

Project

Healthcare Domain

[Ajay Gaur]

Medicure is a super specialty hospital based in New York, USA and provide world class treatment and surgery including Heart, Liver, Kidney transplants and first robotic surgery center. The chain is owned and managed by Global Health Limited.

The Medicure would centrally like to manage all the doctor's and patient's data across the Medicure hospitals in various cities. They have developed an microservice, which offers these services. In order to reduce unnecessary maintenance cost and manual labor, they would like to automate their application build and deployment process using DevOps. They are fine to use any one of the (**AWS, Azure, GCP**) cloud platform as their primary cloud service provider.

The company's primary goal is to deliver the product updates frequently to production with High quality & Reliability. They also want to accelerate software delivery speed, quality and reduce feedback time between developers and testers. They would like to use Kubernetes to manage their container deployments, scaling and descaling of containers etc.

Initially, Medicure is facing multiple problems, because of involved complexity in application as well as Infrastructure.

Following are the problems:

- ✓ Building Complex builds is difficult
- ✓ Manual efforts to test various components/modules of the project
- ✓ Incremental builds are difficult to manage, test and deploy
- ✓ Creation of infrastructure and configure it manually is very time consuming
- ✓ Continuous manual monitoring the application is quite challenging.

In order to implement a POC, you are requested to develop a mavenized microservice using spring boot and in memory h2 database.

1. a microservice which exposes below mentioned endpoints as APIs and uses in memory h2 database to store the data.
 - a. /registerDoctor (HTTP Method : POST) (Request Body : JSON)
 - b. /updateDoctor/{doctorRegNo} (HTTP Method : PUT) (Request Body : JSON)
 - c. /searchDoctor/{doctorName} (HTTP Method : GET) (No Request Body)
 - d. /deletePolicy/{doctorRegNo} (HTTP Method : DELETE) (No Request Body)
2. Write necessary Junit testcase.
3. Generate HTML report using TestNG.
4. Push your code into your GitHub Repository.

Note: Preload some data into the database.

Later, you need to implement Continuous Integration & Continuous Deployment using following tools:

- ✓ Git - For version control for tracking changes in the code files
- ✓ Jenkins - For continuous integration and continuous deployment
- ✓ Docker - For containerizing applications
- ✓ Ansible - Configuration management tools
- ✓ Selenium - For automating tests on the deployed web application
- ✓ Terraform - For creation of infrastructure.
- ✓ Kubernetes – for running containerized application in managed cluster.

This project will be about how to test the services and deploy code to dev/stage/prod etc, just on a click of button.

Business challenge/requirement

As soon as the developer pushes the updated code on the GIT master branch, the Jenkins pipeline should be triggered and code should be checkout, compiled, tested, packaged and containerized. A new test-cluster should be provisioned and configured automatically with all the required software's and as soon as the cluster is healthy and available, the application must be deployed to the test-server automatically using Kubernetes.

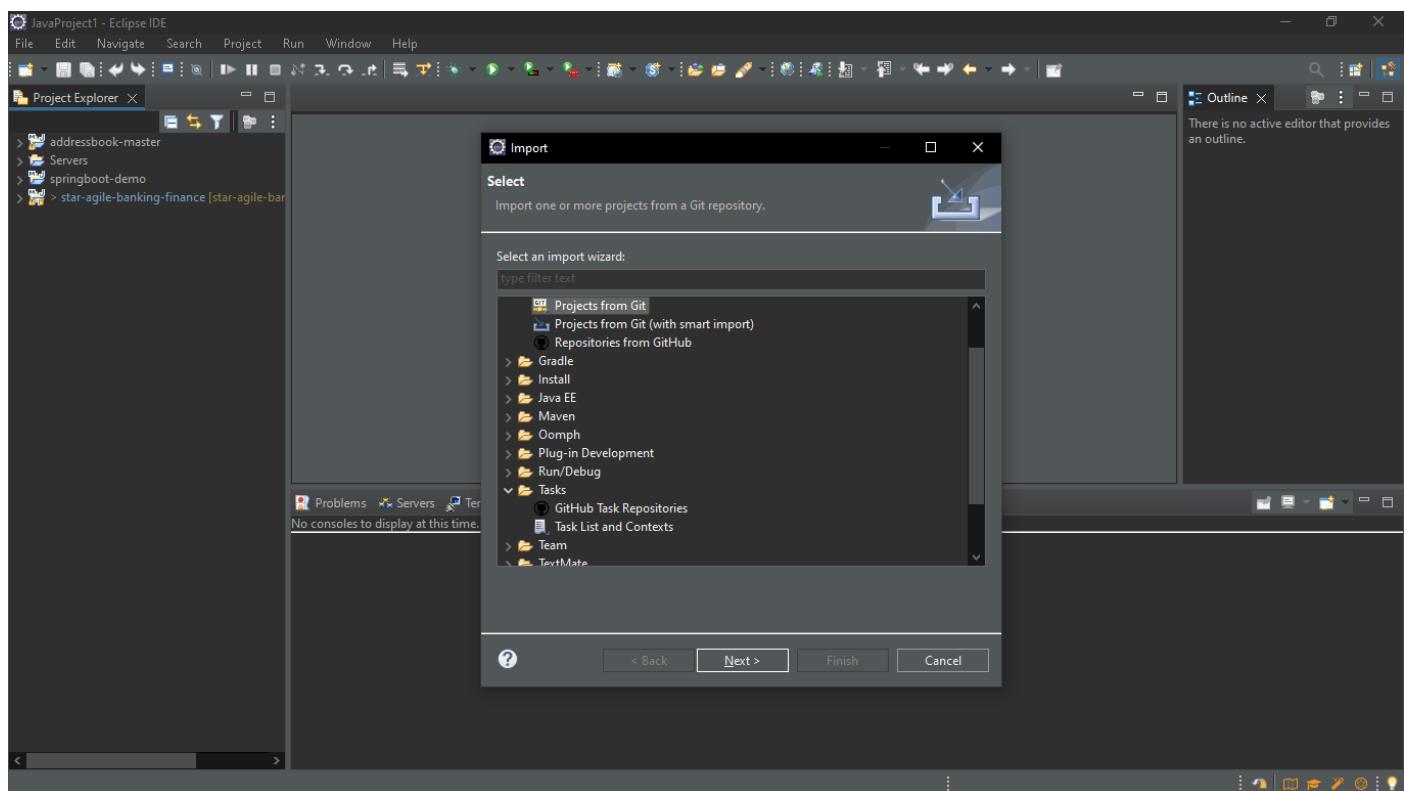
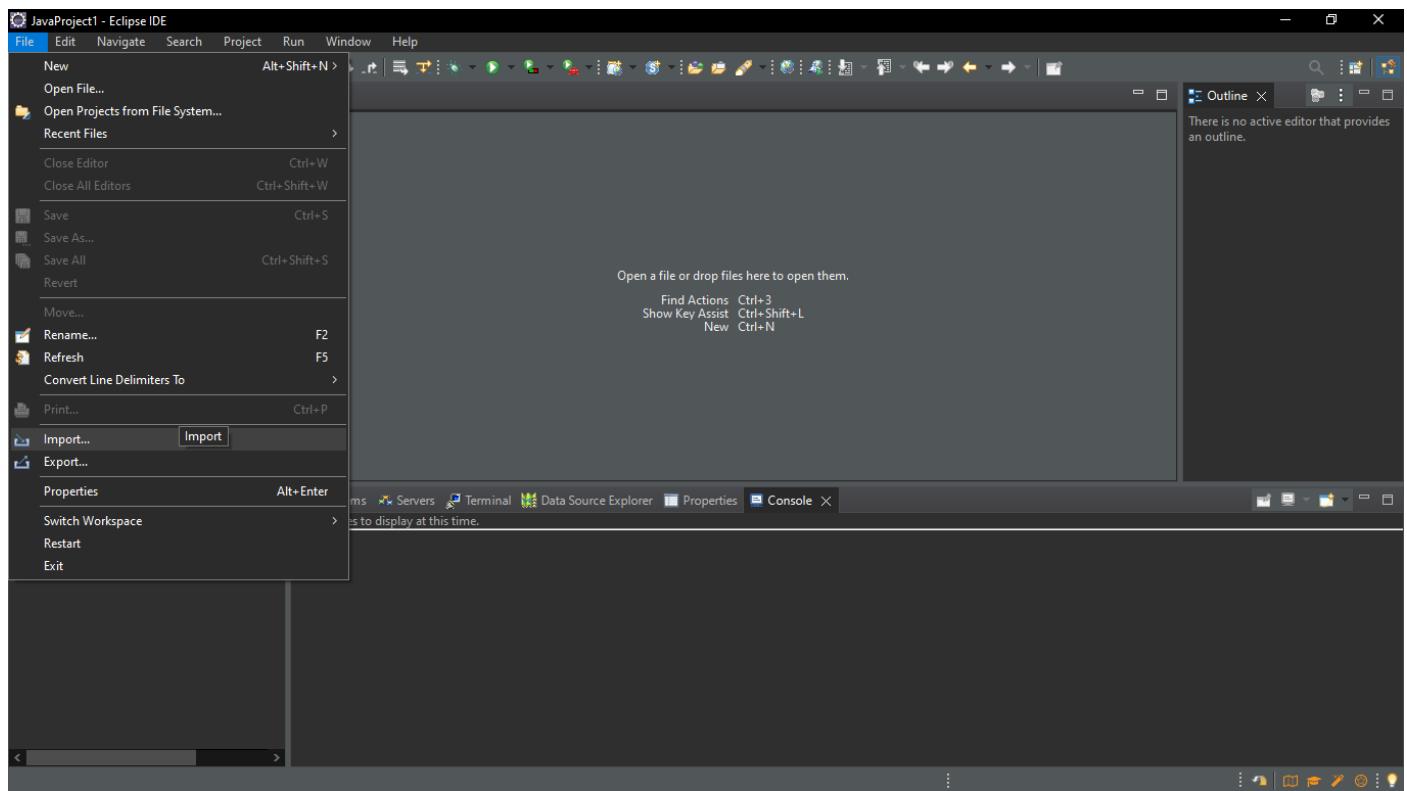
The deployment should then be tested using a test automation tool, and if the build is successful, it should be deployed to the prod server/cluster using Kubernetes. All this should happen automatically and should be triggered from a push to the GitHub master branch.

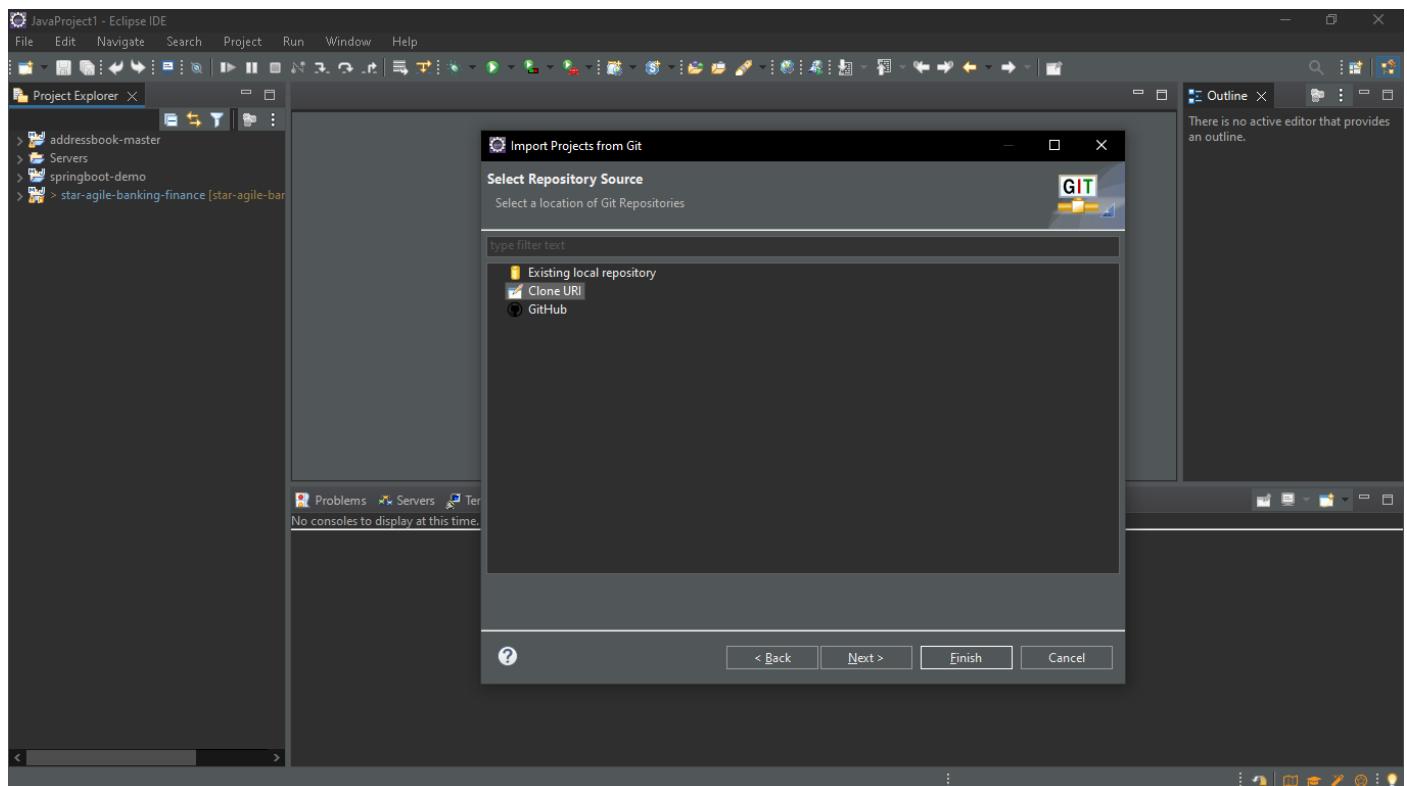
Kubernetes cluster must contain at least 2 servers and must be monitored continuously using Prometheus and dashboard must be visualized using Grafana.

Link for the solution of Medicure project code is attached below, You can use it to validate your solution.

<https://github.com/StarAgileDevOpsTraining/star-agile-health-care.git>

Note: To have a detailed information about running the application and exposed APIs, Input/Output format, Refer to the README.md in the GitHub repository.





→ <https://github.com/StarAgileDevOpsTraining/star-agile-health-care.git>

star-agile-health-care Public
forked from shubhamkushwah123/star-agile-health-care

master 1 Branch 0 Tags

This branch is up to date with shubhamkushwah123/star-agile-health-care:master

shubhamkushwah123 selenium test feature for contact.html has been added

.mvn/wrapper doctorify committed

src selenium test feature updated

.DS_Store testcases updated

.gitignore project name updated

Dockerfile Dockerfile added

ansible-playbook.yml selenium test feature

mvnw doctorify committed

Local Codespaces

Clone

HTTPS SSH GitHub CLI

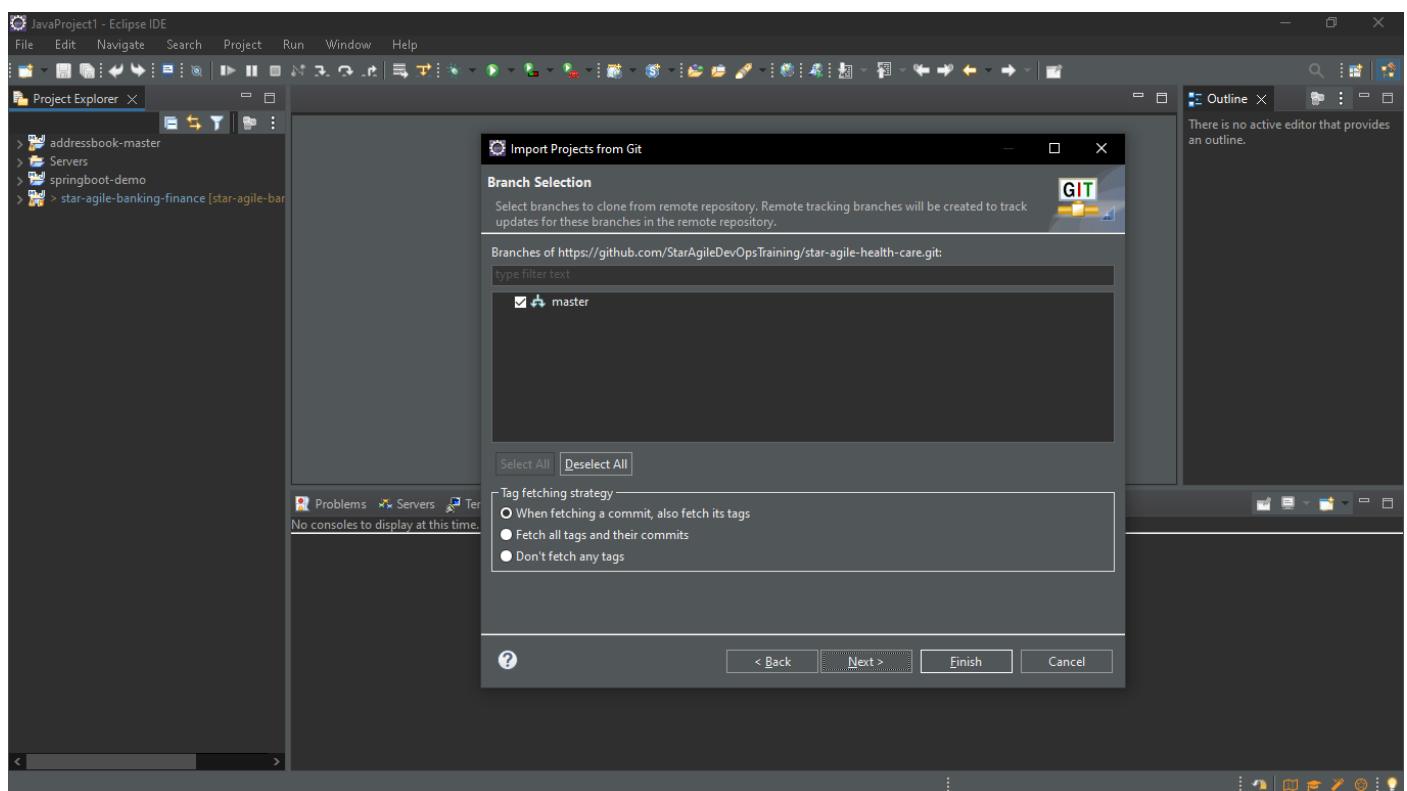
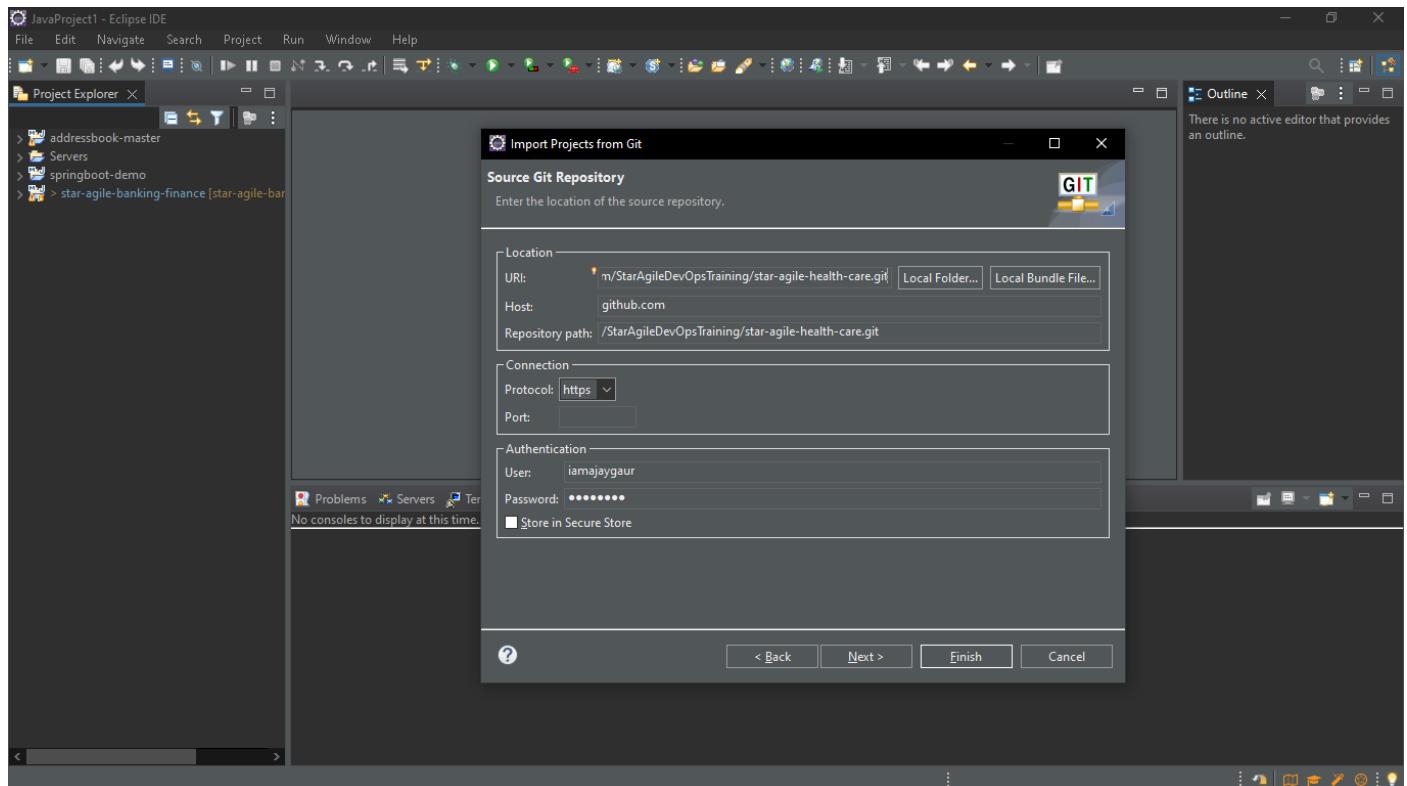
https://github.com/StarAgileDevOpsTraining/star-agile-health-care

