.6)
- K8S (v1.20.15)
- K8S (v1.19.16)
- K8S (v1.12.10)
- OpenShift (v3.11.0)
- OpenShift (v3.10.0)

Re-run triggered yesterday

manusa #4346 manusa:test/serialization...

Status

Success

Total duration

6m 43s

Artifacts

-

e2e-tests.yml

on: pull_request

BuildWithoutTests

13m 49s

Matrix: K8S

K8S (v1.12.10)

3m 20s

K8S (v1.19.16)

3m 40s

K8S (v1.20.15)

2m 35s

K8S (v1.22.6)

2m 52s

K8S (v1.23.3)

3m 4s

K8S (v1.24.0)

2m 51s

Matrix: OpenShift

2 jobs completed

Show all jobs



✓ ci: build and test pipeline Build and Test #1

[Re-run all jobs](#)[Summary](#)

Jobs

✓ Build and test

Build and test

succeeded 1 hour ago in 2m 45s



- > ✓ Set up job 1s
- > ✓ Checkout 1s
- > ✓ Setup Node 0s
- > ✓ Setup Java 17 0s
- > ✓ Build and test 2m 15s
- > ✓ Test frontend 23s
- > ✓ Post Setup Java 17 0s
- > ✓ Post Setup Node 0s
- > ✓ Post Checkout 0s
- > ✓ Complete job 0s

[Open](#)

feat: rename tasks path #1

manusa wants to merge 1 commit into `main` from `break-me`



manusa commented 5 minutes ago • edited



PR to demonstrate the value of the CI workflow

feat: rename tasks path

✗ 22c6c09

Add more commits by pushing to the `break-me` branch on `manusa/task-manager`.



All checks have failed

[Hide all checks](#)

1 failing check



Build and Test / Build and test (pull_request) Failing after 2m — Build and test

[Details](#)

This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request



or view [command line instructions](#).

Reviewers



No reviews

Assignees



No one—assign yourself

Labels



None yet

Projects



None yet

Milestone



No milestone

Development



Successfully merging this pull request may close these issues.