Activity 1 star 0 watching 141 forks Report repository

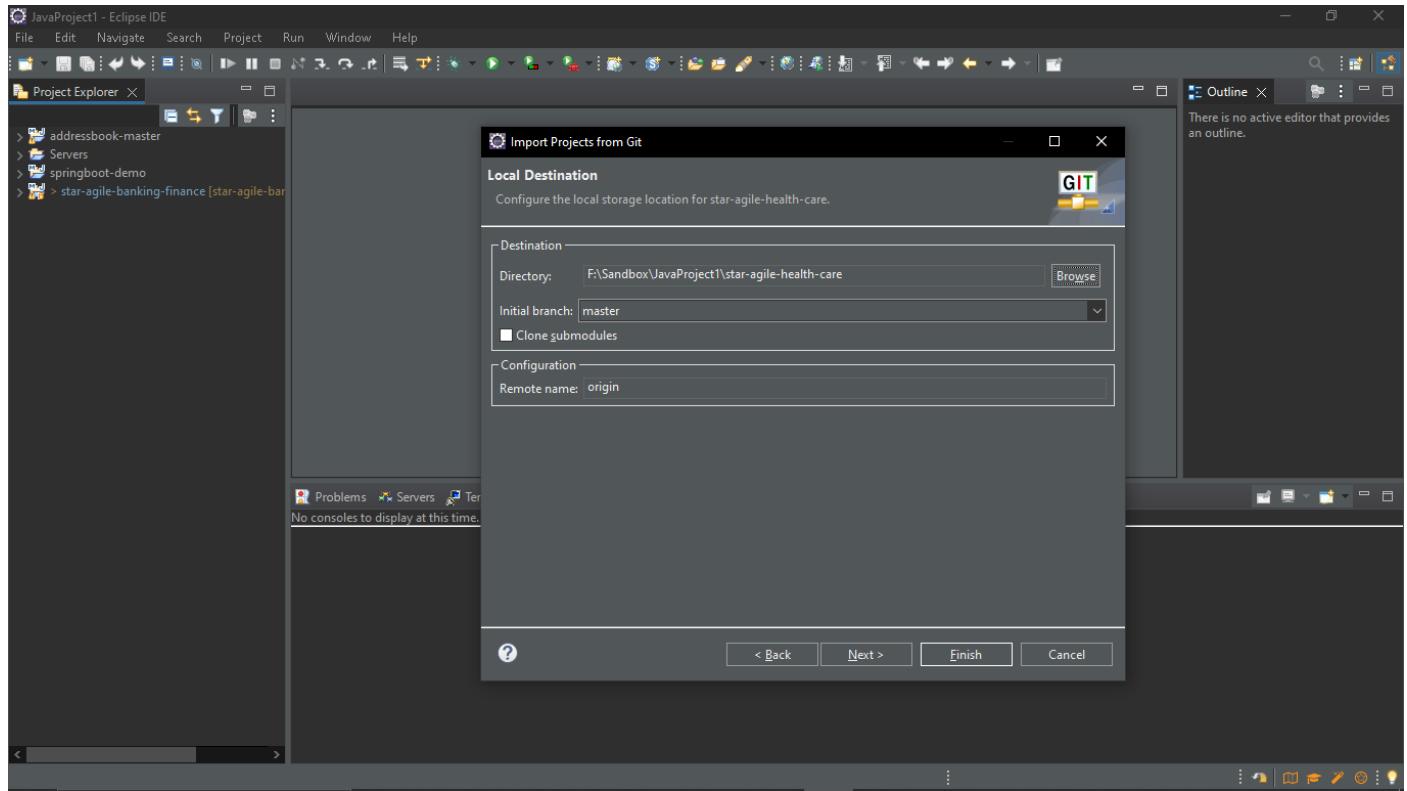
No releases published

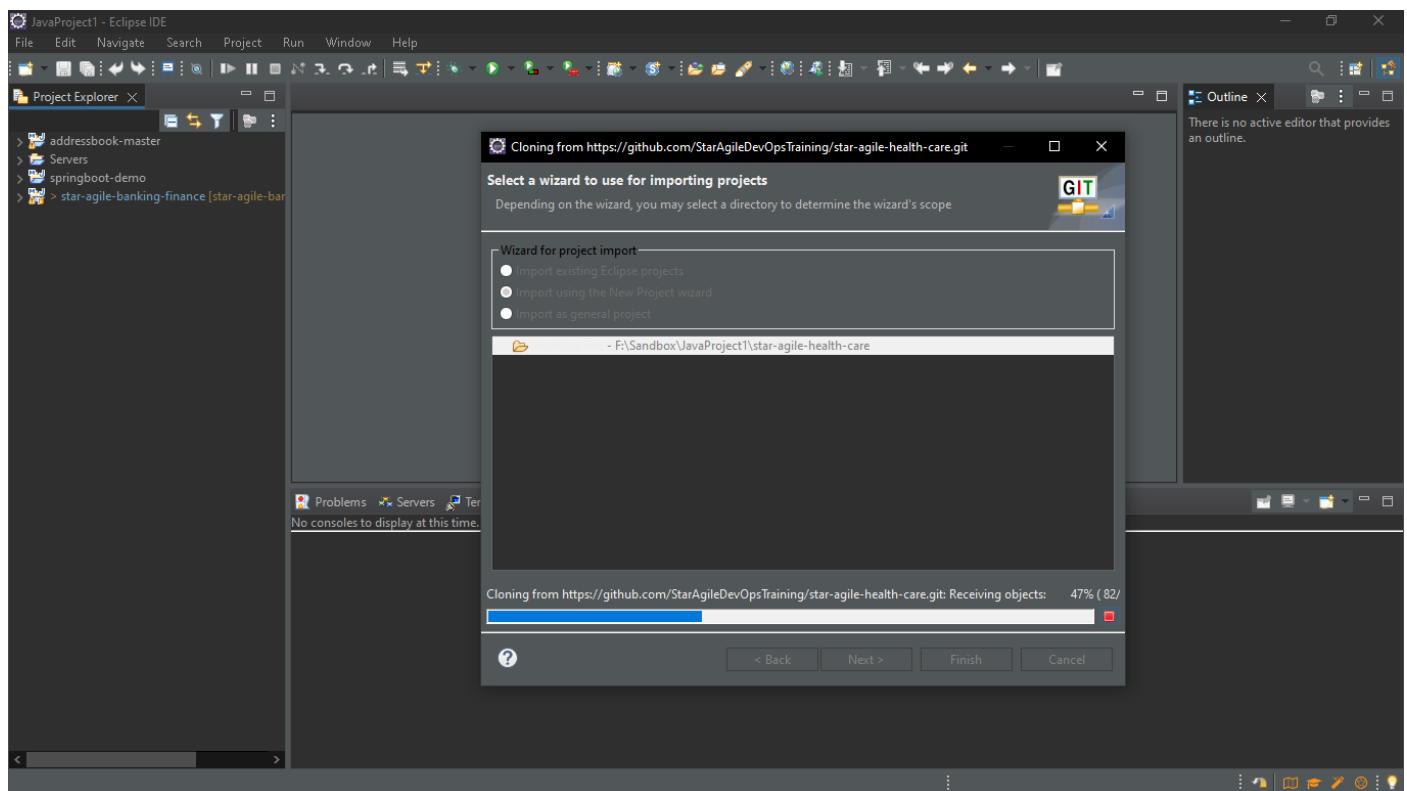
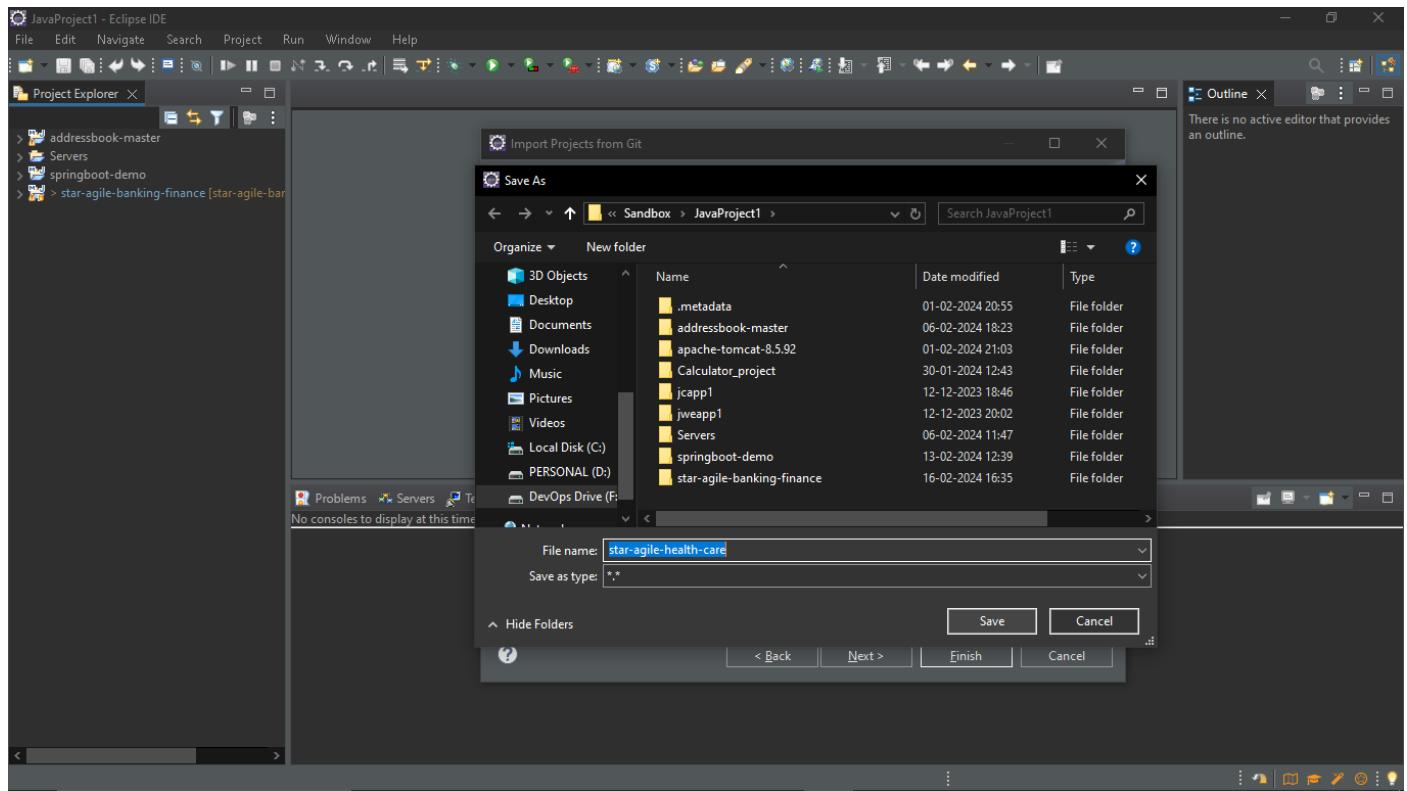
No packages published

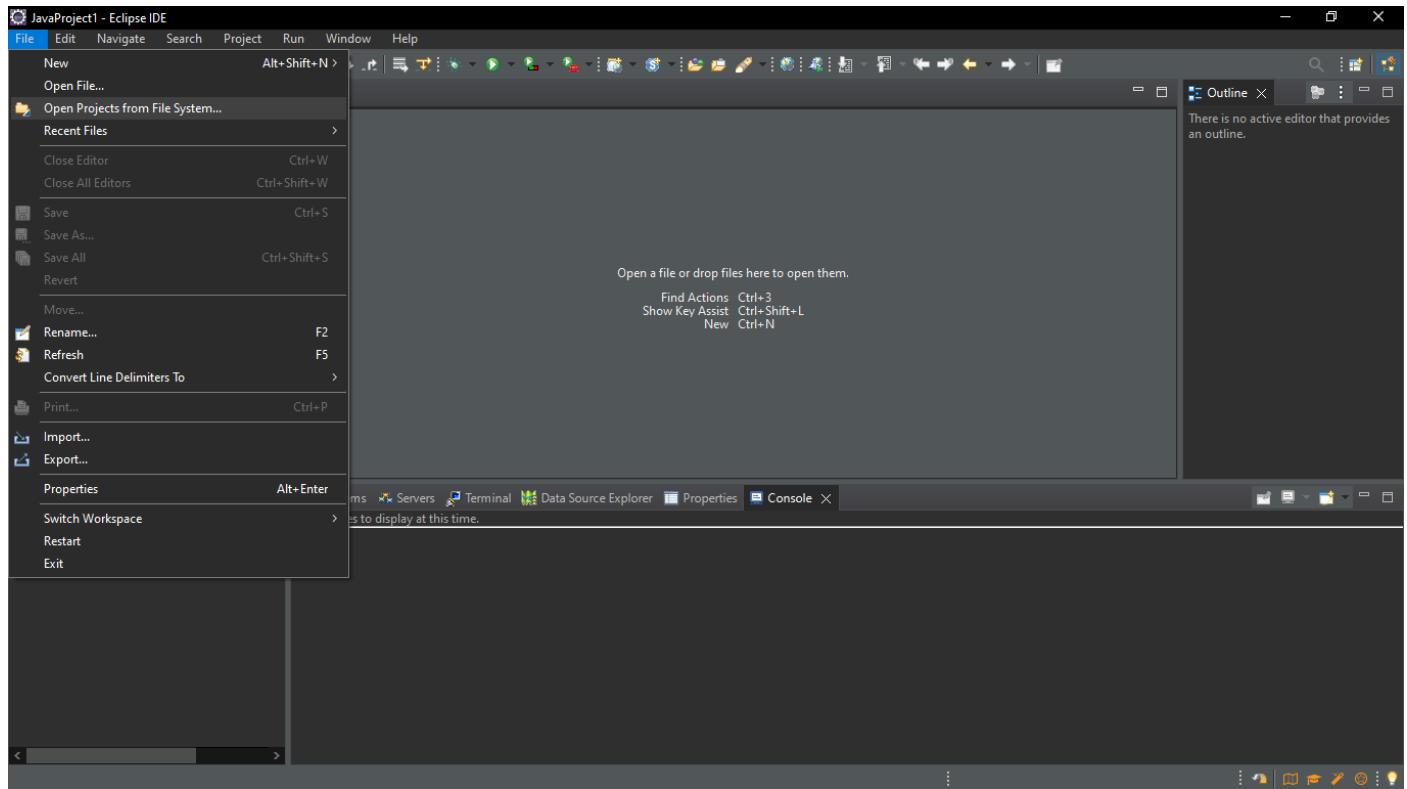
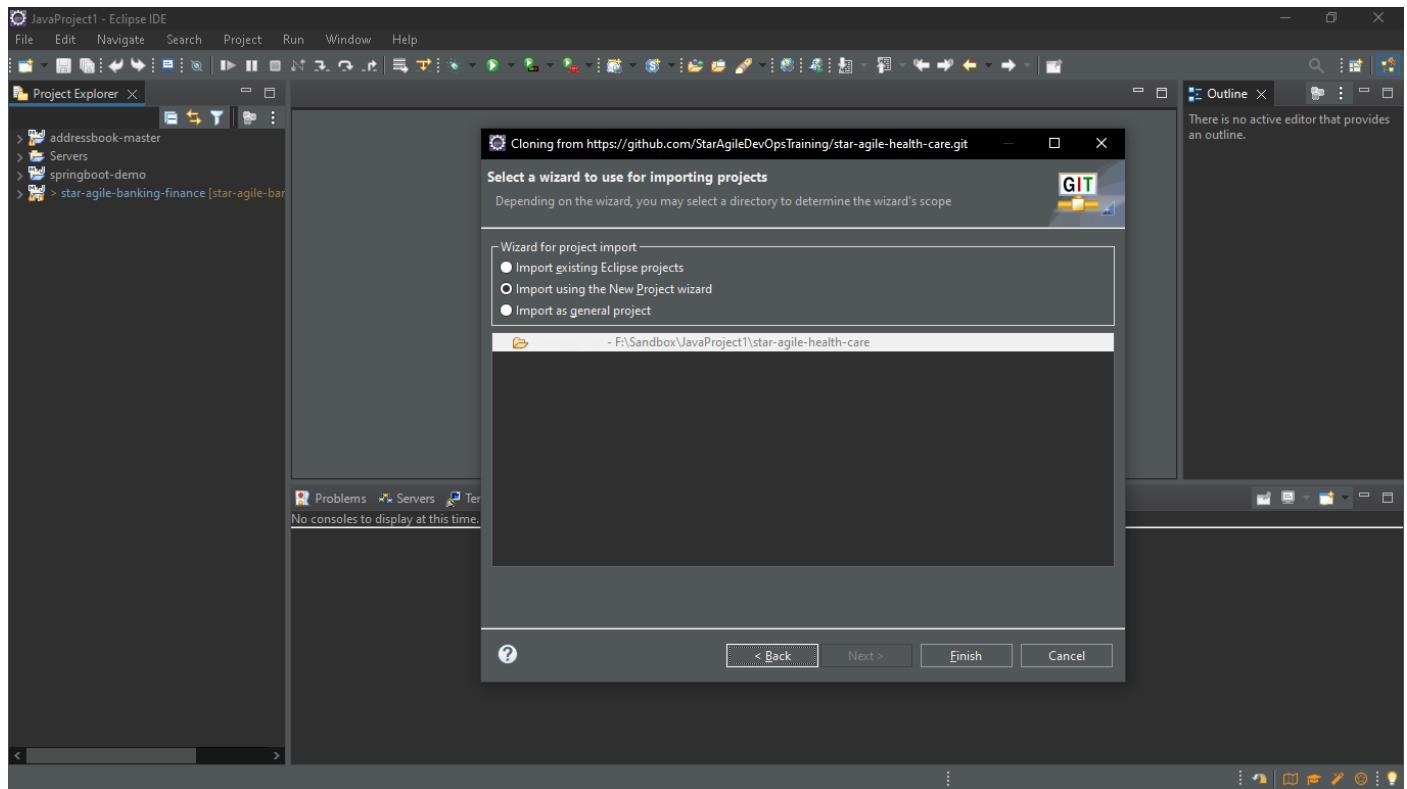
→ <https://github.com/StarAgileDevOpsTraining/star-agile-health-care.git>



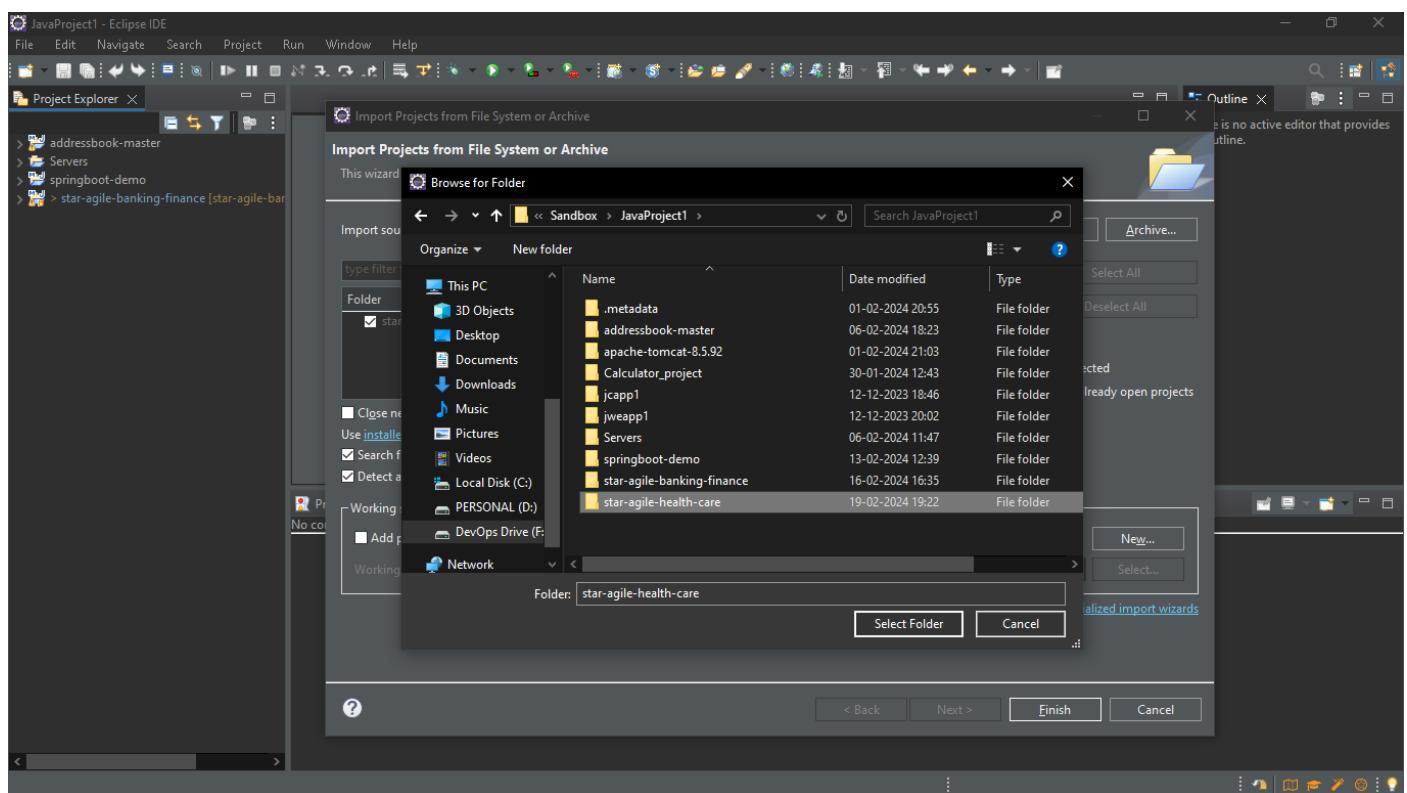
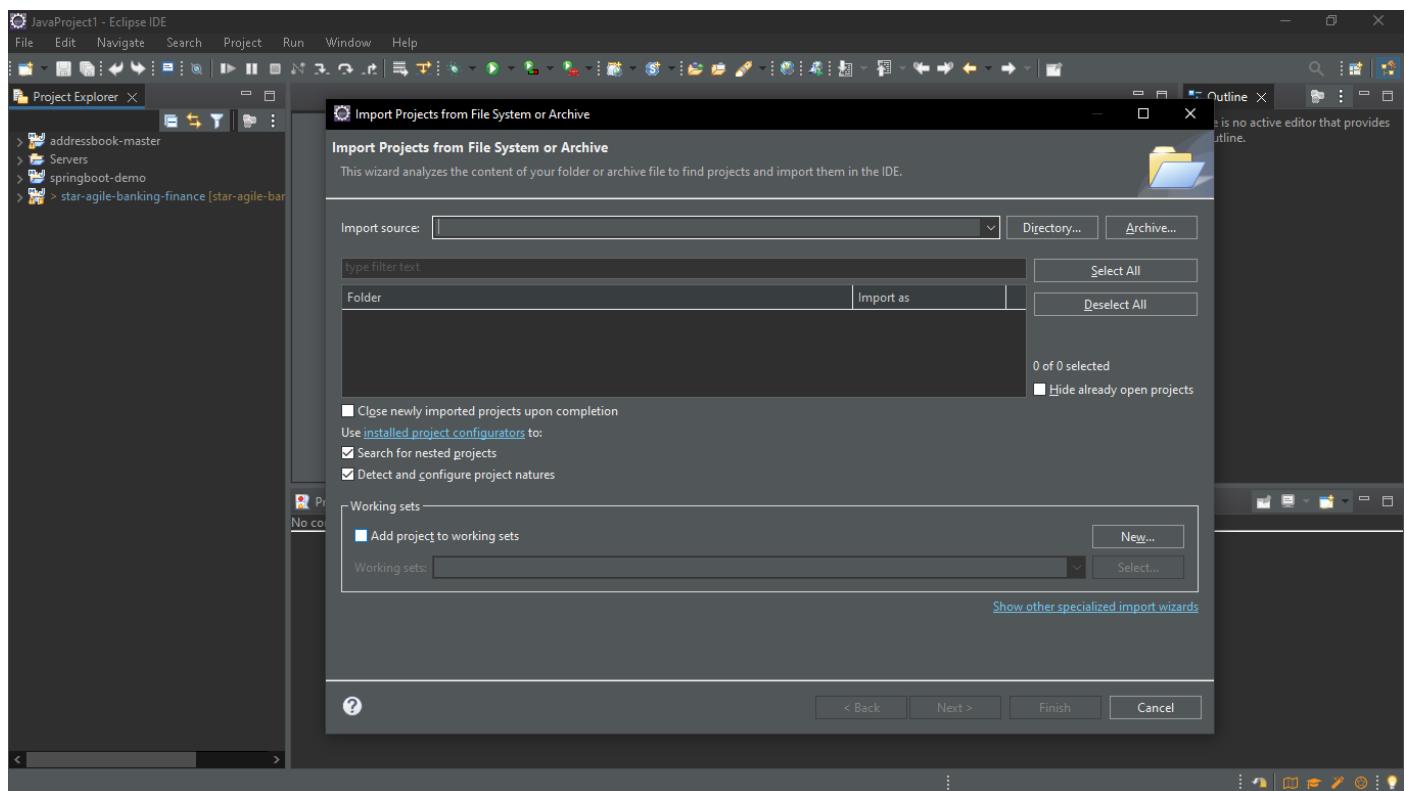
→ Select your Destination where to place the project.

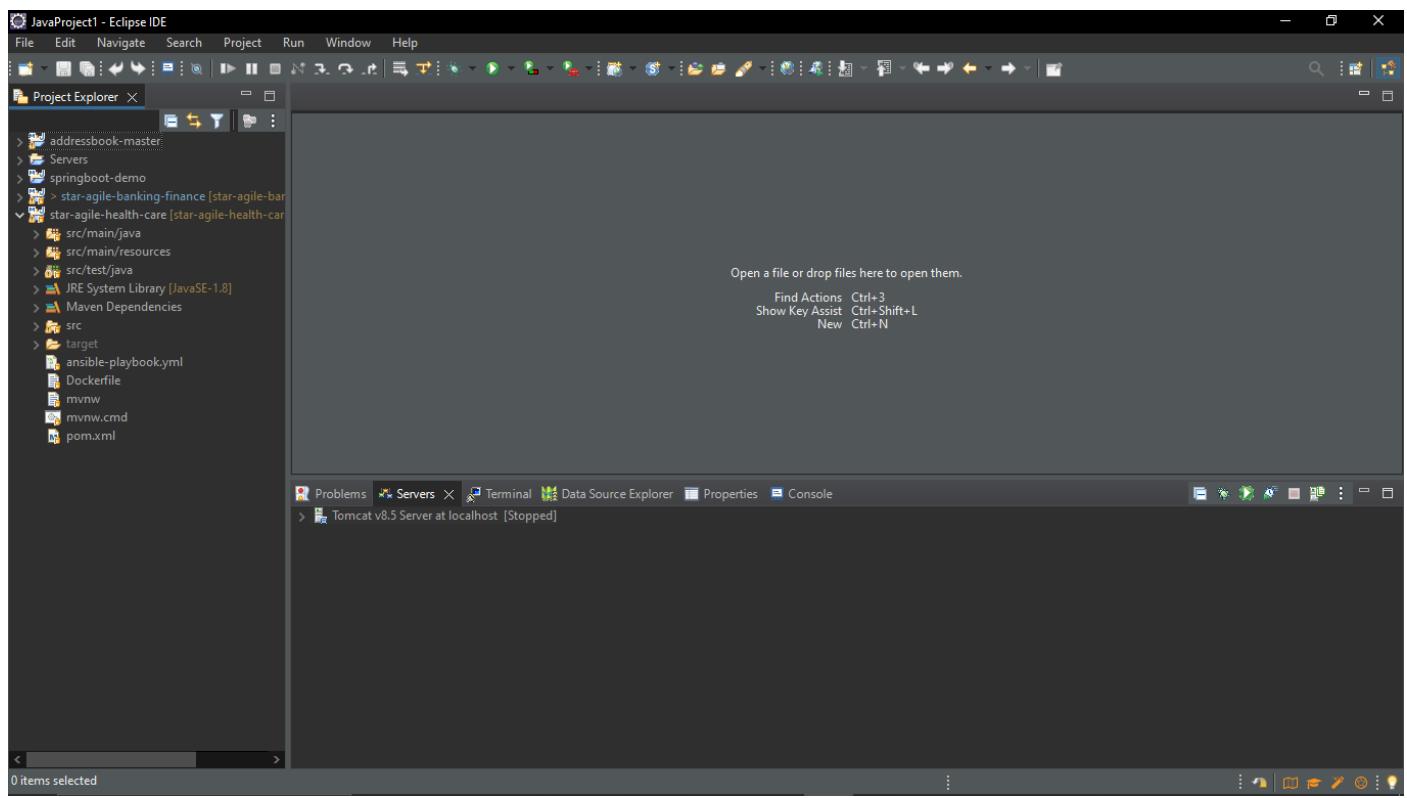
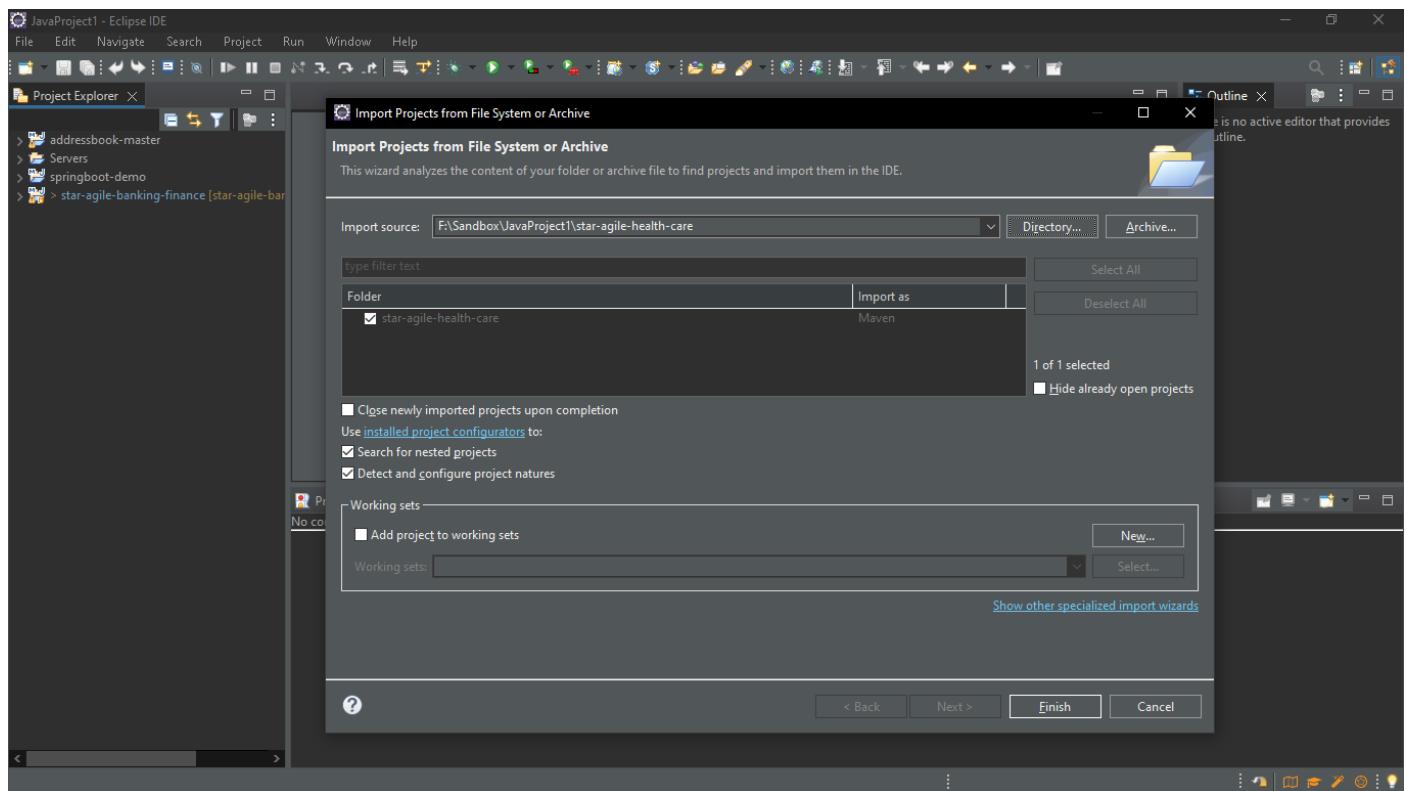


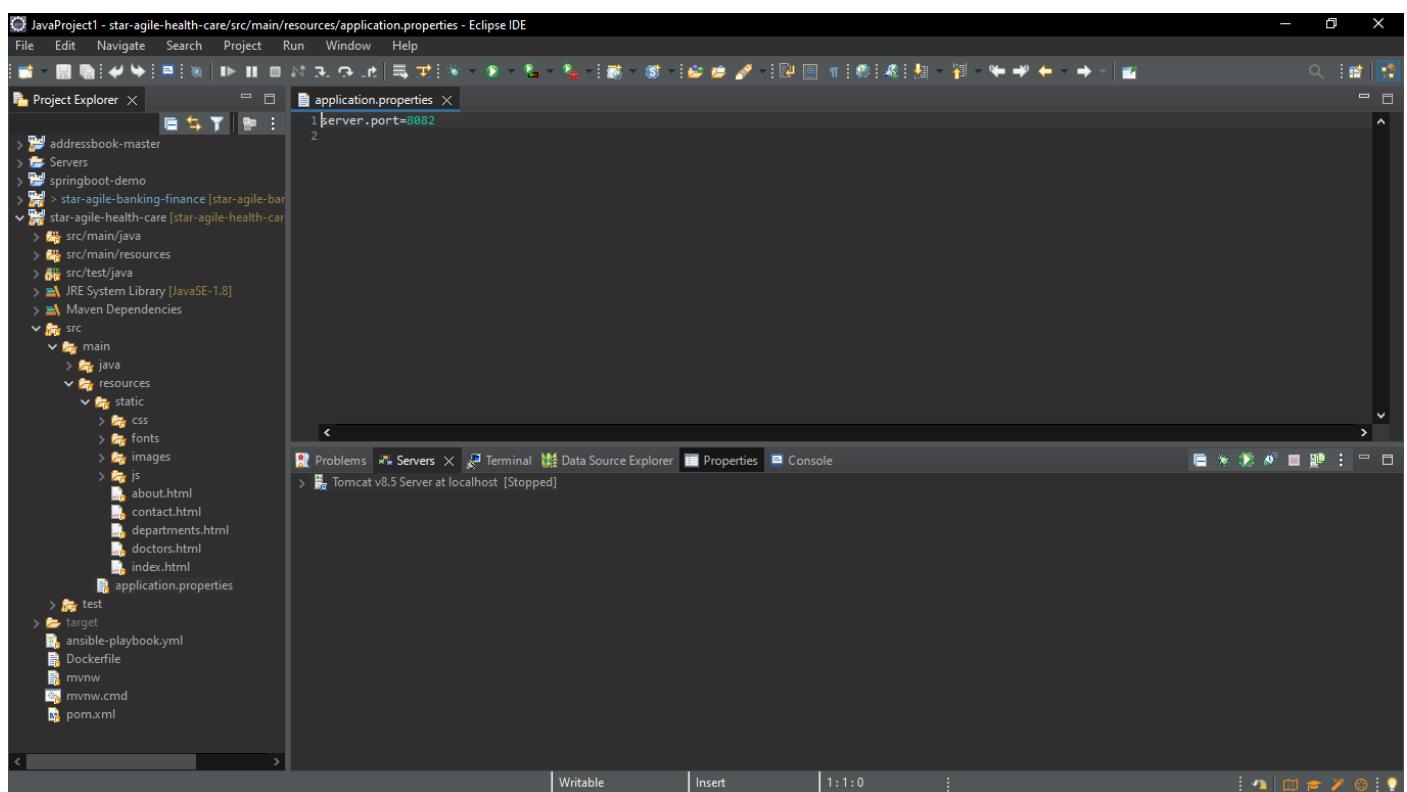
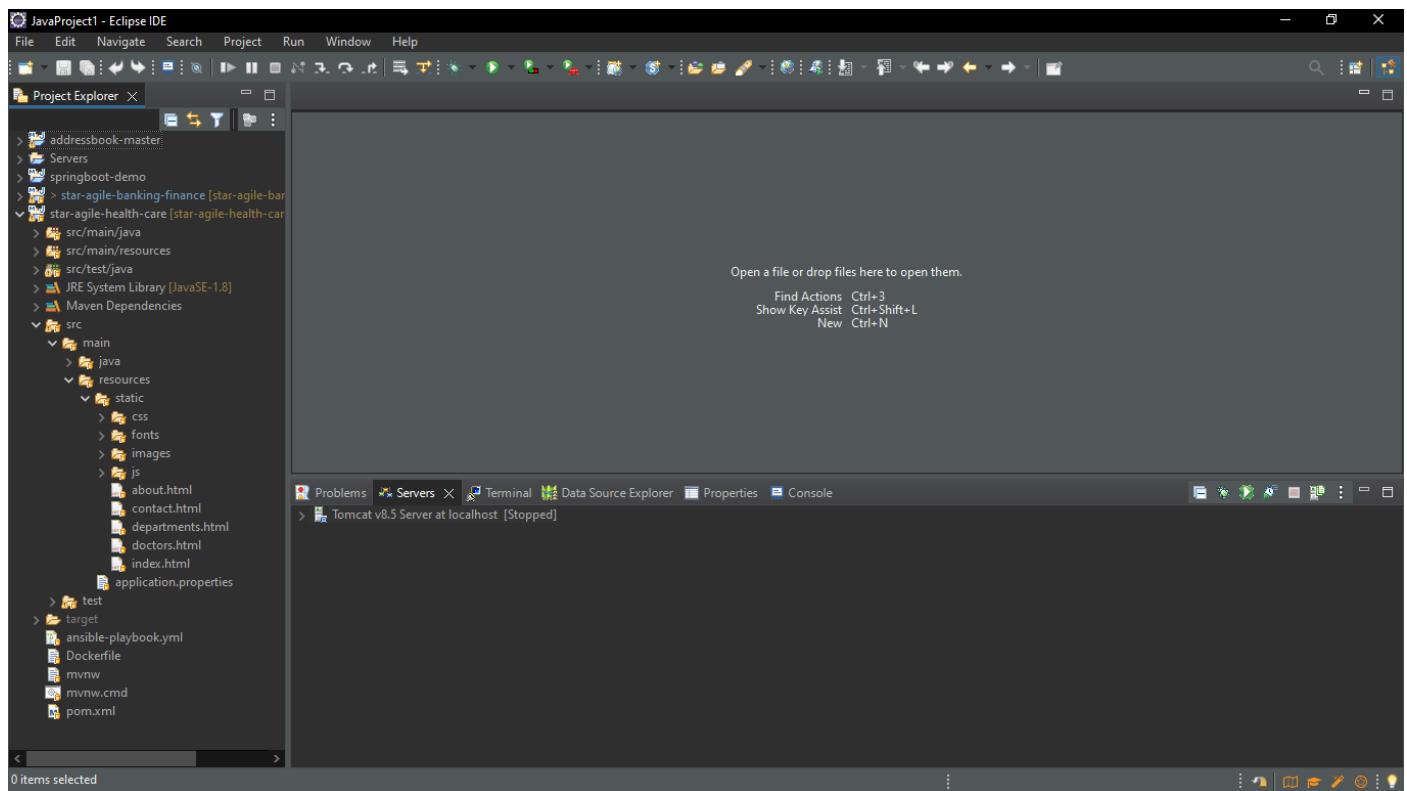


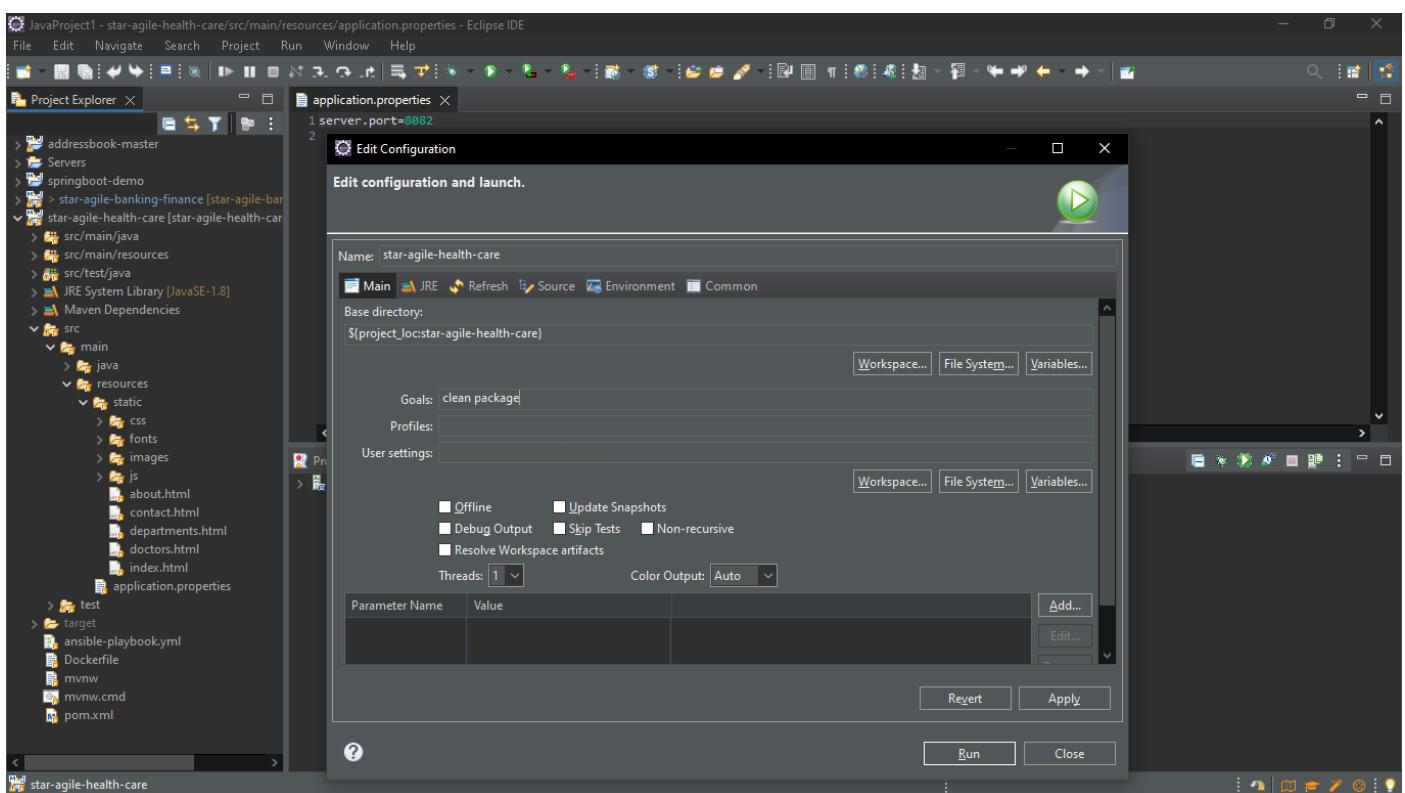
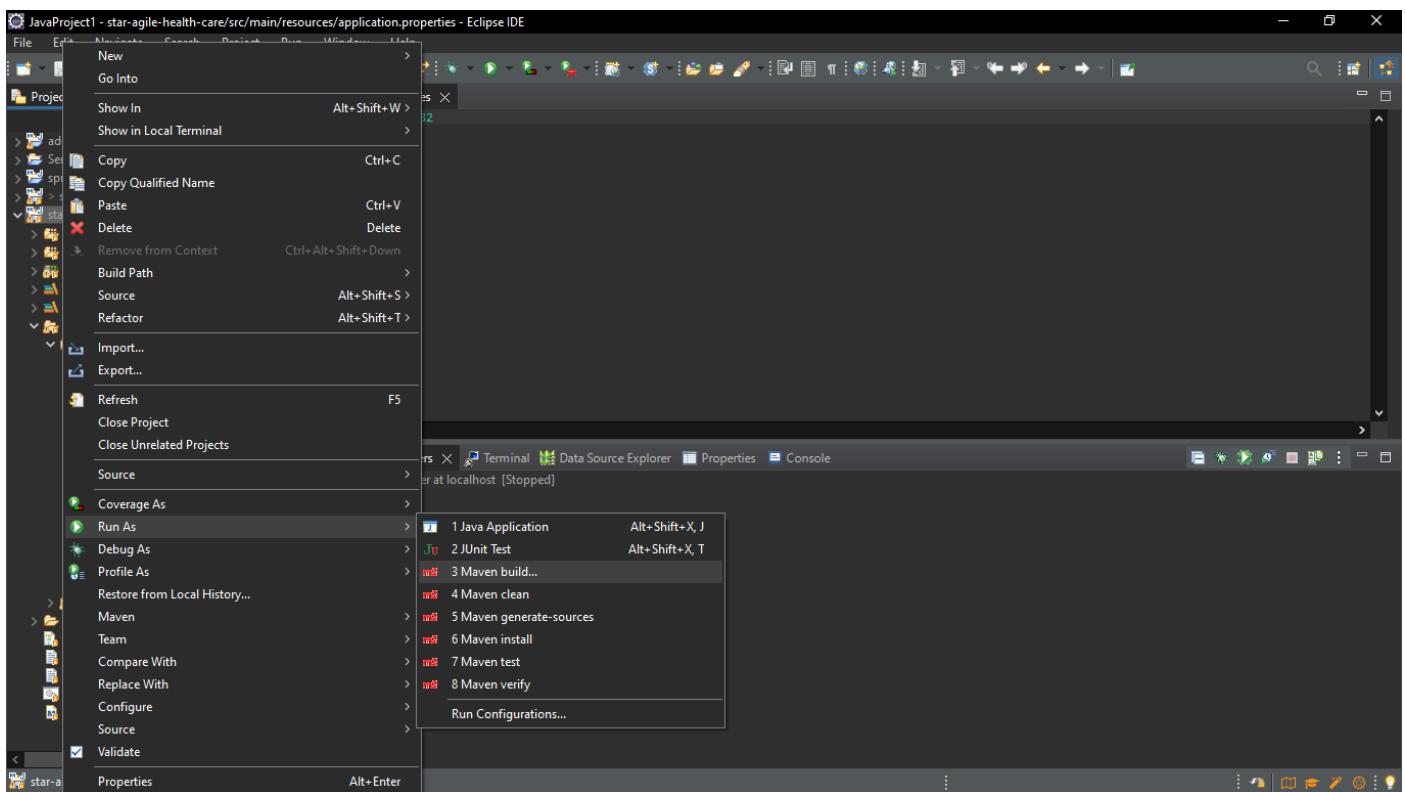


→ Select the project directory









JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X

addressbook-master
springboot-demo
star-agile-banking-finance [star-agile-bar]
star-agile-health-care [star-agile-health-car]
src/main/java
src/main/resources
src/test/java
IREE System Library [JavaSE-1.8]
Maven Dependencies
src
main
java
resources
static
css
fonts
images
js
about.html
contact.html
departments.html
doctors.html
index.html
application.properties

application.properties X

```
1 server.port=8082
2
```

Problems Servers Terminal Data Source Explorer Properties Console X

star-agile-health-care [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm) [pid: 7224]

```
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.project.staragile:medicure >-----
[INFO] Building medicure 0.0.1-SNAPSHOT
[INFO]   from pom.xml
[INFO]   -----[ jar ]-----
[INFO] --- clean:3.2.0:clean (default-clean) @ medicure ---
[INFO] Deleting F:\Sandbox\JavaProject1\star-agile-health-care\target
[INFO]
[INFO] --- resources:3.0.0:resources (default-resources) @ medicure ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Using 'UTF-8' encoding to copy filtered properties files.
[INFO] Copying 1 resource
[INFO] Copying 32 resources
[INFO]
[INFO] --- compiler:3.10.1:compile (default-compile) @ medicure ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 5 source files to F:\Sandbox\JavaProject1\star-agile-health-care\target\classes
```

JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X application.properties

addressbook-master
Servers
springboot-demo
star-agile-banking-finance [star-agile-bar]
star-agile-health-care [star-agile-health-car]
src/main/java
src/main/resources
src/test/java
IREE System Library [JavaSE-1.8]
Maven Dependencies
src
main
java
resources
static
css
fonts
images
js
about.html
contact.html
departments.html
doctors.html
index.html
application.properties

Problems Servers Terminal Data Source Explorer Properties Console X

<terminated> star-agile-health-care [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm - 7:29:17 pm) [pid: 7224]

:: Spring Boot :: (v2.7.4)

```
2024-02-19 19:29:00.585 INFO 3392 --- [           main] c.p.staragile.MedicureApplicationTests : Starting MedicureApplicationTests using Java 17.0.7 c
2024-02-19 19:29:00.590 INFO 3392 --- [           main] c.p.staragile.MedicureApplicationTests : No active profile set, falling back to 1 default prof
2024-02-19 19:29:02.551 INFO 3392 --- [           main] s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT
2024-02-19 19:29:02.660 INFO 3392 --- [           main] s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 86 ms. Fc
2024-02-19 19:29:04.373 INFO 3392 --- [           main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2024-02-19 19:29:05.002 INFO 3392 --- [           main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2024-02-19 19:29:05.325 INFO 3392 --- [           main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: defa
2024-02-19 19:29:05.595 INFO 3392 --- [           main] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.6.11.Final
2024-02-19 19:29:06.196 INFO 3392 --- [           main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations [5.1.2.Fir
2024-02-19 19:29:06.744 INFO 3392 --- [           main] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.H2dia
2024-02-19 19:29:08.368 INFO 3392 --- [           main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000450: Using JtaPlatform implementation: [org.hib
2024-02-19 19:29:08.394 INFO 3392 --- [           main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence
2024-02-19 19:29:10.371 WARN 3392 --- [           main] jpaBaseConfiguration$JpaWebConfiguration : spring-jpa.open-in-view is enabled by default. Theref
2024-02-19 19:29:11.480 INFO 3392 --- [           main] o.s.b.a.w.s.WelcomePageHandlerMapping : Adding welcome page: class path resource [static/inde
```

JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X

application.properties X

```
1 server.port=8082
2
```

src/main/java
src/main/resources
src/test/java
JRE System Library [JavaSE-1.8]
Maven Dependencies
src
main
java
resources
static
css
fonts
images
js
about.html
contact.html
departments.html
doctors.html
index.html
application.properties

test
target
ansible-playbook.yml
Dockerfile
mvnw
mvnw.cmd
pom.xml

Problems Servers Terminal Data Source Explorer Properties Console X

```
<terminated> star-agile-health-care [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm - 7:29:17 pm) [pid: 7224]
2024-02-19 19:29:13.164 INFO 3392 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit
2024-02-19 19:29:13.165 INFO 3392 --- [ionShutdownHook] .SchemaDropperImpl$DelayedDropActionImpl : HHH000477: Starting delayed evictData of schema as part of shutdown...
2024-02-19 19:29:13.175 INFO 3392 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown initiated...
2024-02-19 19:29:13.183 INFO 3392 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.

[INFO] Results:
[INFO]
[INFO] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0

[INFO] --- jar:3.2.2:jar (default-jar) @ medicure ---
[INFO] Building jar: F:\(sandbox\JavaProject1\star-agile-health-care\target\medicure-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot:2.7.4:repackage (repackage) @ medicure ---
[INFO] Replacing main artifact with repackaged archive
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 29.982 s
[INFO] Finished at: 2024-02-19T19:29:17+05:30
[INFO]
```

JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X

New Go Into Show In Alt+Shift+W >

Show in Local Terminal >

Copy Ctrl+C Copy Qualified Name Ctrl+V Paste Ctrl+V Delete Delete Remove from Context Ctrl+Alt+Shift+Down

Build Path Alt+Shift+S >

Source Alt+Shift+S >

Refactor Alt+Shift+T >

Import... Export...

Refresh Refresh F5

Close Project
Close Unrelated Projects
Source
Coverage As
Run As
Debug As
Profile As
Restore from Local History...
Maven
Team
Compare With
Replace With
Configure
Source
Validate
Properties Alt+Enter

Data Source Explorer Properties Console X

```
[d] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm - 7:29:17 pm) [pid: 7224]
-- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit
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-- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.

[INFO] Results:
[INFO]
[INFO] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0

[INFO] --- jar:3.2.2:jar (default-jar) @ medicure ---
[INFO] Building jar: F:\(sandbox\JavaProject1\star-agile-health-care\target\medicure-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot:2.7.4:repackage (repackage) @ medicure ---
[INFO] Replacing main artifact with repackaged archive
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 29.982 s
[INFO] Finished at: 2024-02-19T19:29:17+05:30
[INFO]
```

JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X

application.properties X

```
1 server.port=8082
2
```

src/main/resources
src/test/java
JRE System Library [JavaSE-1.8]
Maven Dependencies
src
 main
 java
 resources
 static
 css
 fonts
 images
 js
 about.html
 contact.html
 departments.html
 doctors.html
 index.html
 application.properties
 test
target
 generated-sources
 generated-test-sources
 maven-archiver
 maven-status
surefire-reports
 medicure-0.0.1-SNAPSHOT.jar
 medicure-0.0.1-SNAPSHOT.jar.org
ansible-playbook.yml
Dockerfile
mvnw
mvnw.cmd
pom.xml

Problems Servers Terminal Data Source Explorer Properties Console X

```
<terminated> star-agile-health-care [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm - 7:29:17 pm) [pid: 7224]
2024-02-19 19:29:13.164 INFO 3392 --- [ionShutdownhook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit
2024-02-19 19:29:13.165 INFO 3392 --- [ionShutdownhook] .SchemaDropperImpl$DelayedDropActionImpl : HHH000477: Starting delayed evictData of schema as part of shutdown...
2024-02-19 19:29:13.175 INFO 3392 --- [ionShutdownhook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown initiated...
2024-02-19 19:29:13.183 INFO 3392 --- [ionShutdownhook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.

[INFO] Results:
[INFO]
[INFO] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] --- jar:3.2.2:jar (default-jar) @ medicure ---
[INFO] Building jar: F:\sandbox\JavaProject1\star-agile-health-care\target\medicure-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot:2.7.4:repackage (repackage) @ medicure ---
[INFO] Replacing main artifact with repackaged archive
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 29.982 s
[INFO] Finished at: 2024-02-19T19:29:17+05:30
[INFO] -----
```

medicure-0.0.1-SNAPSHOT.jar - star-agile-health-care/target

JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

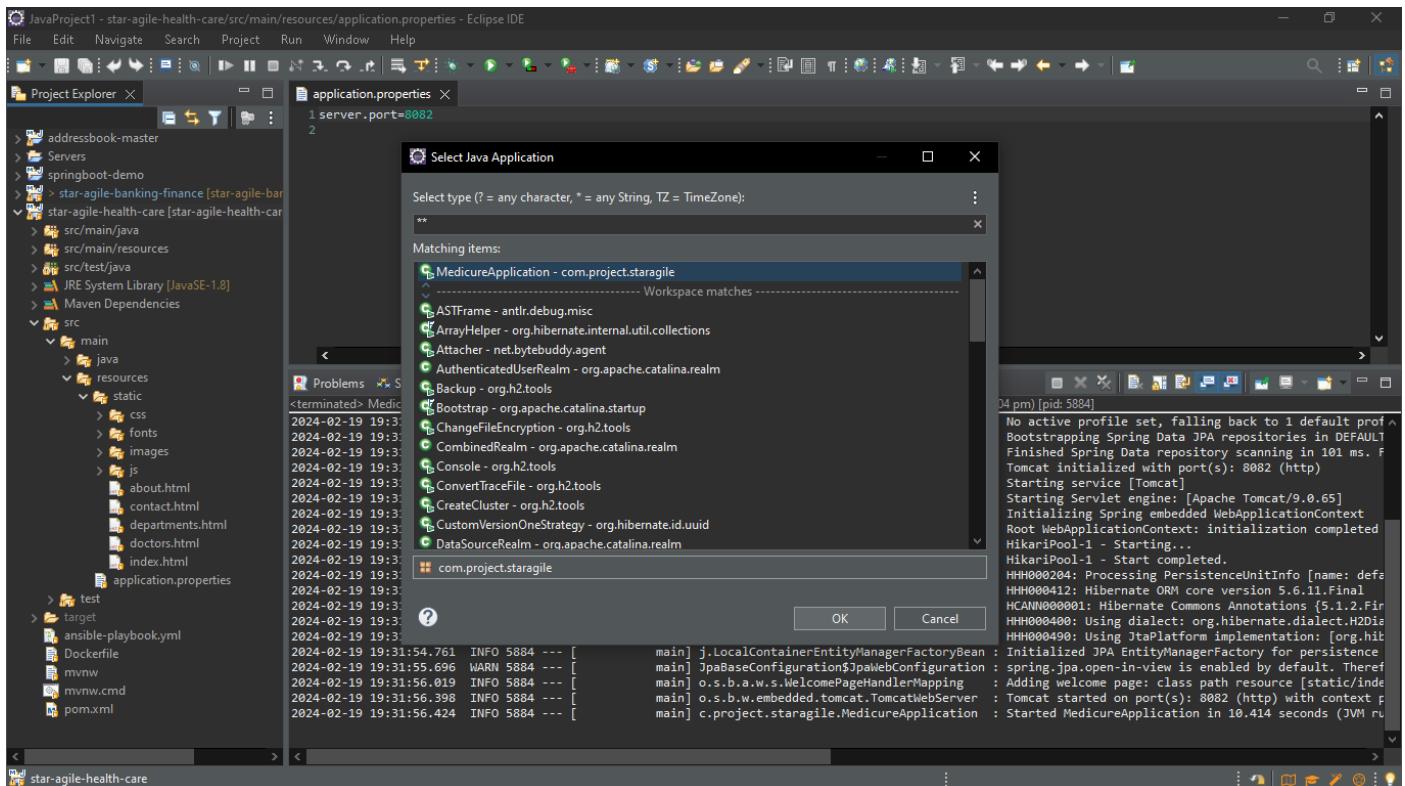
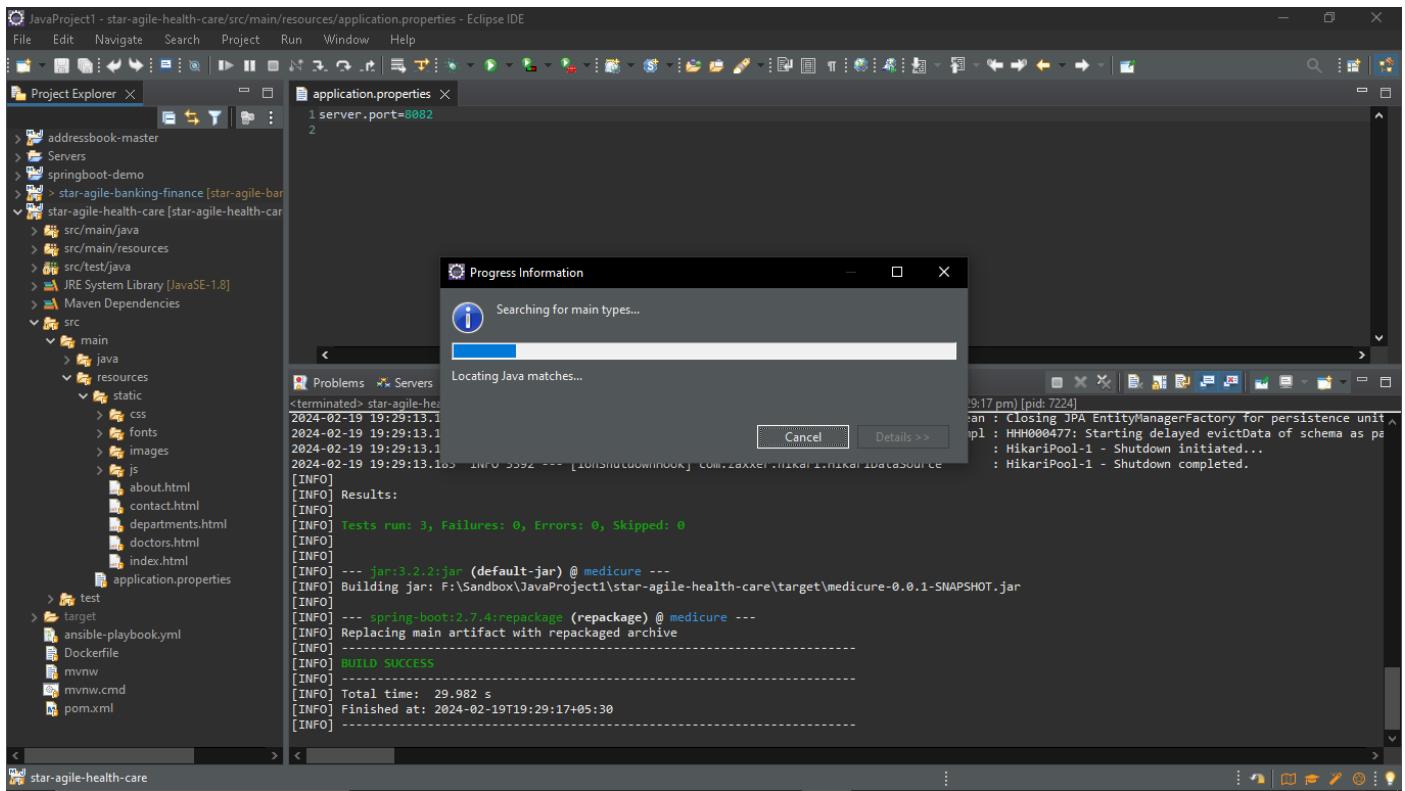
File Edit New Go Into Show In Alt+Shift+W Show in Local Terminal

Copy Ctrl+C Copy Qualified Name Ctrl+Q Paste Ctrl+V Delete Ctrl+X Remove from Context Ctrl+Alt+Shift+Down Build Path Alt+Shift+B Source Alt+Shift+S Refactor Alt+Shift+T Import... Export... Refresh F5 Close Project Close Unrelated Projects Source Coverage As Run As Debug As Profile As Restore from Local History... Maven Team Compare With Replace With Configure Source Validate Properties Alt+Enter

Terminal Data Source Explorer Properties Console X

```
health-care [Maven Build] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:28:43 pm - 7:29:17 pm) [pid: 7224]
164 INFO 3392 --- [ionShutdownhook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit
165 INFO 3392 --- [ionShutdownhook] .SchemaDropperImpl$DelayedDropActionImpl : HHH000477: Starting delayed evictData of schema as part of shutdown...
175 INFO 3392 --- [ionShutdownhook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown initiated...
183 INFO 3392 --- [ionShutdownhook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.
```

1 Java Application	Alt+Shift+X, J
2 JUnit Test	Alt+Shift+X, T
3 Maven build...	
4 Maven clean	
5 Maven generate-sources	
6 Maven install	
7 Maven test	
8 Maven verify	
Run Configurations...	
9 star-agile-health-care (Maven Build)	



JavaProject1 - star-agile-health-care/src/main/resources/application.properties - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer X application.properties X

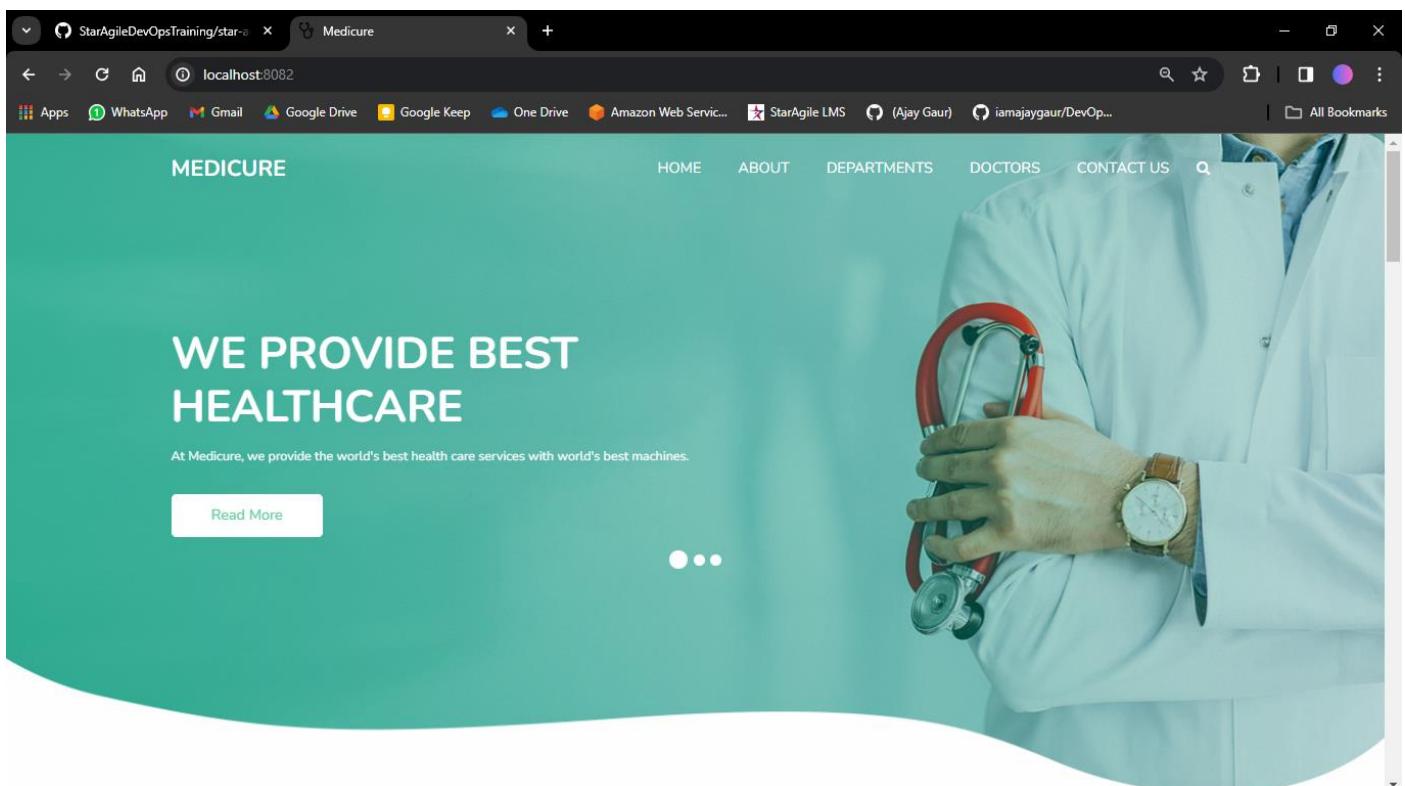
```
1 server.port=8082
2
```

addressbook-master
Servers
springboot-demo
> star-agile-banking-finance [star-agile-bar]
star-agile-health-care [star-agile-health-car]
> src/main/java
> src/main/resources
> src/test/java
> JRE System Library [JavaSE-1.8]
> Maven Dependencies
> src
 > main
 > java
 > resources
 > static
 > css
 > fonts
 > images
 > js
 about.html
 contact.html
 departments.html
 doctors.html
 index.html
 application.properties
 > test
 > ansible-playbook.yml
 Dockerfile
 mvnw
 mvnw.cmd
 pom.xml

Problems Servers Terminal Data Source Explorer Properties Console MedicureApplication [Java Application] [pid: 620]

```
2024-02-19 19:32:21.462 INFO 620 --- [           main] c.project.staragile.MedicureApplication : No active profile set, falling back to 1 default profile: DEFAULT
2024-02-19 19:32:23.559 INFO 620 --- [           main] s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT environment
2024-02-19 19:32:23.760 INFO 620 --- [           main] s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 177 ms. Found 0 repository interfaces
2024-02-19 19:32:25.521 INFO 620 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8082 (http)
2024-02-19 19:32:25.541 INFO 620 --- [           main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-02-19 19:32:25.541 INFO 620 --- [           main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.65]
2024-02-19 19:32:25.906 INFO 620 --- [           main] o.a.c.c.C.[localhost].[] : Initializing Spring embedded WebApplicationContext
2024-02-19 19:32:25.906 INFO 620 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1 ms
2024-02-19 19:32:26.373 INFO 620 --- [           main] com.zaxxer.hikari.HikariDataSource : Hikaripool-1 - Starting...
2024-02-19 19:32:26.770 INFO 620 --- [           main] com.zaxxer.hikari.HikariDataSource : Hikaripool-1 - Start completed.
2024-02-19 19:32:26.953 INFO 620 --- [           main] o.hibernate.jpa.internal.util.LogHelper : HHHH000204: Processing PersistenceUnitInfo [name: defau
2024-02-19 19:32:27.219 INFO 620 --- [           main] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.6.11.Final
2024-02-19 19:32:27.617 INFO 620 --- [           main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations 5.1.2.Final
2024-02-19 19:32:27.899 INFO 620 --- [           main] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.H2Dial
2024-02-19 19:32:29.145 INFO 620 --- [           main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibe
2024-02-19 19:32:29.172 INFO 620 --- [           main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit
2024-02-19 19:32:29.800 WARN 620 --- [           main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefor
2024-02-19 19:32:30.106 INFO 620 --- [           main] o.s.b.a.w.s.WelcomePageHandlerMapping : Adding welcome page: class path resource [static/index.html]
2024-02-19 19:32:30.518 INFO 620 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8082 (http) with context pa
2024-02-19 19:32:30.544 INFO 620 --- [           main] c.project.staragile.MedicureApplication : Started MedicureApplication in 10.06 seconds (JVM runn
```

→ <http://localhost:8082/index.html>



StarAgileDevOpsTraining/star- Medicure localhost:8082

OUR DEPARTMENTS

**CARDIOLOGY**

**DIAGNOSIS**

**SURGERY**

**FIRST AID**

[View All](#)



ABOUT US

Medicure is the world's leading health care unit equipped with world's best doctors and machineries. Medicure is a specialized institution that focuses on treating injuries and diseases of the musculoskeletal system.

[Read More](#)

StarAgileDevOpsTraining/star- Medicure localhost:8082

[View All](#)



ABOUT US

Medicure is the world's leading health care unit equipped with world's best doctors and machineries. Medicure is a specialized institution that focuses on treating injuries and diseases of the musculoskeletal system.

[Read More](#)



StarAgileDevOpsTraining/star- Medicure localhost:8082

OUR DOCTORS

Meet our best in class doctors with 20+ years of experience as Orthopedics.

Elina Josh
Doctor

Adam View
Doctor

Mia Mike
Doctor

[View All](#)

This screenshot shows a section titled "OUR DOCTORS" on a website. It features three individual profiles of doctors, each with a photo, name, and title. The profiles are arranged horizontally. Below the profiles is a "View All" button.

StarAgileDevOpsTraining/star- Medicure localhost:8082

GET IN TOUCH

Your Name

Phone Number

Email

Message

SEND

Google

This page can't load Google Maps correctly.

Do you own this website?

OK

New York City Hall

Old City Hall Station

City Hall Park

Centre St

Park Row

Keyboard shortcuts | Map data ©2024 Google Terms Report a map error

This screenshot shows a contact form with fields for name, phone number, email, and message, followed by a "SEND" button. To the right, there is a map of New York City with a modal overlay from Google Maps stating "This page can't load Google Maps correctly." with an "OK" button.

TESTIMONIAL

StarAgileDevOpsTraining/star... Medicure

localhost:8082

TESTIMONIAL



Alan Emerson

I have got my knee joint replacement surgery at Medicure and I am very happy that I have chosen the best place.
Everything went very smooth.

“ ”



Reach at.. About Links Newsletter

Location About

Home About

Enter email

Subscribe

StarAgileDevOpsTraining/star... Medicure

localhost:8082

TESTIMONIAL



Alan Emerson

I have got my knee joint replacement surgery at Medicure and I am very happy that I have chosen the best place.
Everything went very smooth.

“ ”



Reach at.. About Links Newsletter

Location About

Home About

Departments

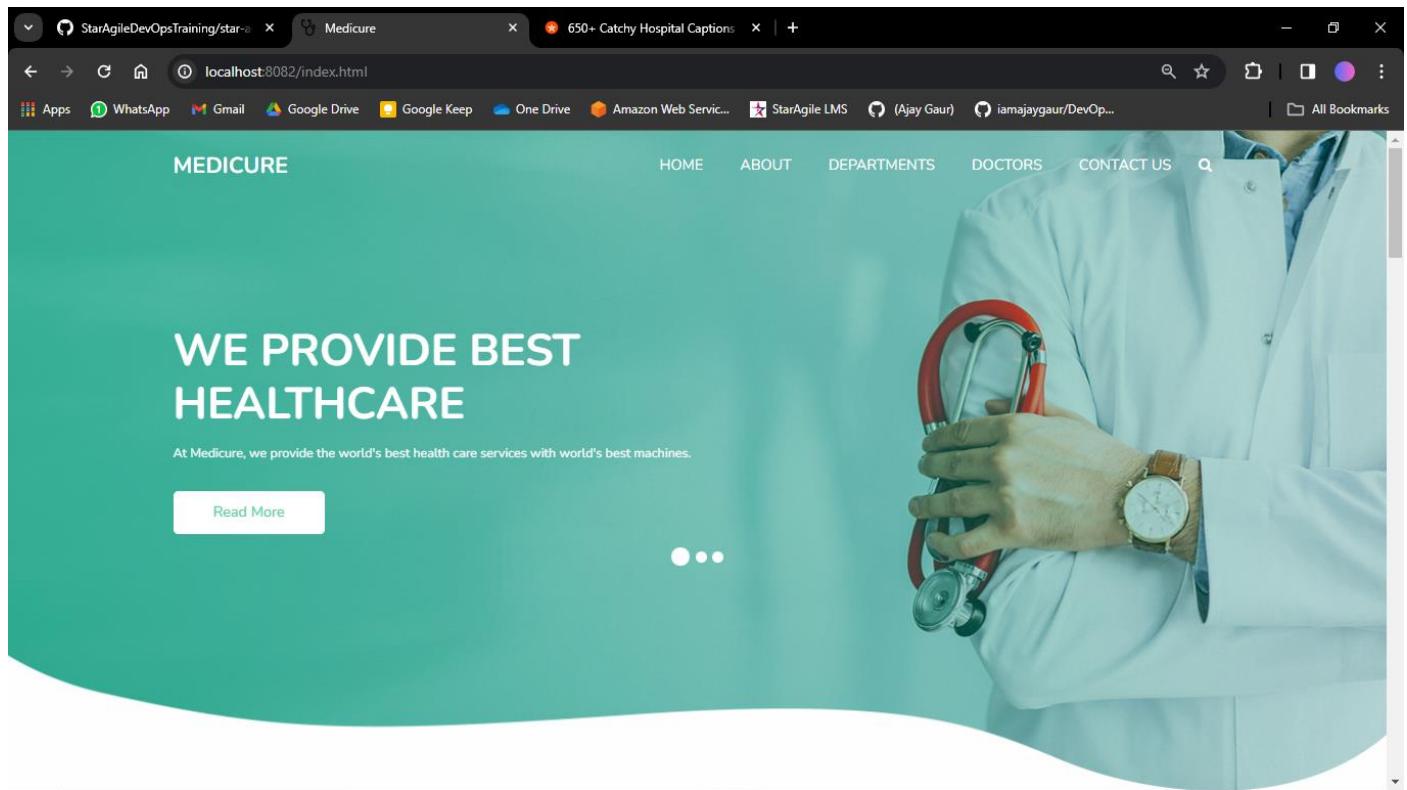
Doctors Contact Us

Enter email

Subscribe

© 2024 All Rights Reserved By Shubham Singh Kushwah

→ Make Changes on Home Page **WE PROVIDE BEST HEALTHCARE TO WHERE PERSONAL TOUCH HEALS.**



→ At index.html

JavaProject1 - star-agile-health-care/src/main/resources/static/index.html - Eclipse IDE

File Edit Source Navigate Project Run Window Help

Project Explorer X application.properties *index.html

```

82         </div>
83     </nav>
84 </header>
85 <!-- end header section -->
86 <!-- slider section -->
87 <section class="slider_section">
88     <div id="customCarousel1" class="carousel slide" data-ride="carousel">
89         <div class="carousel-inner">
90             <div class="carousel-item active">
91                 <div class="container">
92                     <div class="row">
93                         <div class="col-md-7">
94                             <div class="detail-box">
95                                 <h1>
96                                     Where personal touch heals.
97                                 </h1>
98                                 <p>
99                                     At Medicure, we provide the world's best health care services with world's best machines.
100                                </p>
101                                <div class="btn-box">
102                                    <a href="#" class="btn1">
103                                        Read More
104                                    </a>
105                                </div>
106                            </div>
107                        </div>
108                    </div>
109                </div>
110            </div>
111        <div class="carousel-item">
112            <div class="container">
113

```

Problems Servers Terminal Data Source Explorer Properties Console

2024-02-19 19:32:23.760 INFO 620 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 177 ms. Fc

2024-02-19 19:32:25.521 INFO 620 --- [main] o.s.w.eMBEDDED.Tomcat.TomcatWebServer : Tomcat initialized with port(s): 8082 (http)

2024-02-19 19:32:25.541 INFO 620 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]

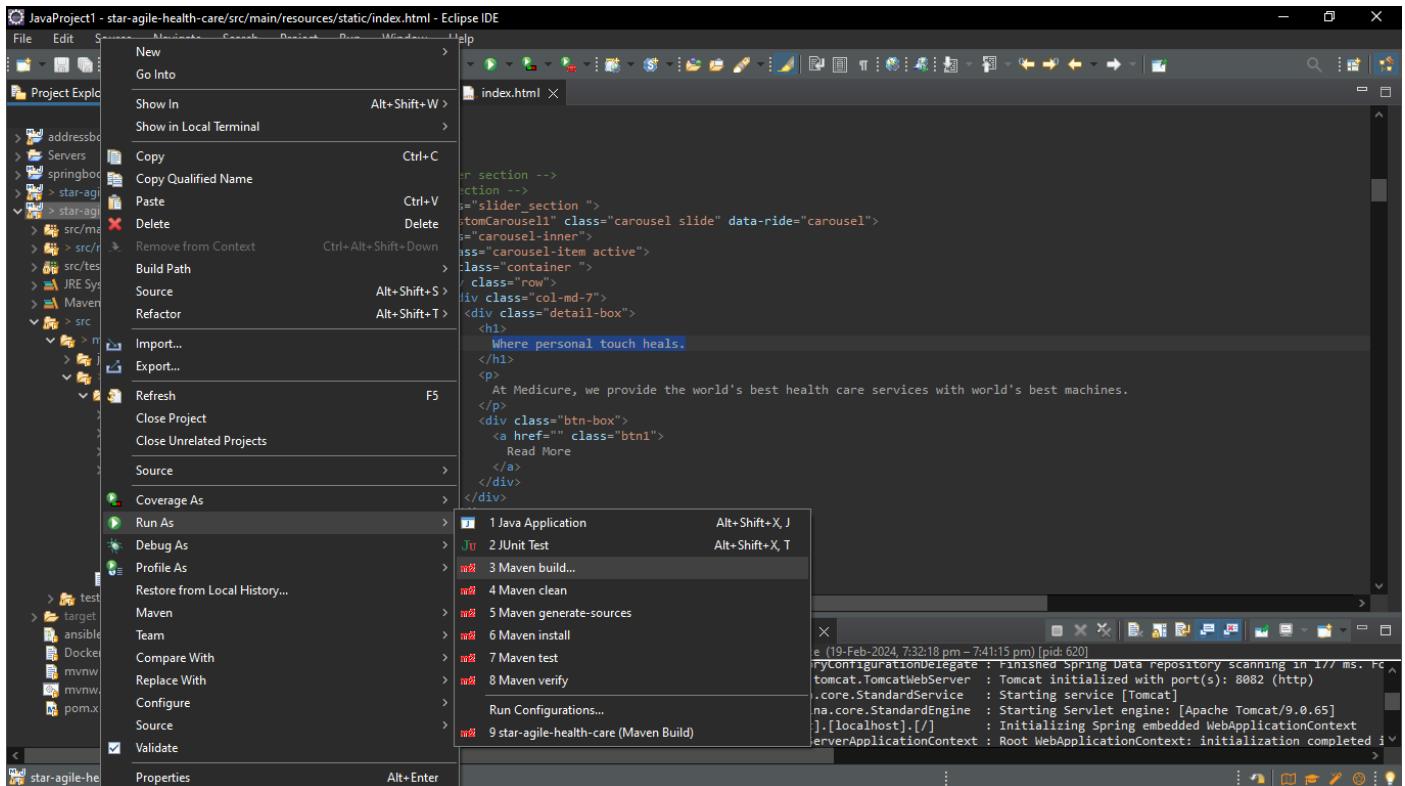
2024-02-19 19:32:25.541 INFO 620 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.65]

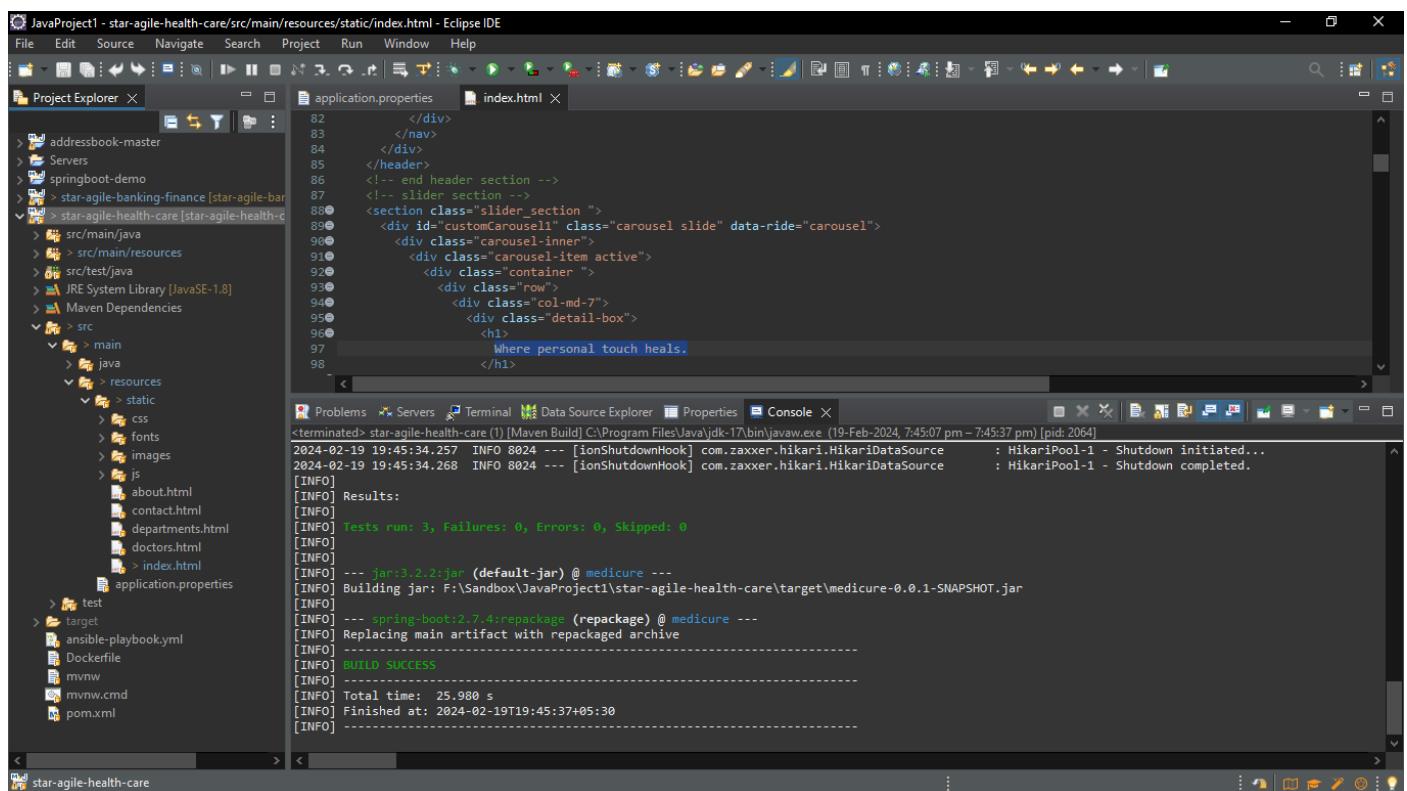
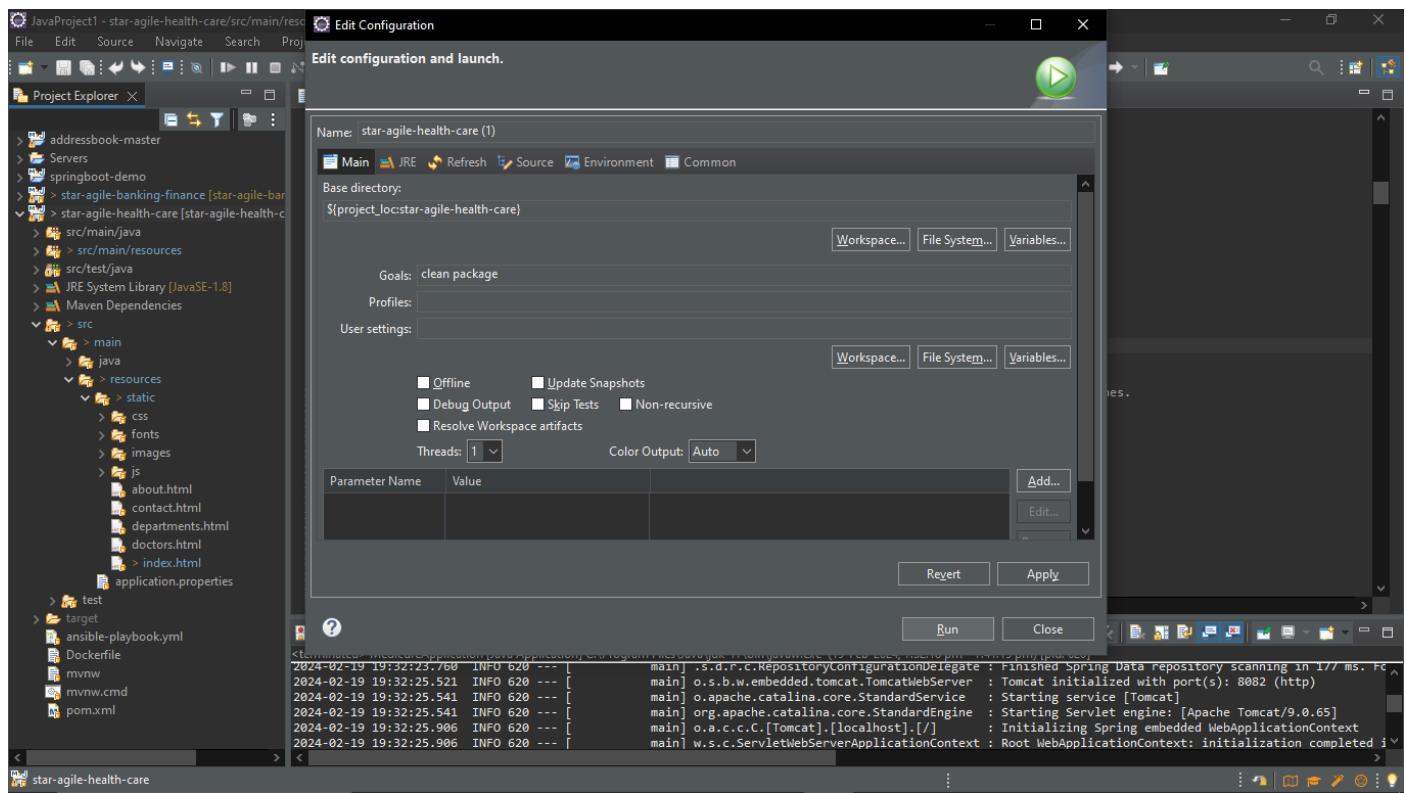
2024-02-19 19:32:25.906 INFO 620 --- [main] o.a.c.c.C.[Tomcat].[localhost].[] : Initializing Spring embedded WebApplicationContext

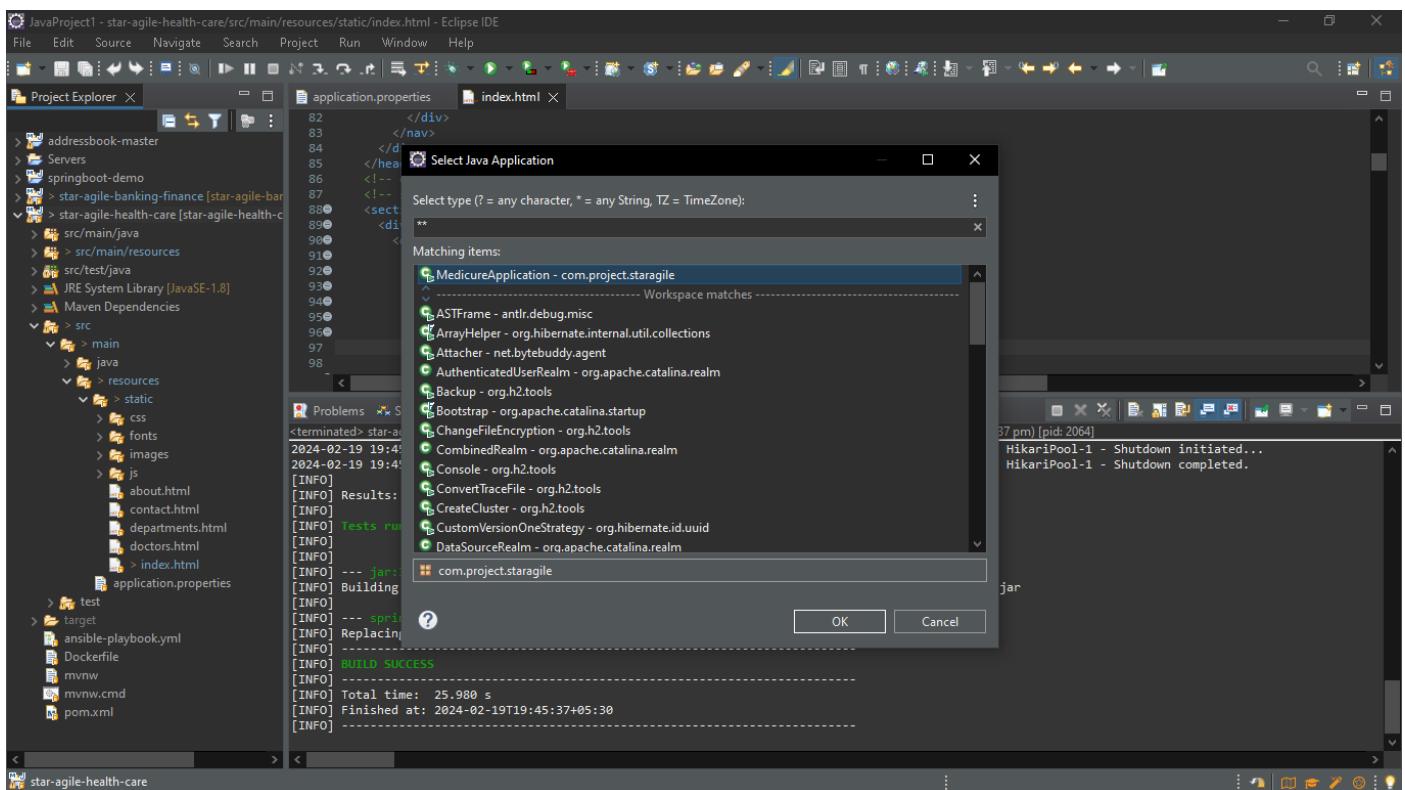
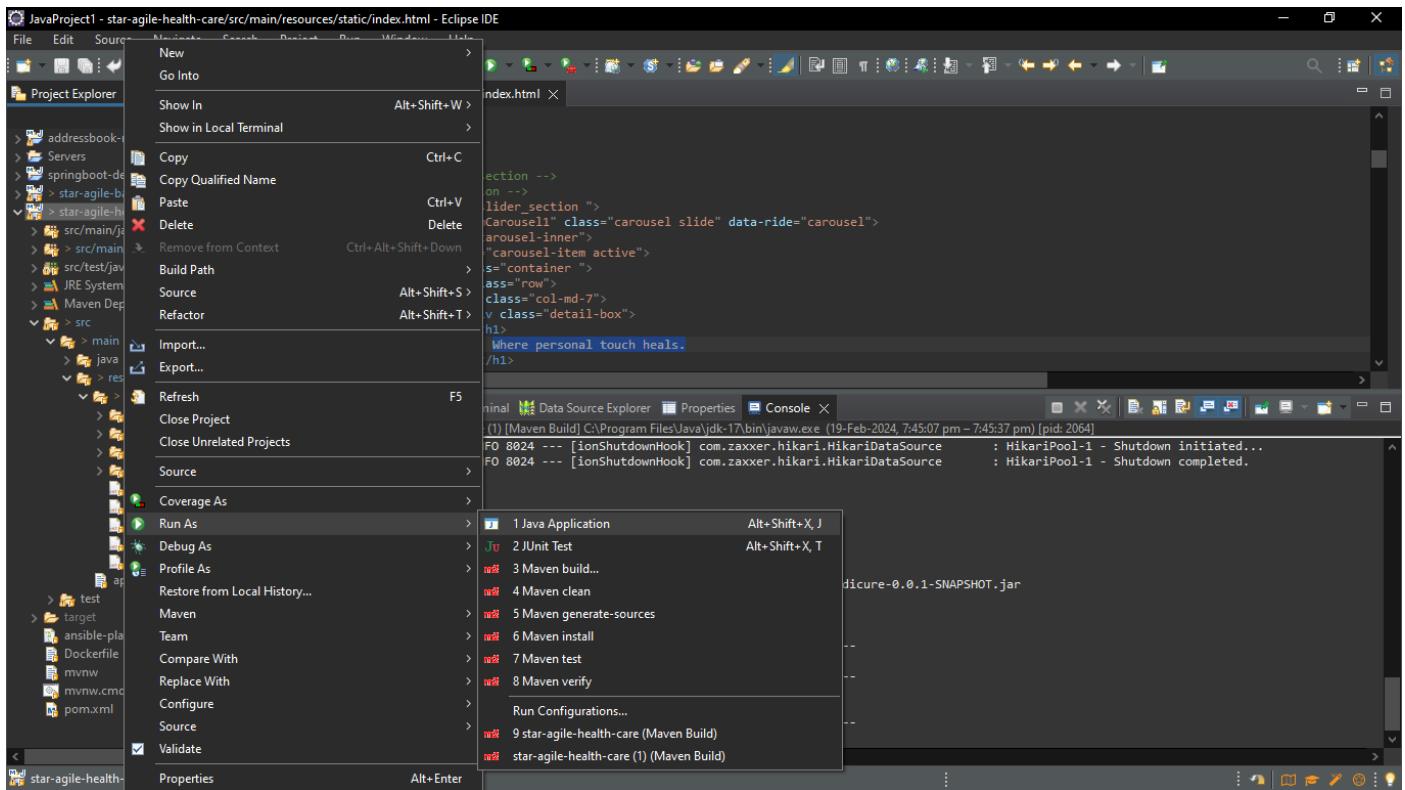
2024-02-19 19:32:25.906 INFO 620 --- [main] w.s.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed i

Writable Insert 97:50 [27]

→ Save the changes and build the war file and run the application to verify the changes.







JavaProject1 - star-agile-health-care/src/main/resources/static/index.html - Eclipse IDE

File Edit Source Navigate Search Project Run Window Help

Project Explorer X

application.properties index.html X

```

82      </div>
83    </nav>
84  </header>
85  <!-- end header section -->
86  <!-- slider section -->
87  <section class="slider_section">
88    <div id="customCarousel" class="carousel slide" data-ride="carousel">
89      <div class="carousel-inner">
90        <div class="carousel-item active">
91          <div class="container">
92            <div class="row">
93              <div class="col-md-7">
94                <div class="detail-box">
95                  <h1>
96                    Where personal touch heals.
97                  </h1>

```

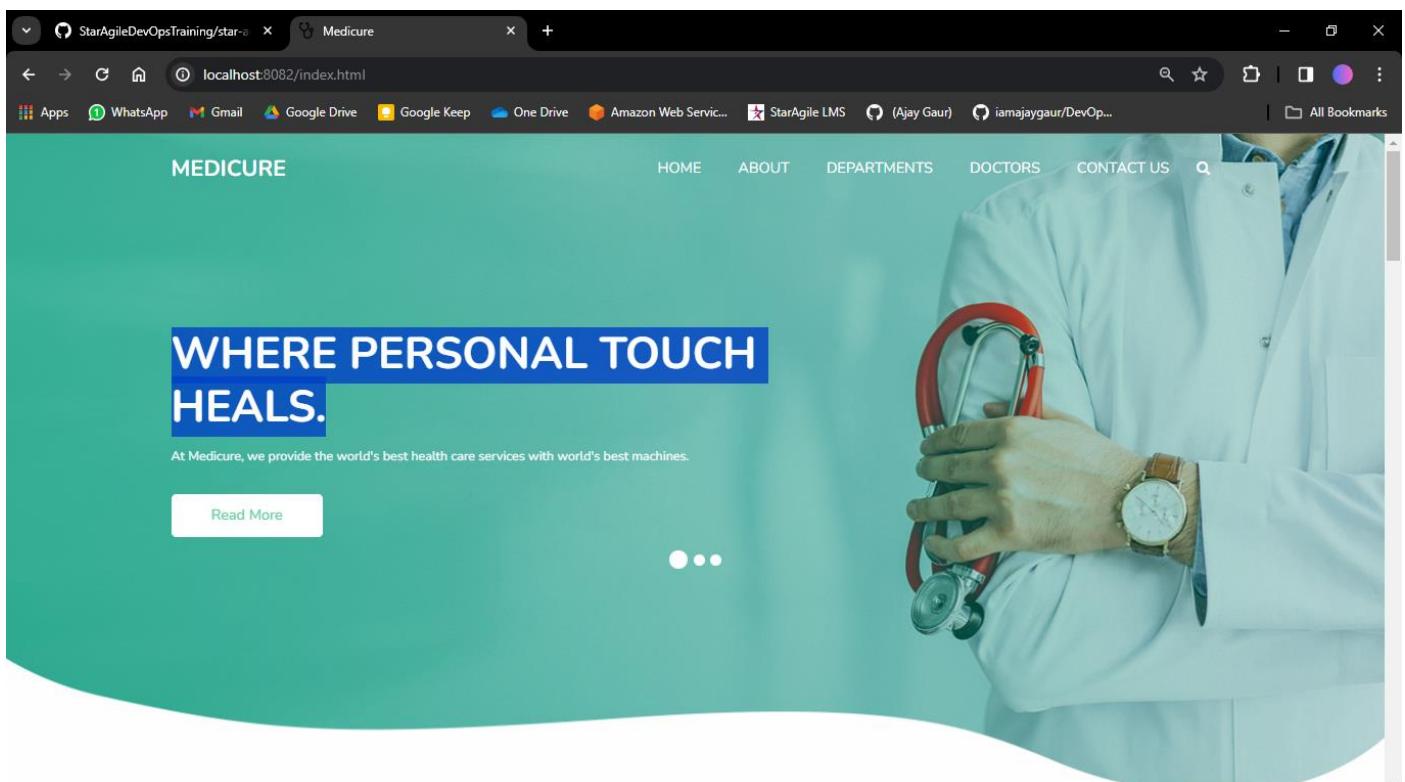
Problems Servers Terminal Data Source Explorer Properties Console X

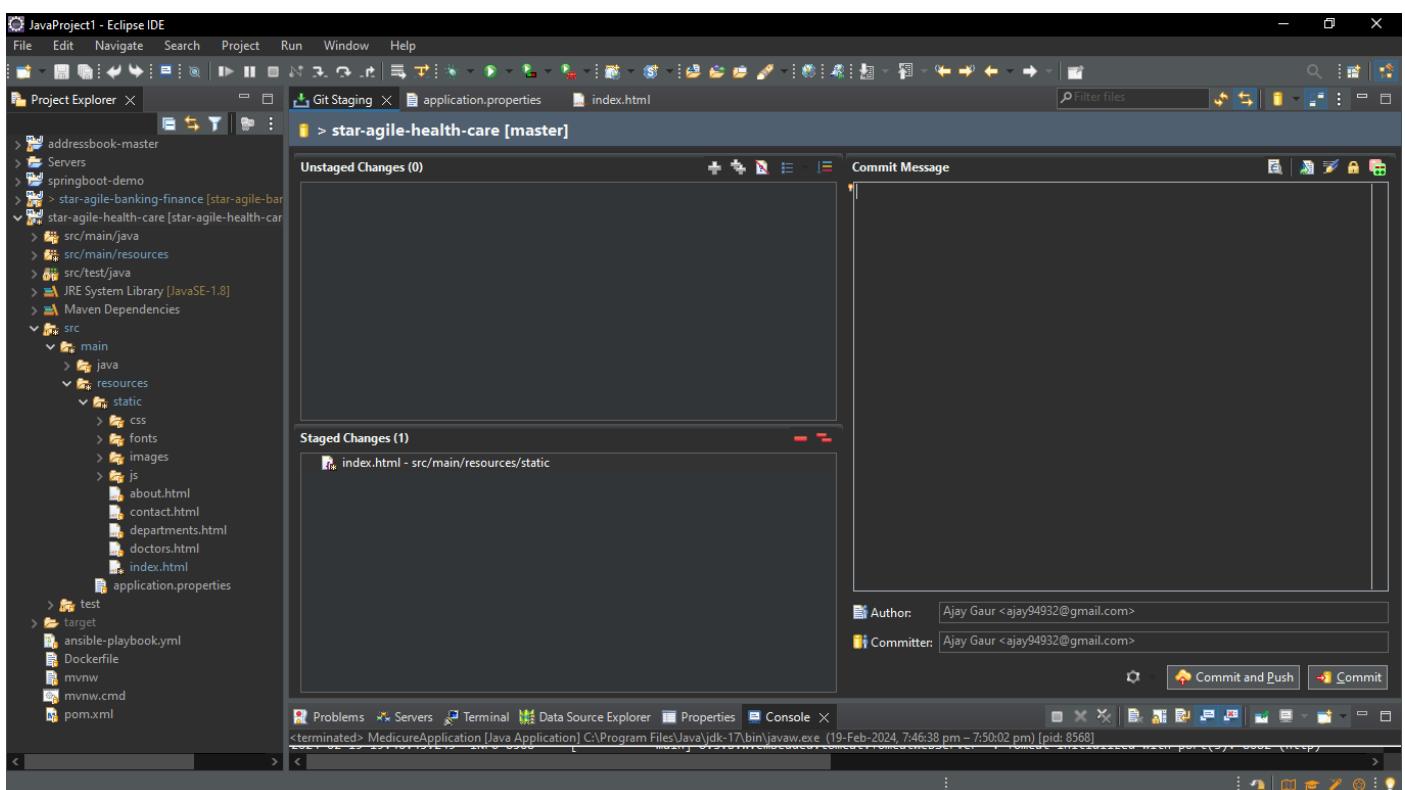
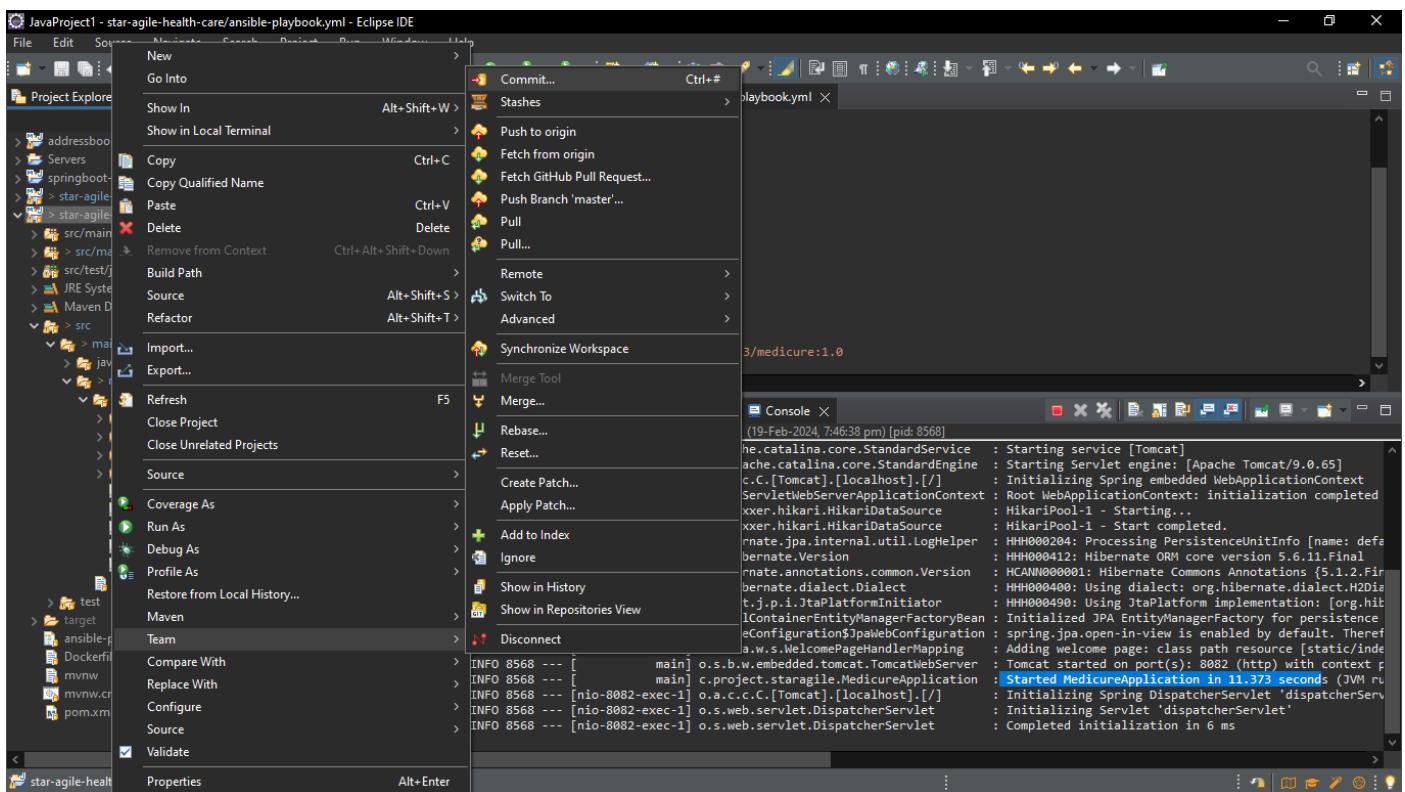
MedicureApplication [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (19-Feb-2024, 7:46:38 pm) [pid: 8568]

```

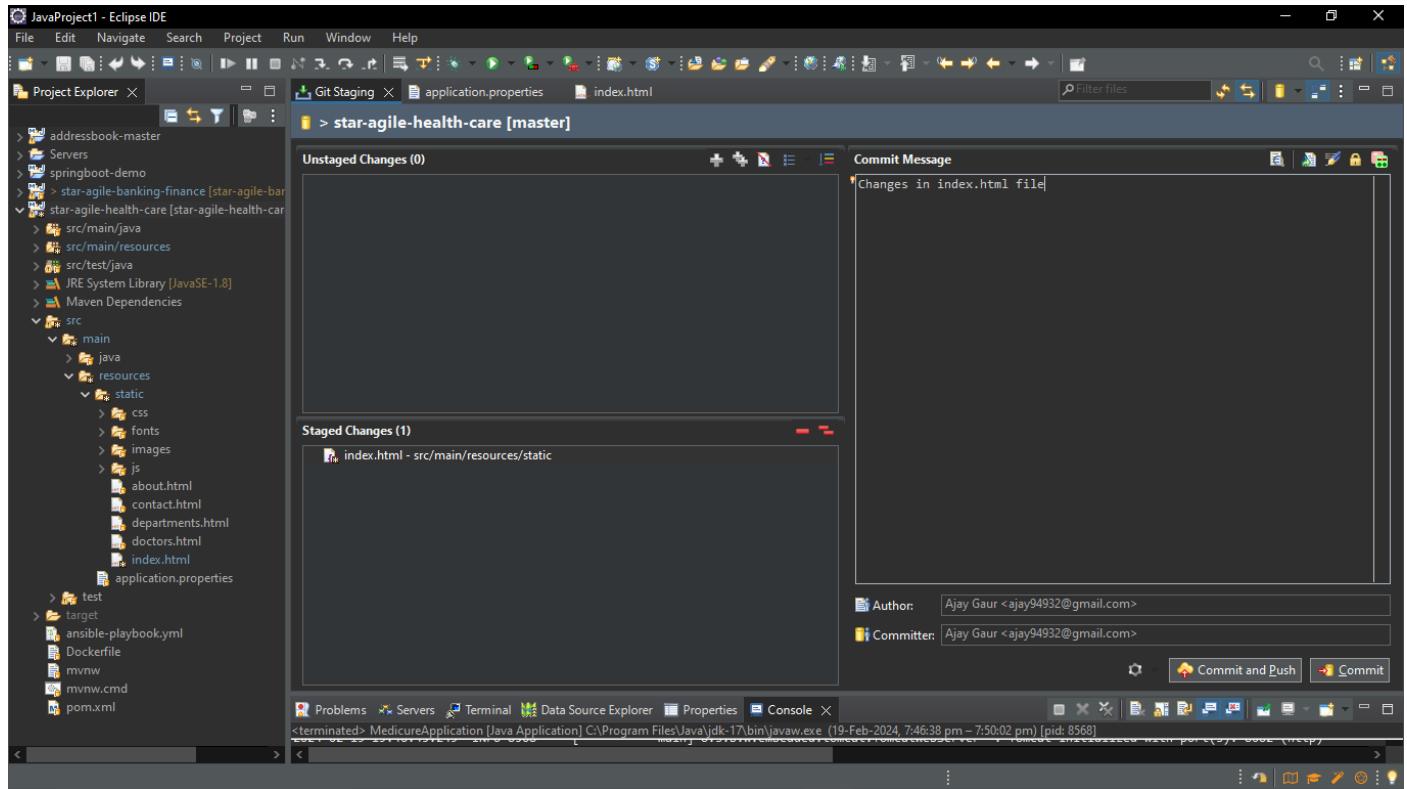
2024-02-19 19:46:42.839 INFO 8568 --- [main] s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2024-02-19 19:46:43.021 INFO 8568 --- [main] s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 136 ms. Found 0 JPA repository interfaces.
2024-02-19 19:46:45.267 INFO 8568 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8082 (http)
2024-02-19 19:46:45.267 INFO 8568 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-02-19 19:46:45.267 INFO 8568 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.65]
2024-02-19 19:46:45.530 INFO 8568 --- [main] o.a.c.c.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext: Root WebApplicationContext: initialization completed in 11 ms.
2024-02-19 19:46:45.530 INFO 8568 --- [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 11 ms.
2024-02-19 19:46:45.906 INFO 8568 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2024-02-19 19:46:46.335 INFO 8568 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2024-02-19 19:46:46.493 INFO 8568 --- [main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: defau... : HHH000412: Hibernate ORM core version 5.6.11.Final
2024-02-19 19:46:46.655 INFO 8568 --- [main] org.hibernate.Version : HCAAN000001: Hibernate Commons Annotations 5.1.2.Final
2024-02-19 19:46:47.093 INFO 8568 --- [main] o.hibernate.annotations.common.Version : HHH000400: Using dialect: org.hibernate.dialect.H2Dialect
2024-02-19 19:46:47.568 INFO 8568 --- [main] org.hibernate.dialect.Dialect : HHH000490: Using JtaPlatform implementation: [org.hib... : HHH000490: Using JtaPlatform implementation: [org.hib... : HHH000490: Using JtaPlatform implementation: [org.hib...
2024-02-19 19:46:49.458 INFO 8568 --- [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hib... : HHH000490: Using JtaPlatform implementation: [org.hib...
2024-02-19 19:46:49.486 INFO 8568 --- [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'defau... : HHH000490: Using JtaPlatform implementation: [org.hib...
2024-02-19 19:46:50.571 WARN 8568 --- [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Theref... : HHH000490: Using JtaPlatform implementation: [org.hib...
2024-02-19 19:46:50.965 INFO 8568 --- [main] o.s.b.a.w.s.WelcomePageHandlerMapping : Adding welcome page: class path resource [static/inde... : HHH000490: Using JtaPlatform implementation: [org.hib...
2024-02-19 19:46:51.395 INFO 8568 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8082 (http) with context p... : Started MedicureApplication in 11.373 seconds (JVM ru...

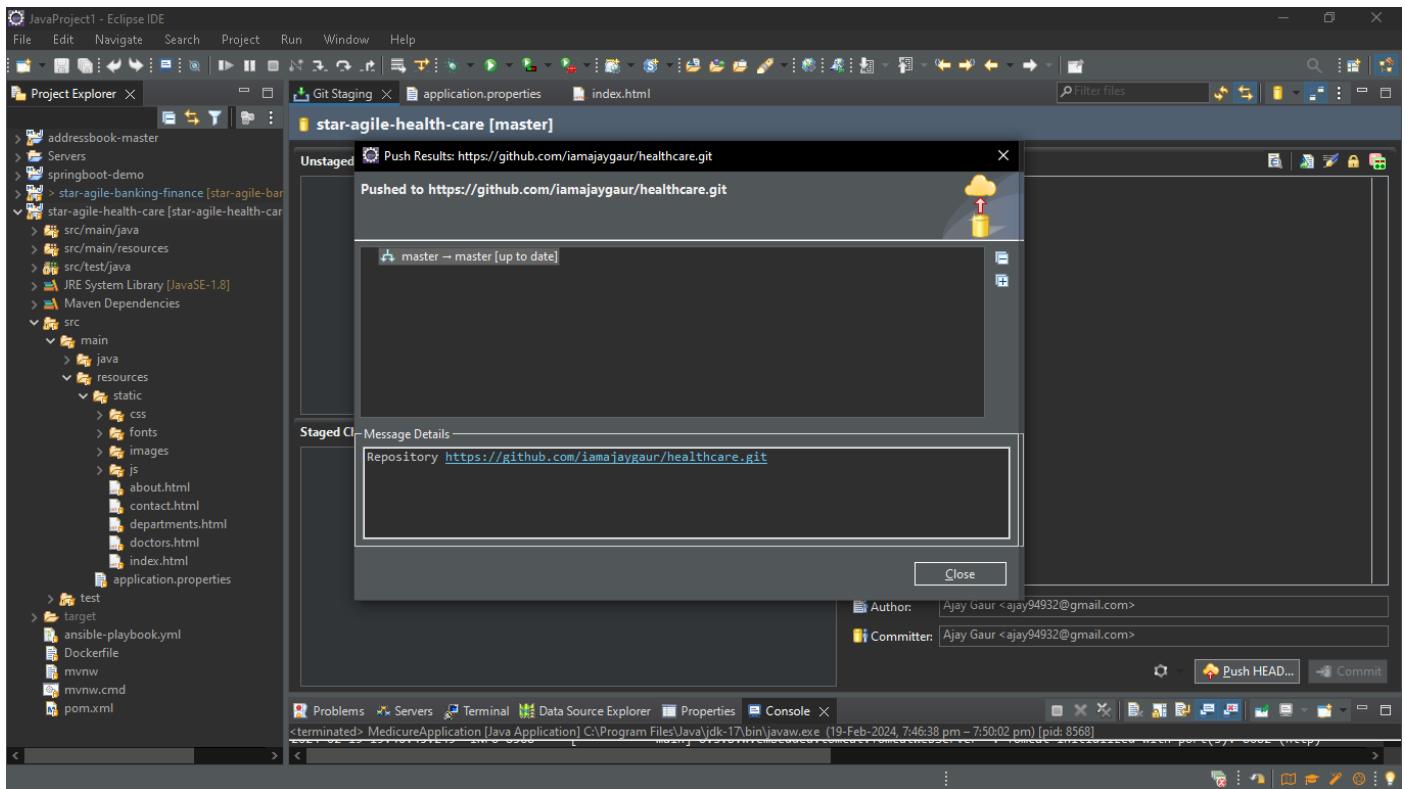
```





→ Commit and Push the changes to the repository





Launch the VM Instances Configure and Integrate them :

1. jenkins-master: Used to create the jenkins pipeline projects and schedule.

jenkins-slave: Used to perform Application Build & Create artifacts - *.war & Build Container Image

2. k8s-master: Deployment of Pods

K8s_worker_node-1

K8s_worker_node-1

Tools required in above VM Instances:

1. jenkins-master: git, jdk, jenkins

Jenkins-slave: git, jdk, maven, docker

2. k8s-master: CRI-ContiainD, Kubectl, Kubeadm, Kubelet.....

K8s_worker_node-1

K8s_worker_node-1

The screenshot shows the AWS EC2 Instances page with the following details:

- Instances (6/6) Info**
- Find Instance by attribute or tag (case-sensitive)**
- Instance state**: Any state
- Actions**: Launch instances
- Instances List:**

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
jenkins-master	i-0a17ab2830e136020	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
jenkins-slave	i-09515aa07e929dd44	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-master	i-087dcc78b7647ddc3	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-workernode1	i-05c88366d2c2c5461	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-workernode2	i-0f3be607a199ecee	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
- Instances:** i-0a17ab2830e136020 (jenkins-master), i-09515aa07e929dd44 (jenkins-slave), i-087dcc78b7647ddc3 (k8s-master), i-05c88366d2c2c5461 (k8s-workernode1), i-0f3be607a199ecee (k8s-workernode2), i-032eb6bdfcb2008f8 (monitoring-server)
- Monitoring**
- Metrics:**
 - CPU utilization (%)
 - Network in (bytes)
 - Network out (bytes)
 - Network packets in (cou...

Stages for project:

1. SCM Checkout
2. Application Build - # Create *.war and perform Unit Testing
3. Docker Build
4. Push the Container Image to Dockerhub
5. Deploy to Kubernetes

→ Login to Jenkins

Screenshot of the Jenkins Dashboard (13.56.181.110:8080) showing the 'banking-app-project' build.

The dashboard includes a sidebar with links like 'New Item', 'People', 'Build History', 'Project Relationship', 'Check File Fingerprint', 'Manage Jenkins', and 'My Views'. A search bar at the top right allows for searching Jenkins items.

The main area displays a table for builds:

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	banking-app-project	1 day 2 hr #4	N/A	42 sec

Below the table, there are links for 'Icon legend', 'Atom feed for all', 'Atom feed for failures', and 'Atom feed for just latest builds'.

Two dropdown menus are shown: 'Build Queue' (No builds in the queue) and 'Build Executor Status' (Built-In Node).

Screenshot of the 'New Item [Jenkins]' configuration page (13.56.181.110:8080/view/all/newJob).

The page title is 'Enter an item name' and the input field contains 'healthcare-project'. A note indicates it's a 'Required field'.

Four project types are listed:

- Freestyle project**: Described as the central feature of Jenkins, combining any SCM with any build system.
- Maven project**: Described as building a Maven project using POM files.
- Pipeline**: Described as orchestrating long-running activities across multiple build agents.
- Multi-configuration project**: Described as suitable for projects with many configurations, such as testing on multiple environments.

A large blue 'OK' button is visible at the bottom left of the configuration panel.

→ Create the pipeline Project

The screenshot shows the Jenkins Pipeline configuration page for a project named "health-care". The "Pipeline" tab is selected. The "Script" pane contains the following Groovy code:

```
1 pipeline {
2     agent { label 'slave1' }
3 
4     tools {
5         // Install the Maven version configured as "MB" and add it to the path.
6         maven "maven-3.6.3"
7     }
8 
9     environment {
10        DOCKERHUB_CREDENTIALS=credentials('dockerloginid')
11    }
12 
13     stages {
14         stage('SCM Checkout') {
15             steps {
16                 // Get some code from a GitHub repository
17                 git 'https://github.com/iamajaygaur/healthcare.git'
18             }
19         }
20         stage('Maven Build') {
21             steps {
22                 // Run Maven on a Unix agent.
23                 sh "mvn -Dmaven.test.failure.ignore=true clean package"
24             }
25         }
26         stage("Docker build"){
27             steps {
28                 sh 'docker build -t iamajaygaur/health-care:${BUILD_NUMBER} .'
29                 sh 'docker image list'
30                 sh "docker tag iamajaygaur/health-care:${BUILD_NUMBER} iamajaygaur/health-care:latest"
31             }
32         }
33     }
34 }
35 
36     stage('Login2DockerHub') {
37         steps {
38             sh 'echo $DOCKERHUB_CREDENTIALS_PSW | docker login -u $DOCKERHUB_CREDENTIALS_USR --password-stdin'
39         }
40     }
41 
42     stage('Push2DockerHub') {
43         steps {
44             sh "docker push iamajaygaur/health-care:latest"
45         }
46     }
47 
48     stage('Deploy to Kubernetes Dev Environment') {
49         steps {
50             script {
51                 sshPublisher(publishers: [sshPublisherDesc(configName: 'Kubernetes_Cluster', transfers: [sshTransfer(cleanRemote: false, excludeList: ['*/.git*', '!*.yaml', '!*.yml'])])])
52             }
53         }
54     }
55 }
```

Use Groovy Sandbox

Save Apply

The screenshot shows the continuation of the Jenkins Pipeline configuration page. The "Pipeline" tab is selected. The "Script" pane contains the following Groovy code, building upon the previous stages:

```
26     stage("Docker build"){
27         steps {
28             sh 'docker build -t iamajaygaur/health-care:${BUILD_NUMBER} .'
29             sh 'docker image list'
30             sh "docker tag iamajaygaur/health-care:${BUILD_NUMBER} iamajaygaur/health-care:latest"
31         }
32     }
33 
34     stage('Login2DockerHub') {
35         steps {
36             sh 'echo $DOCKERHUB_CREDENTIALS_PSW | docker login -u $DOCKERHUB_CREDENTIALS_USR --password-stdin'
37         }
38     }
39 
40     stage('Push2DockerHub') {
41         steps {
42             sh "docker push iamajaygaur/health-care:latest"
43         }
44     }
45 
46     stage('Deploy to Kubernetes Dev Environment') {
47         steps {
48             script {
49                 sshPublisher(publishers: [sshPublisherDesc(configName: 'Kubernetes_Cluster', transfers: [sshTransfer(cleanRemote: false, excludeList: ['*/.git*', '!*.yaml', '!*.yml'])])])
50             }
51         }
52     }
53 
54     stage('Deploy to Kubernetes Prod Environment') {
55         steps {
56             script {
57                 sshPublisher(publishers: [sshPublisherDesc(configName: 'Kubernetes_Prod', transfers: [sshTransfer(cleanRemote: true, excludeList: ['*/.git*', '!*.yaml', '!*.yml'])])])
58             }
59         }
60     }
61 }
```

Use Groovy Sandbox

Save Apply

Dashboard > health-care > Configuration

Configure

Definition Pipeline script

General

Advanced Project Options

Pipeline

```

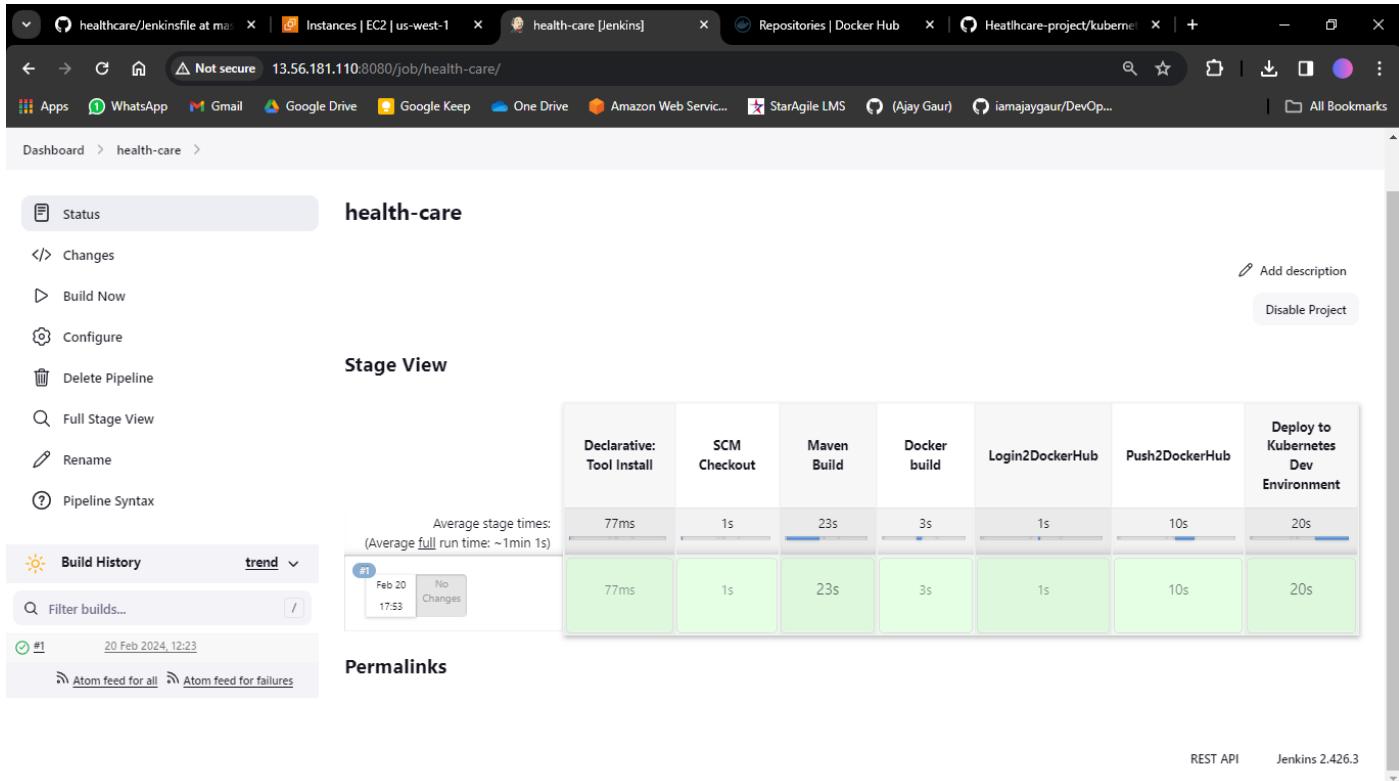
29      sh "docker build -t iamajaygaur/health-care:${BUILD_NUMBER} ."
30      sh 'docker image list'
31      sh "docker tag iamajaygaur/health-care:${BUILD_NUMBER} iamajaygaur/health-care:latest"
32
33    }
34  }
35
36  stage('Login2DockerHub') {
37    steps {
38      sh 'echo $DOCKERHUB_CREDENTIALS_PSW | docker login -u $DOCKERHUB_CREDENTIALS_USR --password-stdin'
39    }
40  }
41
42  stage('Push2DockerHub') {
43    steps {
44      sh "docker push iamajaygaur/health-care:latest"
45    }
46  }
47  stage('Deploy to Kubernetes Dev Environment') {
48    steps {
49      script {
50        sshPublisher(publishers: [sshPublisherDesc(configName: 'Kubernetes_Cluster', transfers: [sshTransfer(cleanRemote: false, excludeList: ['**/.*'], includeList: ['*/.gitignore'], maxDepth: 1, maxSSHLogSize: 1000, maxWaitTime: 10, remoteDir: '/var/www/html', timeout: 1000, useJenkinsKey: true)]), useJenkinsKey: true)])
51      }
52    }
53  }
54

```

Use Groovy Sandbox

Save **Apply**

→ Click on Build Now



The screenshot shows the Jenkins console output for a pipeline job named 'health-care #1'. The pipeline starts by cloning a repository from GitHub. It then performs a Maven build, which fails due to a missing dependency. The pipeline continues with a stage for 'StarAgile LMS' and ends with a 'Medicare' step.

```
Commit message: "Update Jenkinsfile"
First time build. Skipping changelog.
[Pipeline]
[Pipeline] // withEnv
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Maven Build)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline]
[Pipeline] stage
[Pipeline] { (SCM Checkout)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline]
[Pipeline] git
```

The screenshot shows the Jenkins console output for a pipeline job named 'health-care #1'. The pipeline starts by cloning a repository from GitHub. It then performs a Maven build, which fails due to a missing dependency. The pipeline continues with a stage for 'StarAgile LMS' and ends with a 'Medicare' step.

```
Commit message: "Update Jenkinsfile"
First time build. Skipping changelog.
[Pipeline]
[Pipeline] // withEnv
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Maven Build)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline]
[Pipeline] {
[Pipeline] sh
Cloning repository https://github.com/iamajaygaur/healthcare.git
> git init /home/devopsadmin/workspace/health-care # timeout=10
Fetching upstream changes from https://github.com/iamajaygaur/healthcare.git
> git --version # timeout=10
> git --version # 'git version 2.25.1'
> git fetch --tags --force --progress -- https://github.com/iamajaygaur/healthcare.git +refs/heads/*:refs/remotes/origin/*
> git config remote.origin.url https://github.com/iamajaygaur/healthcare.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git config core.sparsecheckout # timeout=10
> git checkout -f bc360c51c5dfb2efd8c9839ce9663a1f6dcccfc59 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git checkout -b master bc360c51c5dfb2efd8c9839ce9663a1f6dcccfc59 # timeout=10
+ mvn -Dmaven.test.failure.ignore=true clean package
[@@1;34mINFO@@m] Scanning for projects...
[@@1;34mINFO@@m]
[@@1;34mINFO@@m] @@[1m-----< @@[0;36mcom.project.staragile:medicare@@[0;1m >-----@@[m
```

Dashboard > health-care > #1

```

[@1;34mINFO@m] @[1mBuilding medicure 0.0.1-SNAPSHOT[m
[@1;34mINFO@m] @[1m-----[ jar ]-----@[m
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-clean-plugin:3.2.0:clean@m @[1m(default-clean)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-resources-plugin:3.2.0:resources@m @[1m(default-resources)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m] Using 'UTF-8' encoding to copy filtered resources.
[@1;34mINFO@m] Using 'UTF-8' encoding to copy filtered properties files.
[@1;34mINFO@m] Copying 1 resource
[@1;34mINFO@m] Copying 32 resources
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-compiler-plugin:3.10.1:compile@m @[1m(default-compile)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m] Changes detected - recompiling the module!
[@1;34mINFO@m] Compiling 5 source files to /home/devopsadmin/workspace/health-care/target/classes
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-resources-plugin:3.2.0:testResources@m @[1m(default-testResources)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m] Using 'UTF-8' encoding to copy filtered resources.
[@1;34mINFO@m] Using 'UTF-8' encoding to copy filtered properties files.
[@1;34mINFO@m] skip non existing resourceDirectory /home/devopsadmin/workspace/health-care/src/test/resources
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-compiler-plugin:3.10.1:testCompile@m @[1m(default-testCompile)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m] Changes detected - recompiling the module!
[@1;34mINFO@m] Compiling 2 source files to /home/devopsadmin/workspace/health-care/target/test-classes
[@1;34mINFO@m]
[@1;34mINFO@m] @[1m-- @[0;32mmaven-surefire-plugin:2.22.2:test@m @[1m(default-test)@m @ [36mmedicure@0;1m ---@m
[@1;34mINFO@m]
[@1;34mINFO@m] -----
[@1;34mINFO@m] T E S T S
[@1;34mINFO@m] -----
[@1;34mINFO@m] Running com.project.staragile.@[1mTestMedicureService@m
12:24:03.067 [main] DEBUG org.springframework.test.context.BootstrapUtils - Instantiating CacheAwareContextLoaderDelegate from class

```

Dashboard > health-care > #1

```

[@1;34mINFO@m]
[@1;34mINFO@m] -----
[@1;34mINFO@m] T E S T S
[@1;34mINFO@m] -----
[@1;34mINFO@m] Running com.project.staragile.@[1mTestMedicureService@m
12:24:03.067 [main] DEBUG org.springframework.test.context.BootstrapUtils - Instantiating CacheAwareContextLoaderDelegate from class
[org.springframework.test.context.cache.DefaultCacheAwareContextLoaderDelegate]
12:24:03.087 [main] DEBUG org.springframework.test.context.BootstrapUtils - Instantiating BootstrapContext using constructor [public
org.springframework.test.context.support.DefaultBootstrapContext(java.lang.Class,org.springframework.test.context.CacheAwareContextLoaderDelegate)
]
12:24:03.153 [main] DEBUG org.springframework.test.context.BootstrapUtils - Instantiating TestContextBootstrapper for test class
[com.project.staragile.TestMedicureService] from class [org.springframework.boot.test.context.SpringBootTestBootstrapper]
12:24:03.178 [main] INFO org.springframework.boot.test.context.SpringBootTestBootstrapper - Neither @ContextConfiguration nor
@ContextHierarchy found for test class [com.project.staragile.TestMedicureService], using SpringBootTestContextLoader
12:24:03.189 [main] DEBUG org.springframework.test.context.support.AbstractContextLoader - Did not detect default resource location for test class
[com.project.staragile.TestMedicureService], class path resource [com/project/staragile/TestMedicureService-context.xml] does not exist
12:24:03.192 [main] DEBUG org.springframework.test.context.support.AbstractContextLoader - Did not detect default resource location for test class
[com.project.staragile.TestMedicureService], class path resource [com/project/staragile/TestMedicureServiceContext.groovy] does not exist
12:24:03.193 [main] INFO org.springframework.test.context.support.AbstractContextLoader - Could not detect default resource locations for test
class [com.project.staragile.TestMedicureService]: no resource found for suffixes {-context.xml, Context.groovy}.
12:24:03.195 [main] INFO org.springframework.test.context.support.AnnotationConfigContextLoaderUtils - Could not detect default configuration
classes for test class [com.project.staragile.TestMedicureService]: TestMedicureService does not declare any static, non-private, non-final,
nested classes annotated with @Configuration.
12:24:03.305 [main] DEBUG org.springframework.test.context.support.ActiveProfilesUtils - Could not find an 'annotation declaring class' for
annotation type [org.springframework.test.context.ActiveProfiles] and class [com.project.staragile.TestMedicureService]
12:24:03.448 [main] DEBUG org.springframework.context.annotation.ClassPathScanningCandidateComponentProvider - Identified candidate component
class: file [/home/devopsadmin/workspace/health-care/target/classes/com/project/staragile/MedicureApplication.class]
12:24:03.484 [main] INFO org.springframework.boot.test.context.SpringBootTestBootstrapper - Found @SpringBootConfiguration
com.project.staragile.MedicureApplication for test class com.project.staragile.TestMedicureService
12:24:03.711 [main] DEBUG org.springframework.boot.test.context.SpringBootTestBootstrapper - @TestExecutionListeners is not present for
class [com.project.staragile.TestMedicureService]: using defaults.

```

Dashboard > health-care > #1

```

  /\ \ / ____'_ _ _ -_(_)_ _ _ _ _ \ \ \ \
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  \ \ \_)| |_)| | | | | | | | | | ) ) ) )
  ' |____| _|_|_|_|_|_\ \_,| | / / /
  ======|_|=====|_|/_=/\_/_/
  :: Spring Boot ::           (v2.7.4)

2024-02-20 12:24:04.596 INFO 3032 --- [           main] c.project.staragile.TestMedicureService : Starting TestMedicureService using Java
11.0.21 on ip-172-31-19-155 with PID 3032 (started by devopsadmin in /home/devopsadmin/workspace/health-care)
2024-02-20 12:24:04.600 INFO 3032 --- [           main] c.project.staragile.TestMedicureService : No active profile set, falling back to 1
default profile: "default"
2024-02-20 12:24:06.119 INFO 3032 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in
DEFAULT mode.
2024-02-20 12:24:06.212 INFO 3032 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 77
ms. Found 1 JPA repository interfaces.
2024-02-20 12:24:07.485 INFO 3032 --- [           main] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Starting...
2024-02-20 12:24:07.972 INFO 3032 --- [           main] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Start completed.
2024-02-20 12:24:08.135 INFO 3032 --- [           main] o.hibernate.jpa.internal.util.LogHelper   : HHH000204: Processing PersistenceUnitInfo
[name: default]
2024-02-20 12:24:08.237 INFO 3032 --- [           main] org.hibernate.Version                  : HHH000412: Hibernate ORM core version
5.6.11.Final
2024-02-20 12:24:08.618 INFO 3032 --- [           main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations
{5.1.2.Final}
2024-02-20 12:24:08.904 INFO 3032 --- [           main] org.hibernate.dialect.Dialect        : HHH000400: Using dialect:
org.hibernate.dialect.H2Dialect
2024-02-20 12:24:10.001 INFO 3032 --- [           main] o.h.e.t.j.p.i.JtaPlatformInitiator    : HHH000490: Using JtaPlatform implementation:
[org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
2024-02-20 12:24:10.019 INFO 3032 --- [           main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for
persistence unit 'default'
2024-02-20 12:24:11.191 WARN 3032 --- [           main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default.

```

Dashboard > health-care > #1

```

com-project-staragile-testmedicure-0.1-SNAPSHOT.jar
2024-02-20 12:24:13.373 INFO 3032 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for
persistence unit 'default'
2024-02-20 12:24:13.374 INFO 3032 --- [ionShutdownHook] .SchemaDropperImpl$DelayedDropActionImpl : HHH000477: Starting delayed evictData of
schema as part of SessionFactory shut-down'
2024-02-20 12:24:13.395 INFO 3032 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Shutdown initiated...
2024-02-20 12:24:13.408 INFO 3032 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Shutdown completed.
[@1;34mINFO@m]
[@1;34mINFO@m] Results:
[@1;34mINFO@m]
[@1;34mINFO@m] [1@1;32mTests run: 3, Failures: 0, Errors: 0, Skipped: 0@1m
[@1;34mINFO@m]
[@1;34mINFO@m]
[@1;34mINFO@m] @1m-- @0;32mmaven-jar-plugin:3.2.2:jar@m @1m(default-jar)m @0;1m --@m
[@1;34mINFO@m] Building jar: /home/devopsadmin/workspace/health-care/target/medicure-0.1-SNAPSHOT.jar
[@1;34mINFO@m]
[@1;34mINFO@m] @1m-- @0;32mspring-boot-maven-plugin:2.7.4:repackage@m @1m(repackage)m @0;1m --@m
[@1;34mINFO@m] Replacing main artifact with repackaged archive
[@1;34mINFO@m] @1m-----
[@1;34mINFO@m] @1@1;32mBUILD SUCCESS@m
[@1;34mINFO@m] @1m-----
[@1;34mINFO@m] Total time: 20.894 s
[@1;34mINFO@m] Finished at: 2024-02-20T12:24:16Z
[@1;34mINFO@m] @1m-----
[@Pipeline]
[@Pipeline] // withEnv
[@Pipeline]
[@Pipeline] // stage
[@Pipeline] stage
[@Pipeline] { (Docker build)
[@Pipeline] tool

```

```
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline] {
[Pipeline] sh
+ docker version
Client:
Version: 24.0.5
API version: 1.43
Go version: go1.20.3
Git commit: 24.0.5-0ubuntu1~20.04.1
Built: Mon Aug 21 19:50:14 2023
OS/Arch: linux/amd64
Context: default

Server:
Engine:
Version: 24.0.5
API version: 1.43 (minimum version 1.12)
Go version: go1.20.3
Git commit: 24.0.5-0ubuntu1~20.04.1
Built: Mon Aug 21 19:50:14 2023
OS/Arch: linux/amd64
Experimental: false
containerd:
Version: 1.7.2
GitCommit:
runc:
Version: 1.1.7-0ubuntu1~20.04.2
GitCommit:
docker-init:
```

```
GitCommit:
runc:
Version: 1.1.7-0ubuntu1~20.04.2
GitCommit:
docker-init:
Version: 0.19.0
GitCommit:
[Pipeline] sh
+ docker build -t iamajaygaur/health-care:1 .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 49.61MB

Step 1/5 : FROM openjdk:11
--> 47a932d998b7
Step 2/5 : ARG JAR_FILE=target/*.jar
--> Using cache
--> 15457d378f38
Step 3/5 : COPY ${JAR_FILE} app.jar
--> dc8f7e3eb2c1
Step 4/5 : ENTRYPOINT ["java","-jar","/app.jar"]
--> Running in 05739d3c108c
Removing intermediate container 05739d3c108c
--> 3b82cc234e37
Step 5/5 : EXPOSE 8082
--> Running in c0db34b6958f
Removing intermediate container c0db34b6958f
--> a037c79316b5
```

```
healthcare/Jenkinsfile at master | Instances | EC2 | us-west-1 | health-care #1 Console [Jen... | Repositories | Docker Hub | Healthcare-project/kubernetes | + - _ X
Not secure 13.56.181.110:8080/job/health-care/1/console | Apps WhatsApp Gmail Google Drive Google Keep One Drive Amazon Web Service StarAgile LMS (Ajay Gaur) iamajaygaur/DevOp... | All Bookmarks

Dashboard > health-care > #1

Successfully built a037c79316b5
Successfully tagged iamajaygaur/health-care:1
[Pipeline] sh
+ docker image list
REPOSITORY          TAG      IMAGE ID   CREATED        SIZE
iamajaygaur/health-care   1        a037c79316b5  1 second ago  695MB
iamajaygaur/healthcare-eta-app  3        9d63bf001c98  25 minutes ago  695MB
iamajaygaur/healthcare-eta-app  latest   9d63bf001c98  25 minutes ago  695MB
iamajaygaur/healthcare-eta-app  2        2a310b39e735  32 minutes ago  695MB
iamajaygaur/healthcare-eta-app  1        29eadd2eebcd  39 minutes ago  695MB
iamajaygaur/bankapp-eta-app   4        91a63a2b42b5  28 hours ago  696MB
iamajaygaur/bankapp-eta-app   latest   91a63a2b42b5  28 hours ago  696MB
iamajaygaur/bankapp-eta-app   3        3803c537c165  28 hours ago  696MB
iamajaygaur/bankapp-eta-app   2        66168c629a22  28 hours ago  696MB
iamajaygaur/bankapp-eta-app   1        6703035e716d  28 hours ago  696MB
iamajaygaur/bankingapp       4        e4c32a43d7e1  29 hours ago  696MB
iamajaygaur/bankingapp       latest   e4c32a43d7e1  29 hours ago  696MB
iamajaygaur/bankingapp       3        d6396c74bfcc  29 hours ago  696MB
iamajaygaur/bankingapp       2        6c1fdb635866  29 hours ago  696MB
loksaieta/loksai-eta-app    1        705a5e2eacff  30 hours ago  357MB
loksaieta/loksai-eta-app    latest   705a5e2eacff  30 hours ago  357MB
openjdk                     11       47a032d98b7   18 months ago  654MB
tomcat                      8.0      ef6a7c98d192  5 years ago   356MB
[Pipeline] sh
+ docker tag iamajaygaur/health-care:1 iamajaygaur/health-care:latest
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] / (Push2DockerHub)
```

```
healthcare/Jenkinsfile at master | Instances | EC2 | us-west-1 | health-care #1 Console [Jen... | Repositories | Docker Hub | Healthcare-project/kubernetes | + - _ X
Not secure 13.56.181.110:8080/job/health-care/1/console | Apps WhatsApp Gmail Google Drive Google Keep One Drive Amazon Web Service StarAgile LMS (Ajay Gaur) iamajaygaur/DevOp... | All Bookmarks

Dashboard > health-care > #1

https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Push2DockerHub)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline] {
[Pipeline] sh
+ docker push iamajaygaur/health-care:latest
The push refers to repository [docker.io/iamajaygaur/health-care]
fcf30e2925dc: Preparing
7b7f3078e1db: Preparing
826c3ddbb29c: Preparing
b626401ef603: Preparing
9b55156abf26: Preparing
293d5db30c9f: Preparing
03127cdb479b: Preparing
9c742cd6c7a5: Preparing
293d5db30c9f: Waiting
03127cdb479b: Waiting
9c742cd6c7a5: Waiting
7b7f3078e1db: Mounted from iamajaygaur/bankapp-eta-app
9b55156abf26: Mounted from iamajaygaur/bankapp-eta-app
b626401ef603: Mounted from iamajaygaur/bankapp-eta-app
826c3ddbb29c: Pushed
```

```
-----  
293d5db30c9f: Mounted from iamajaygaur/bankapp-eta-app  
03127cd479b: Mounted from iamajaygaur/bankapp-eta-app  
9c742cd6c7a5: Mounted from iamajaygaur/bankapp-eta-app  
fcf30e2925dc: Pushed  
latest: digest: sha256:e89e3c9993f4451ff67e38d94f74e279fcf99f31e2aa2635302cf782309beaf5 size: 2007  
[Pipeline] }  
[Pipeline] // withEnv  
[Pipeline] }  
[Pipeline] // stage  
[Pipeline] stage  
[Pipeline] { (Deploy to Kubernetes Dev Environment)  
[Pipeline] tool  
[Pipeline] envVarsForTool  
[Pipeline] withEnv  
[Pipeline] {  
[Pipeline] script  
[Pipeline] {  
[Pipeline] sshPublisher  
SSH: Connecting from host [ip-172-31-19-155]  
SSH: Connecting with configuration [Kubernetes_Cluster] ...  
[Pipeline] }  
[Pipeline] // script  
[Pipeline] }  
[Pipeline] // withEnv  
[Pipeline] }  
[Pipeline] // stage  
[Pipeline] }  
[Pipeline] // withEnv  
[Pipeline] }  
[Pipeline] // withCredentials
```

```
-----  
[Pipeline] { (Deploy to Kubernetes Dev Environment)  
[Pipeline] tool  
[Pipeline] envVarsForTool  
[Pipeline] withEnv  
[Pipeline] {  
[Pipeline] script  
[Pipeline] {  
[Pipeline] sshPublisher  
SSH: Connecting from host [ip-172-31-19-155]  
SSH: Connecting with configuration [Kubernetes_Cluster] ...  
[Pipeline] }  
[Pipeline] // script  
[Pipeline] }  
[Pipeline] // withEnv  
[Pipeline] }  
[Pipeline] // stage  
[Pipeline] }  
[Pipeline] // withEnv  
[Pipeline] }  
[Pipeline] // withCredentials  
[Pipeline] }  
[Pipeline] // node  
[Pipeline] End of Pipeline  
Finished: SUCCESS
```

Screenshot of Docker Hub showing the repository `iamajaygaur/health-care`. The repository has one tag, `latest`, which was pushed 5 minutes ago. The Docker commands section shows the command `docker push iamajaygaur/health-care:tagname`.

Docker commands
To push a new tag to this repository:
`docker push iamajaygaur/health-care:tagname`

Tags
This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest	Ubuntu	Image	4 minutes ago	5 minutes ago

[See all](#)

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. [Read more about automated builds](#).

[Upgrade](#)

Screenshot of MobaXterm showing a terminal session on a k8s master node. The user is running several `kubectl` commands to check nodes, pods, and services.

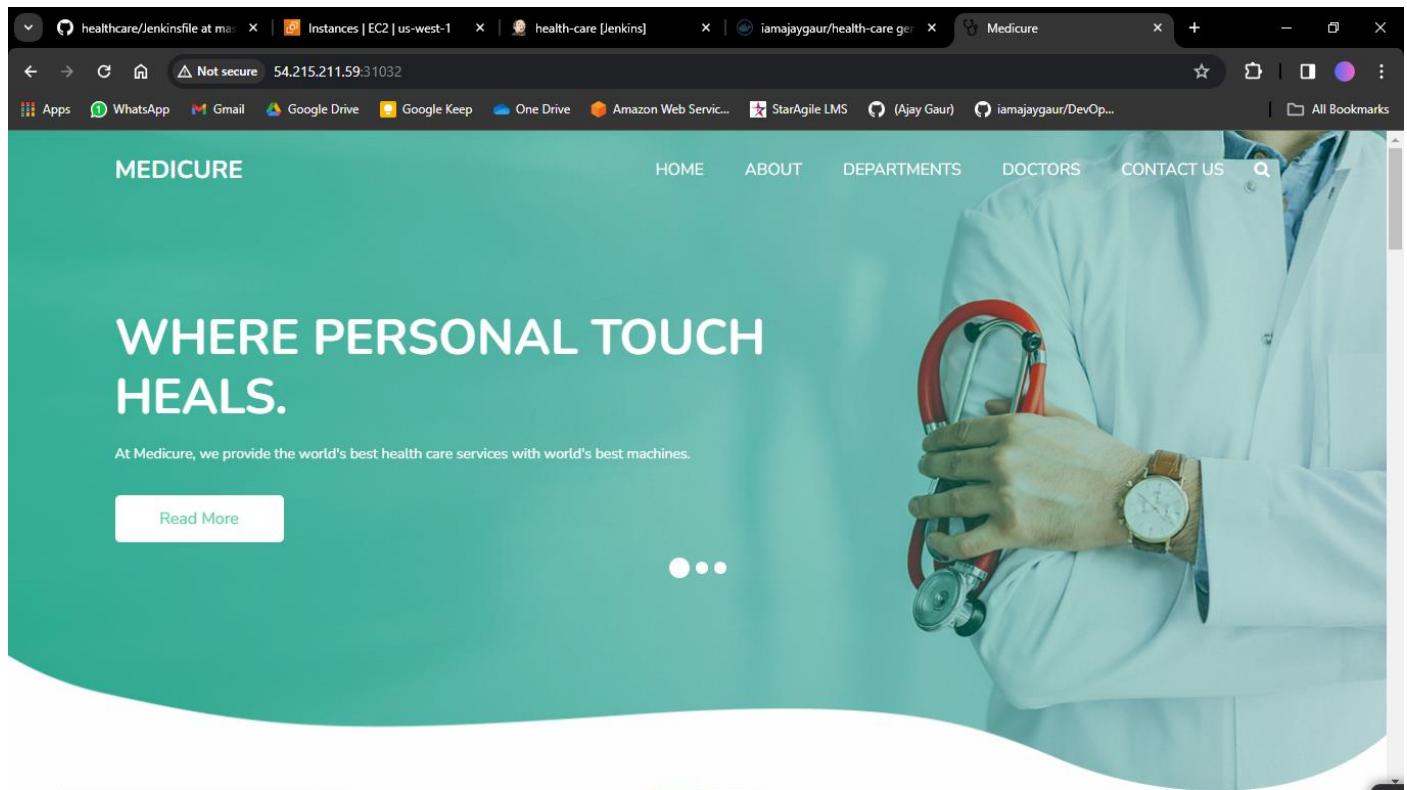
```
devopsadmin@kmaster-node:~$ kubectl get nodes
NAME      STATUS    ROLES      AGE   VERSION
kmaster-node   Ready    control-plane   30h   v1.28.2
worker-node1  NotReady <none>     30h   v1.28.2
worker-node2  Ready    <none>     30h   v1.28.2

devopsadmin@kmaster-node:~$ kubectl get pods
NAME                               READY   STATUS        RESTARTS   AGE
bankapp-eta-deploy-d466b85c8-57rgf   1/1    Running       0          6m59s
bankapp-eta-deploy-d466b85c8-jhkgc   1/1    Running       0          6m59s
bankapp-eta-deploy-d466b85c8-x9zqw   1/1    Running       0          6m59s
bankingapp-deploy-5fd9b56dd9-8m6ms  0/1    ImagePullBackOff 0          6m59s
bankingapp-deploy-5fd9b56dd9-dh8nh  0/1    ImagePullBackOff 0          6m59s
bankingapp-deploy-5fd9b56dd9-fzvms  0/1    ImagePullBackOff 0          6m59s
health-care-fb766fd54-dqfxs        1/1    Running       0          4m27s
health-care-fb766fd54-kn76q        1/1    Running       0          4m27s
health-care-fb766fd54-p4fvj        1/1    Running       0          4m27s
healthcare-eta-deploy-6b79ddc9c8-rwm57 0/1    ImagePullBackOff 0          6m59s
healthcare-eta-deploy-6b79ddc9c8-vkpfz 0/1    ImagePullBackOff 0          6m59s
healthcare-eta-deploy-6b79ddc9c8-zz4rl 0/1    ImagePullBackOff 0          6m58s

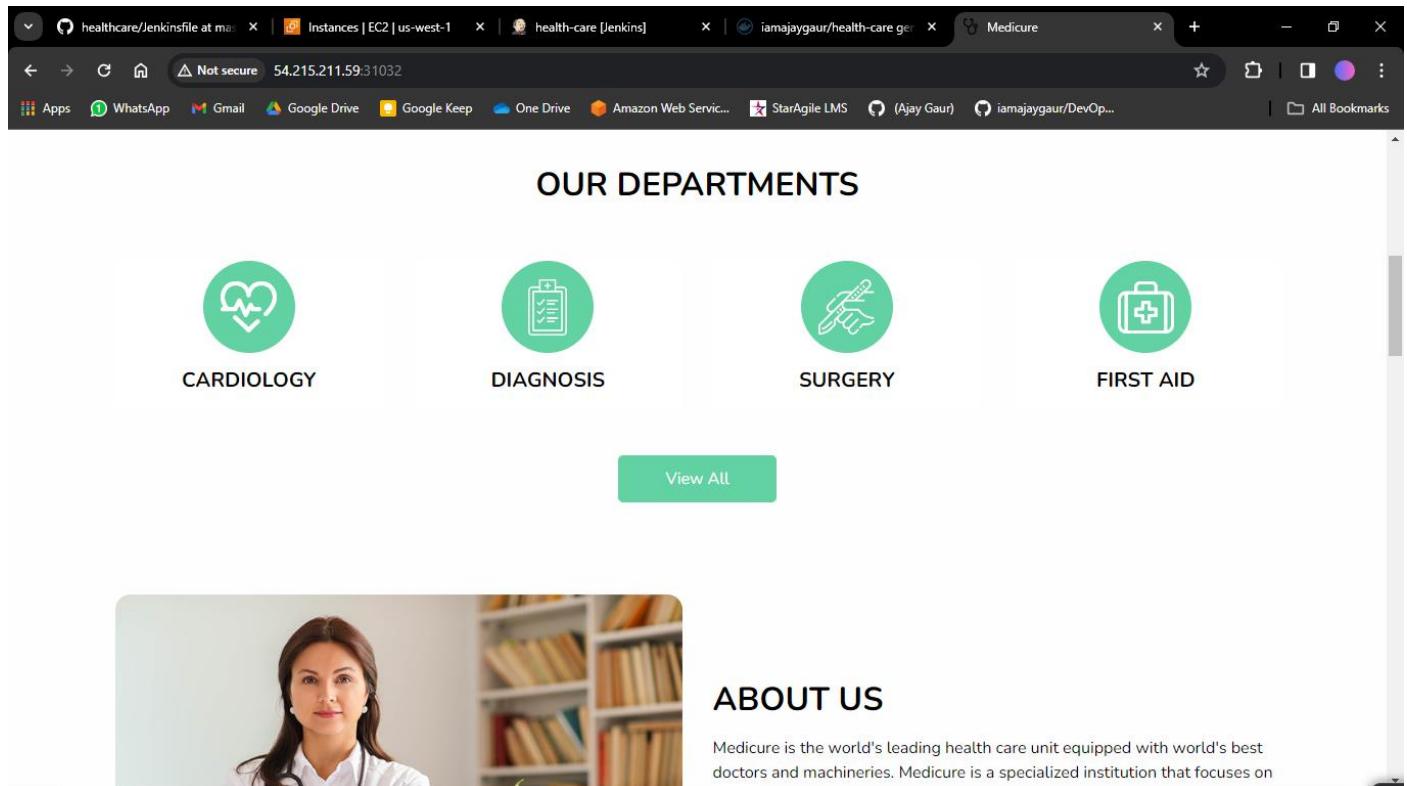
devopsadmin@kmaster-node:~$ kubectl get svc
NAME           TYPE      CLUSTER-IP   EXTERNAL-IP   PORT(S)   AGE
health-care-np-service   NodePort   10.111.97.120 <none>       8082:31032/TCP   5m12s
kubernetes     ClusterIP  10.96.0.1    <none>       443/TCP    30h

devopsadmin@kmaster-node:~$
```

→http:// 54.215.211.59:31032/



The screenshot shows the homepage of the Medicure website. The header features the word "MEDICURE" in a bold, black, sans-serif font. Below it is a navigation bar with links for "HOME", "ABOUT", "DEPARTMENTS", "DOCTORS", and "CONTACT US". A search icon is also present. The main background is a teal color with a large, semi-transparent white circular graphic on the right side. Inside this circle, a doctor's hand wearing a white coat and a brown leather watch is holding a red stethoscope. The text "WHERE PERSONAL TOUCH HEALS." is displayed in large, white, sans-serif capital letters. Below this, a smaller line of text reads "At Medicure, we provide the world's best health care services with world's best machines." A "Read More" button is located in the bottom-left corner of the teal area. At the very bottom of the page, there is a horizontal navigation bar with icons for various apps like WhatsApp, Gmail, Google Drive, etc.



The screenshot shows the "OUR DEPARTMENTS" section of the Medicure website. The title "OUR DEPARTMENTS" is centered at the top in a bold, black, sans-serif font. Below it are four circular icons, each representing a department: "CARDIOLOGY" (a heart icon), "DIAGNOSIS" (a clipboard icon), "SURGERY" (a scalpel icon), and "FIRST AID" (a first aid kit icon). Each icon is accompanied by its respective department name. A green "View All" button is positioned below the icons. Further down the page, there is a large image of a female doctor in a white coat, and the section "ABOUT US" is visible with a brief description of the institution.

ABOUT US

Medicure is the world's leading health care unit equipped with world's best doctors and machineries. Medicure is a specialized institution that focuses on treating injuries and diseases of the musculoskeletal system.

[Read More](#)

OUR DOCTORS

OUR DOCTORS

Meet our best in class doctors with 20+ years of experience as Orthopedics.

Elina Josh
Doctor

Adam View
Doctor

Mia Mike
Doctor

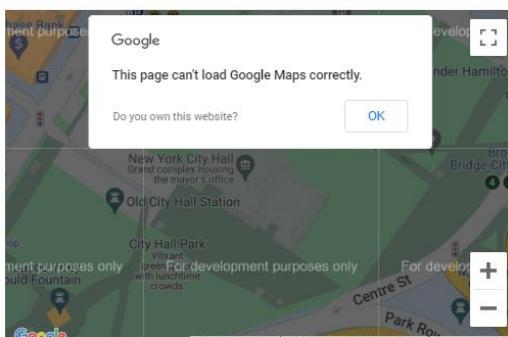
[View All](#)

healthcare/Jenkinsfile at master | Instances | EC2 | us-west-1 | health-care [Jenkins] | iamajaygaur/health-care get | Medicure | + - X

Not secure 54.215.211.59:31032

Apps WhatsApp Gmail Google Drive Google Keep One Drive Amazon Web Services StarAgile LMS (Ajay Gaur) iamajaygaur/DevOp... All Bookmarks

GET IN TOUCH



TESTIMONIAL

healthcare/Jenkinsfile at master | Instances | EC2 | us-west-1 | health-care [Jenkins] | iamajaygaur/health-care get | Medicure | + - X

Not secure 54.215.211.59:31032

Apps WhatsApp Gmail Google Drive Google Keep One Drive Amazon Web Services StarAgile LMS (Ajay Gaur) iamajaygaur/DevOp... All Bookmarks

TESTIMONIAL



Alan Emerson

I have got my knee joint replacement surgery at Medicure and I am very happy that I have chosen the best place. Everything went very smooth.

“ ”

← →

Reach at..

Location

About

Links

Home About

Newsletter

Enter email

Alan Emerson

I have got my knee joint replacement surgery at Medicure and I am very happy that I have chosen the best place.
Everything went very smooth.

“ ”

Reach at..

- Location
- Call +01 1234567890
- demo@gmail.com

About

Links

Newsletter

Enter email

Subscribe

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→ Launch the Monitoring Server in VM and Install and Configure Prometheus and Grafana

Instances (1/6) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
jenkins-master	i-0a17ab2830e136020	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
jenkins-slave	i-09515aa07e929dd44	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-master	i-087dcc78b7647ddc3	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-workernode1	i-05c88366d2c2c5461	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
k8s-workernode2	i-0f3be607a199ec6ec	Running	t2.micro	2/2 checks passed	View alarms	us-west-1c
monitoring-server	i-032eb6bdfcb2008f8	Running	t2.micro	Initializing	View alarms	us-west-1c

Instance: i-032eb6bdfcb2008f8 (monitoring-server)

Details **Status and alarms** **New** **Monitoring** **Security** **Networking** **Storage** **Tags**

Instance summary

Instance ID i-032eb6bdfcb2008f8 (monitoring-server)	Public IPv4 address 54.177.102.173 Open address	Private IP4 addresses 172.31.19.226
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-54-177-102-173.us-west-1.compute.amazonaws.com Open address
Hostname type	Private IP DNS name (IPv4 only)	

```

[ec2-user@ip-172-31-19-226 ~]$ sudo systemctl daemon-reload
[ec2-user@ip-172-31-19-226 ~]$ sudo systemctl start prometheus
● prometheus.service - Prometheus Server
    Loaded: loaded (/etc/systemd/system/prometheus.service; enabled; preset: disabled)
    Active: active (running) since Tue 2024-02-20 12:59:33 UTC; 4min 51s ago
      Docs: https://prometheus.io/docs/introduction/overview/
        Main PID: 2140 (prometheus)
          Tasks: 7 (limit: 1114)
         Memory: 81.6M
            CPU: 333ms
          CGroup: /system.slice/prometheus.service
                  └─2140 /root/prometheus-2.49.0-rc.1.linux-amd64/prometheus --config.file=/root/prometheus-2.49.0-rc.1.linux-amd64/prometheus

Feb 20 12:59:34 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:34.643Z calle>
Feb 20 12:59:34 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:34.651Z calle>
Feb 20 12:59:34 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:34.651Z calle>
Feb 20 12:59:34 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:34.658Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.066Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.070Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.136Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.146Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.146Z calle>
Feb 20 12:59:46 ip-172-31-19-226.us-west-1.compute.internal prometheus[2140]: ts=2024-02-20T12:59:46.159Z calle>
lines 1-21/21 (END)

```

```

[ec2-user@ip-172-31-19-226 ~]$ sudo /bin/systemctl start grafana-server.service
[ec2-user@ip-172-31-19-226 ~]$ sudo /bin/systemctl status grafana-server.service
● grafana-server.service - Grafana instance
    Loaded: loaded (/usr/lib/systemd/system/grafana-server.service; enabled; preset: disabled)
    Active: active (running) since Tue 2024-02-20 12:59:35 UTC; 6min ago
      Docs: http://docs.grafana.org
        Main PID: 2137 (grafana-server)
          Tasks: 7 (limit: 1114)
         Memory: 101.1M
            CPU: 655ms
          CGroup: /system.slice/grafana-server.service
                  └─2137 /usr/sbin/grafana-server --config=/etc/grafana/grafana.ini --pidfile=/var/run/grafana/grafan>

Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=ticker t=2024-02-20T12:>
Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=infra.usagesstats.colle>
Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=server t=2024-02-20T12:>
Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=provisioning.alerting>
Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=provisioning.alerting>
Feb 20 12:59:35 ip-172-31-19-226.us-west-1.compute.internal systemd[1]: Started grafana-server.service - Grafan>
Feb 20 12:59:36 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=http.server t=2024-02->
Feb 20 12:59:36 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=ngalert t=2024-02-20T1:>
Feb 20 12:59:36 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=grafanaStorageLogger t:>
Feb 20 12:59:36 ip-172-31-19-226.us-west-1.compute.internal grafana-server[2137]: logger=ngalert.multior.org.alert>
lines 1-21/21 (END)

```

The screenshot shows the Prometheus Time Series Collector interface. At the top, there are several tabs: 'DevOps_Training_Docs/Phase-1', 'Instances | EC2 | us-west-1', 'Medicure', and 'Prometheus Time Series Collector'. The URL in the address bar is 'Not secure 54.177.102.173:9090/graph?g0.expr=up&g0.tab=1&g0.display_mode=lines&g0.show_exemplars=0&g0.range_input=1h'. Below the tabs, there are global configuration options: 'Use local time' (unchecked), 'Enable query history' (unchecked), 'Enable autocomplete' (checked), 'Enable highlighting' (checked), and 'Enable linter' (checked). A search bar contains the query 'up'. To the right of the search bar are buttons for 'Table' (selected) and 'Graph', followed by 'Execute'.

Table **Graph** **Execute**

Evaluation time: < >

	0	1
up{instance="172.31.19.99:9100", job="prometheus"}	0	
up{instance="localhost:9090", job="prometheus"}		1

Load time: 269ms Resolution: 14s Result series: 2

Remove Panel

Add Panel

The screenshot shows the Grafana Settings page for the 'Prometheus-1' data source. The title is 'Data Sources / Prometheus-1' and it specifies 'Type: Prometheus'. On the left, there is a sidebar with icons for settings, search, star, square, gear, user, and help. The main area has tabs for 'Settings' (selected) and 'Dashboards'. A message box says 'Configure your Prometheus data source below' and 'Or skip the effort and get Prometheus (and Loki) as fully-managed, scalable, and hosted data sources from Grafana Labs with the free-forever Grafana Cloud plan.' The 'HTTP' section contains fields for 'URL' (set to 'http://54.177.102.173:9090/'), 'Access' (set to 'Server (default)'), 'Allowed cookies' (with a placeholder 'New tag (enter key to add)'), and 'Timeout' (set to 'Timeout in seconds'). The 'Auth' section includes 'Basic auth' and 'With Credentials' buttons.

Data Sources / Prometheus-1

Type: Prometheus

Settings Dashboards

Configure your Prometheus data source below

Or skip the effort and get Prometheus (and Loki) as fully-managed, scalable, and hosted data sources from Grafana Labs with the [free-forever Grafana Cloud plan](#).

Name: Prometheus-1 Default:

HTTP

URL: http://54.177.102.173:9090/

Access: Server (default)

Allowed cookies: New tag (enter key to add)

Timeout: Timeout in seconds

Auth

Basic auth With Credentials

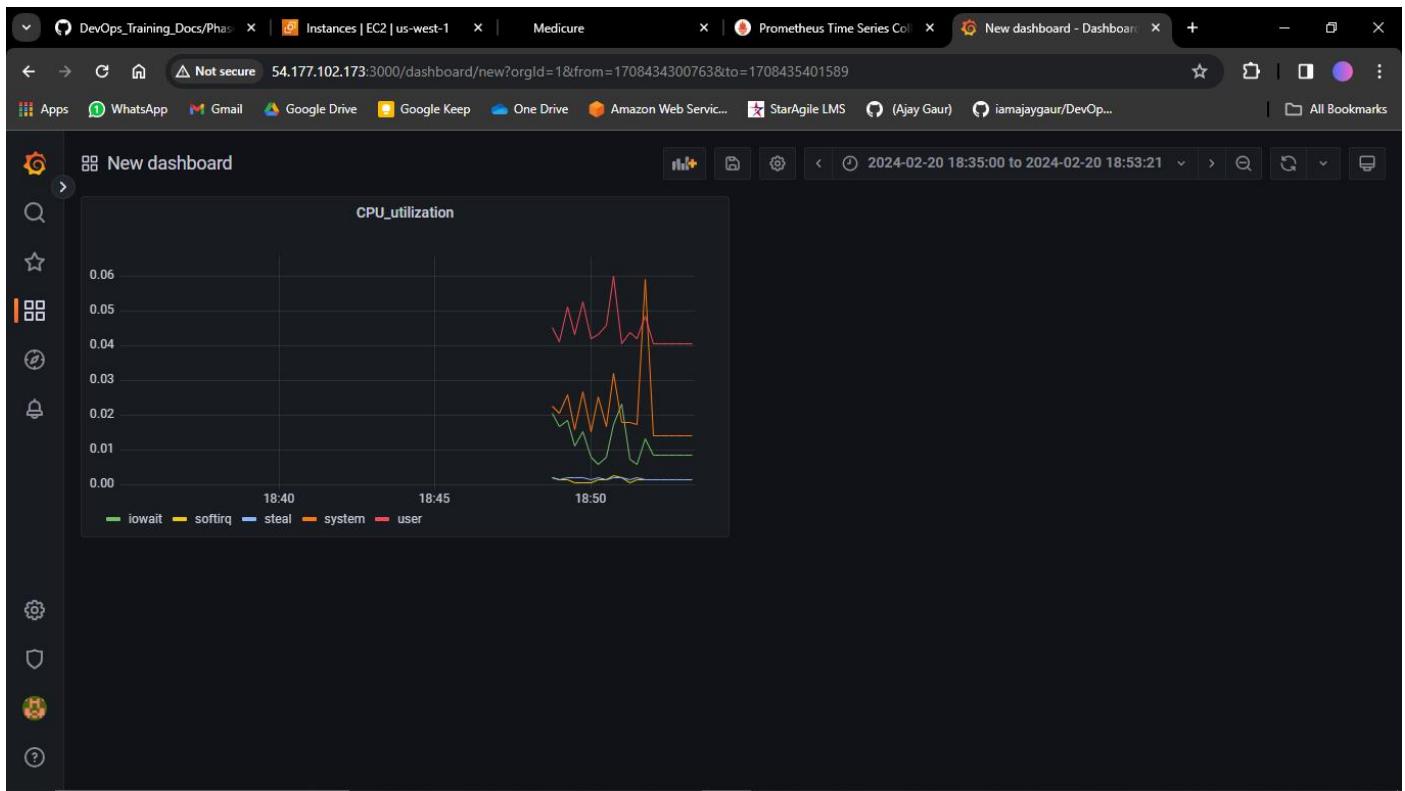
The screenshot shows the Prometheus UI for editing a data source. At the top, there are tabs for 'DevOps_Training_Docs/Phas', 'Instances | EC2 | us-west-1', 'Medicure', 'Prometheus Time Series Col...', and 'Settings - Prometheus-1 - G...'. The main area has sections for 'Scrape interval' (15s), 'Query timeout' (60s), and 'HTTP Method' (POST). A green success message 'Datasource updated' is displayed. Below these are 'Misc' and 'Exemplars' sections, both currently empty. At the bottom, there are buttons for 'Back', 'Explore', 'Delete' (highlighted in red), and 'Save & test'.

→ Add Panel Title as CPU_utilization

→ Select Data source as Prometheus

→ Run Query - sum by(mode)(irate(node_cpu_seconds_total{mode!="idle"}[5m])) > 0

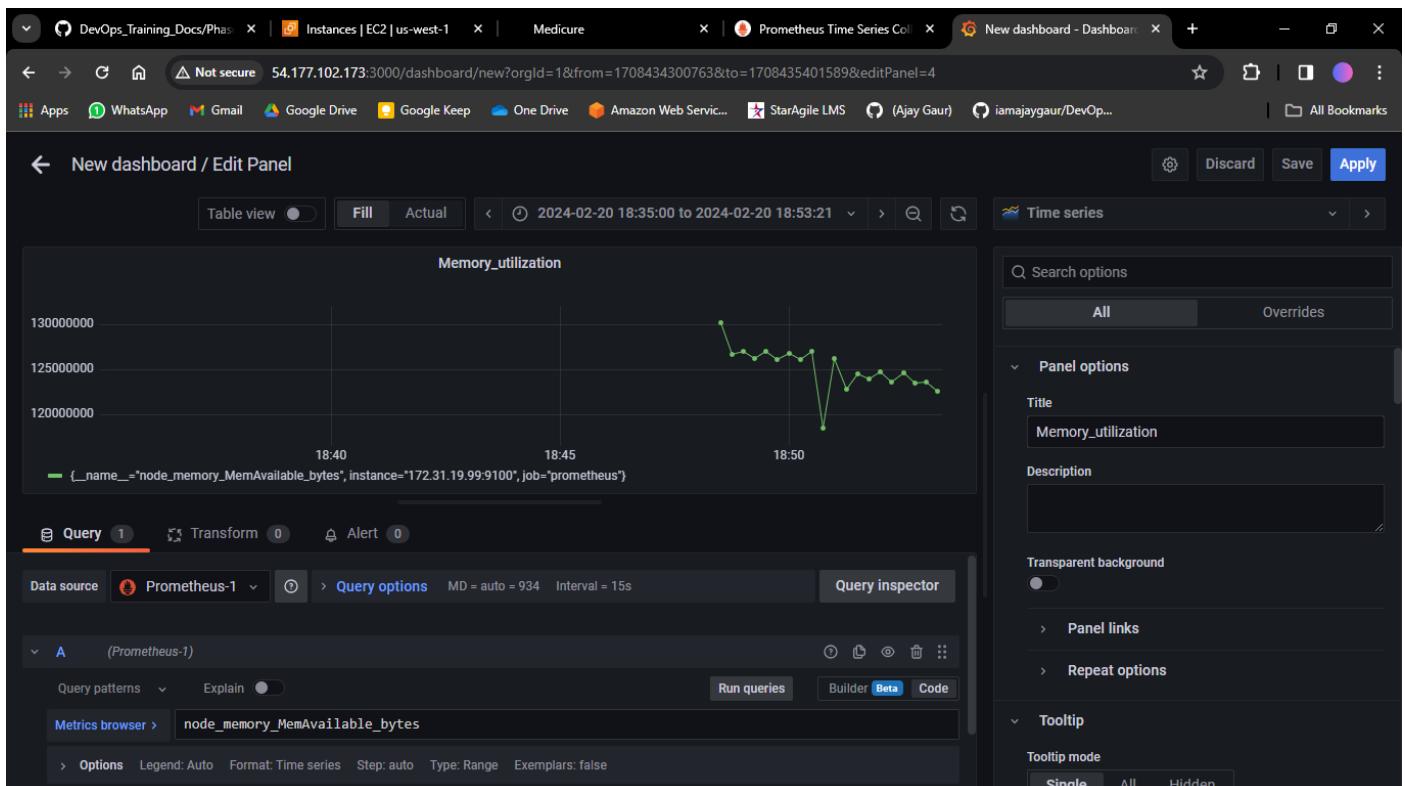
The screenshot shows the Grafana interface for creating a new dashboard. The main area displays a time series chart titled 'CPU_utilization' with five data series: iowait (green), softirq (yellow), steal (blue), system (orange), and user (red). The chart shows CPU usage over a 10-minute period from 18:40 to 18:50. The legend indicates that the system and user modes are active. Below the chart are 'Query', 'Transform', and 'Alert' buttons. The 'Query' section shows the query: `sum by(mode)(irate(node_cpu_seconds_total{mode!="idle"}[5m])) > 0`. The right side of the screen contains the 'Panel options' panel, which includes fields for 'Title' (set to 'CPU_utilization'), 'Description', 'Transparent background' (disabled), 'Panel links', 'Repeat options', and 'Tooltip' settings (mode set to 'Single').

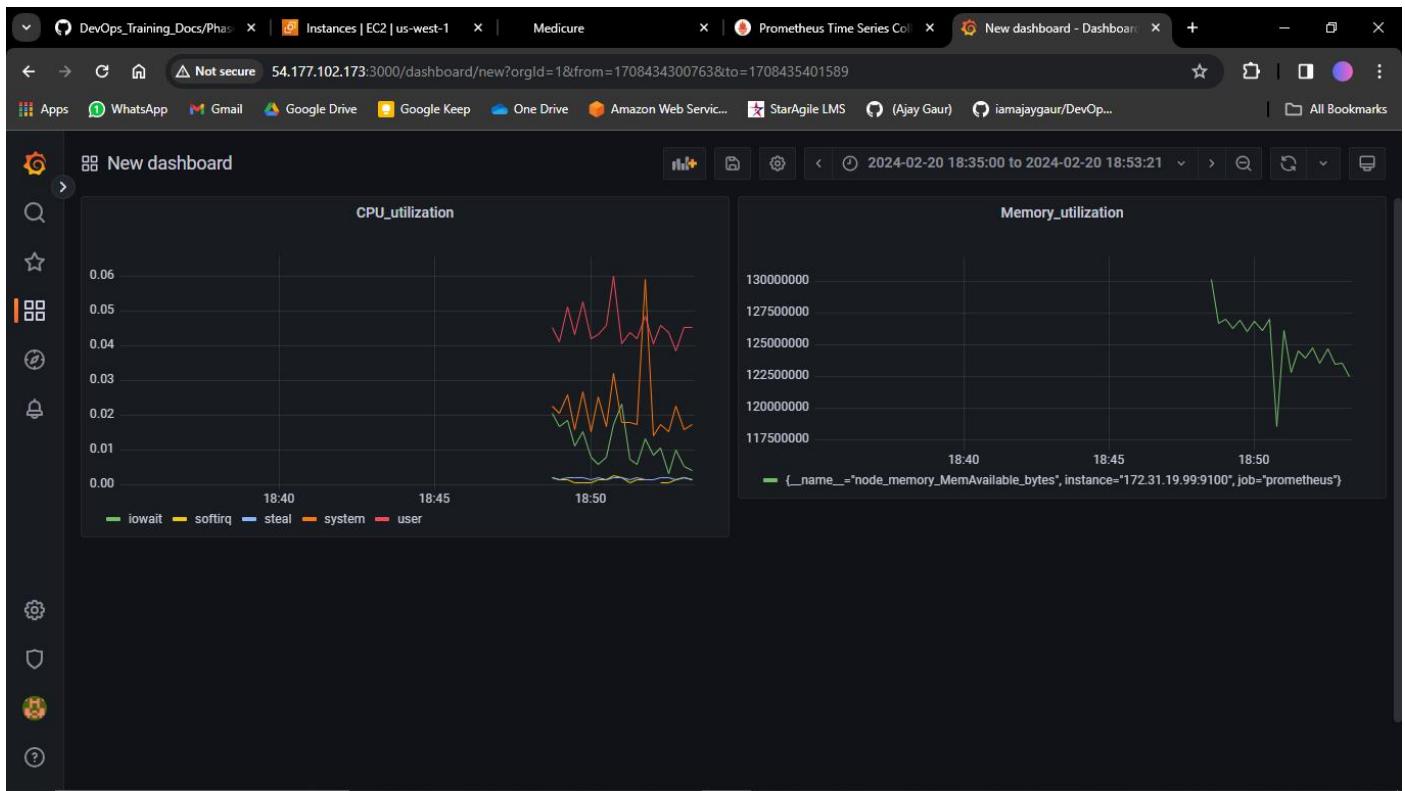


→ Add new Panel as Memory_utilization

→ Select Data source as Prometheus

→ Run Query - node_memory_MemAvailable_bytes

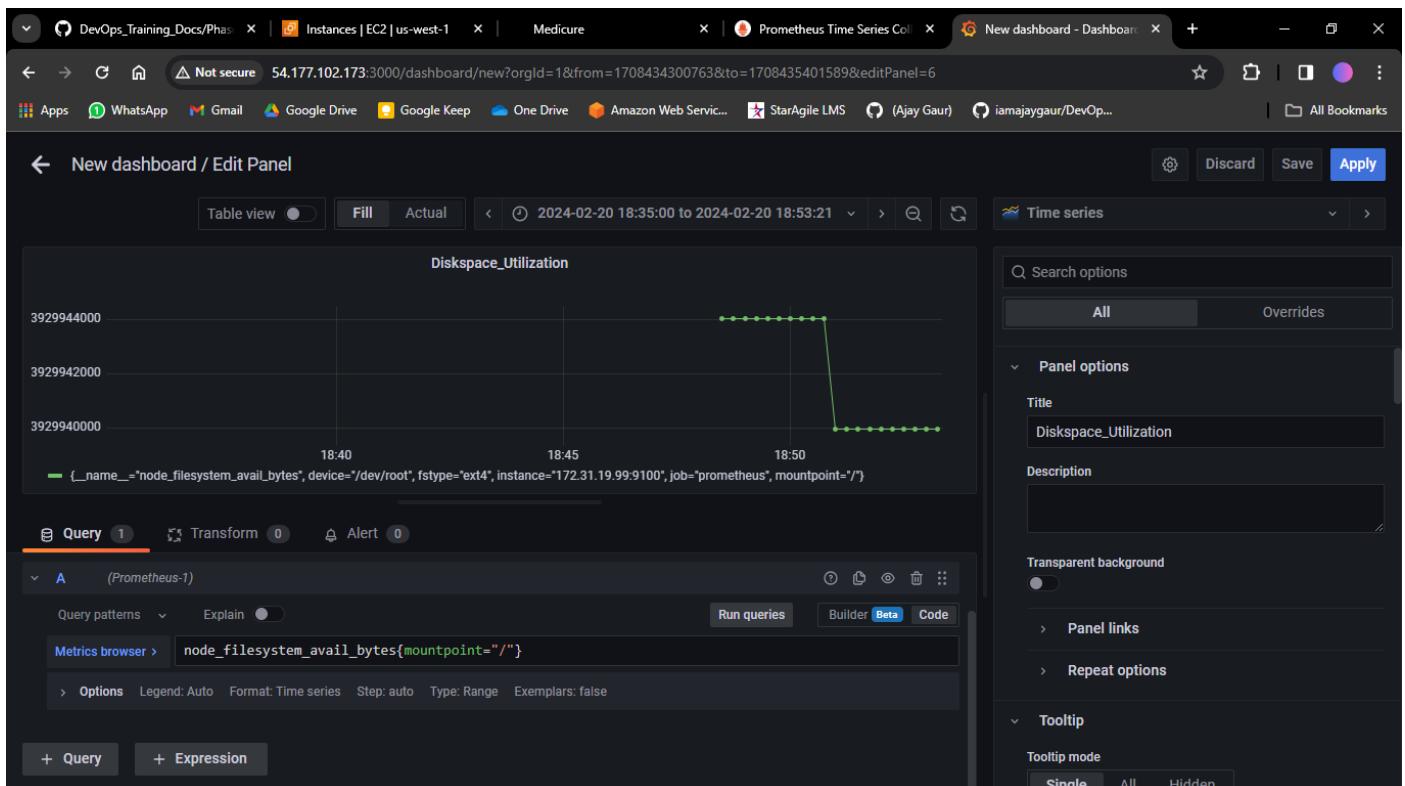


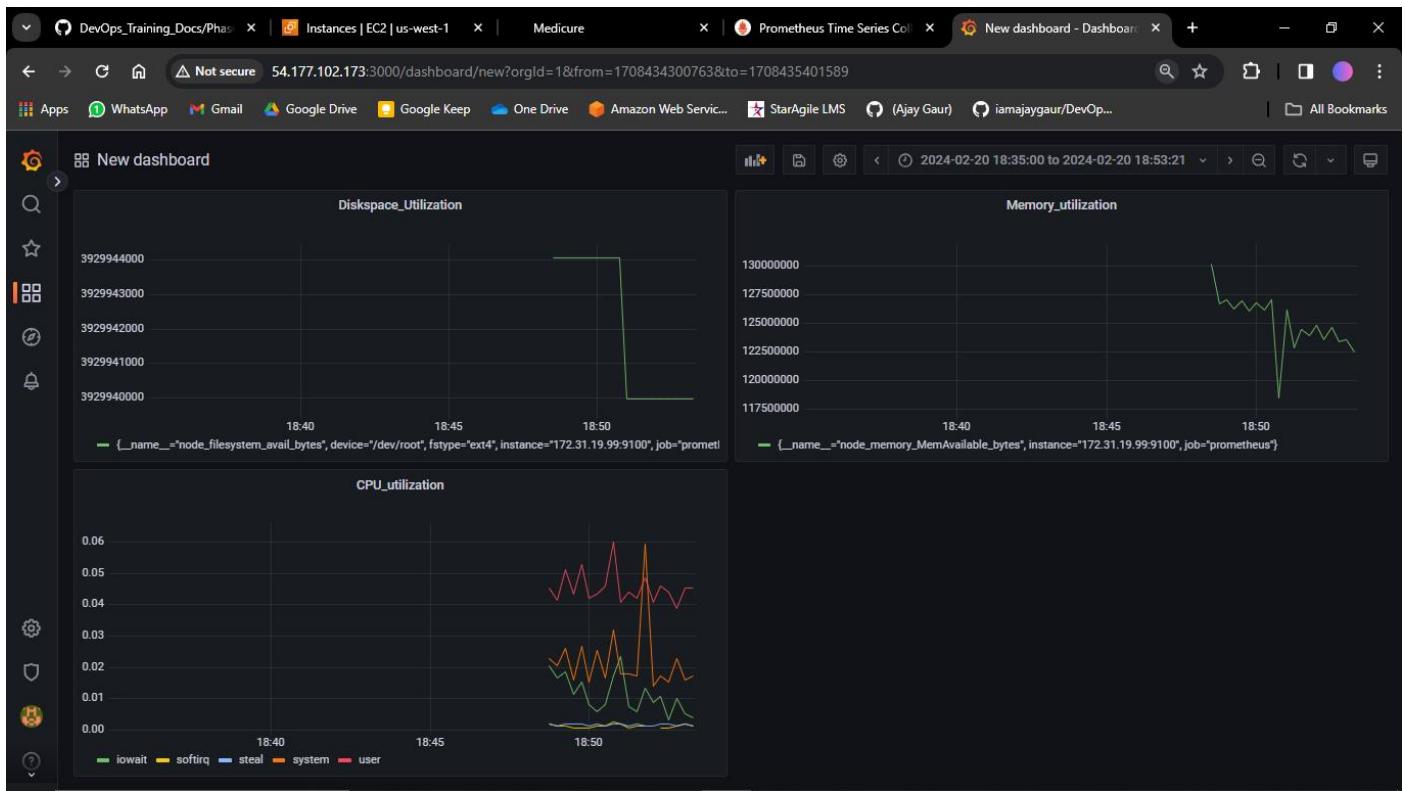


→ Add new Panel as Diskspace_Utilization

→ Select Data source as Prometheus

→ Run Query - `node_filesystem_avail_bytes{mountpoint="/"}`





→ Add new Panel as Containermemory_Utilization

→ Select Data source as Prometheus

→ Run Query - node_cpu_guest_seconds_total

