AQE Project

- Pavan Pendyala

Spring initializer
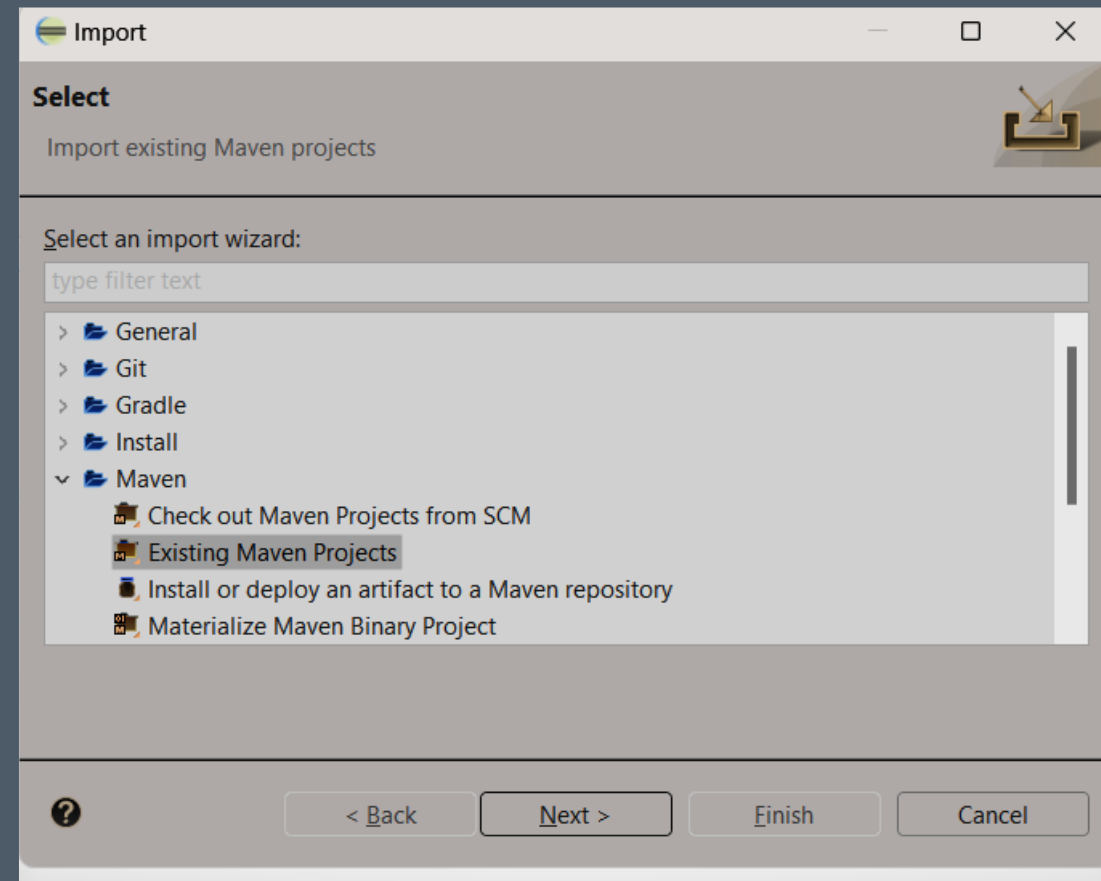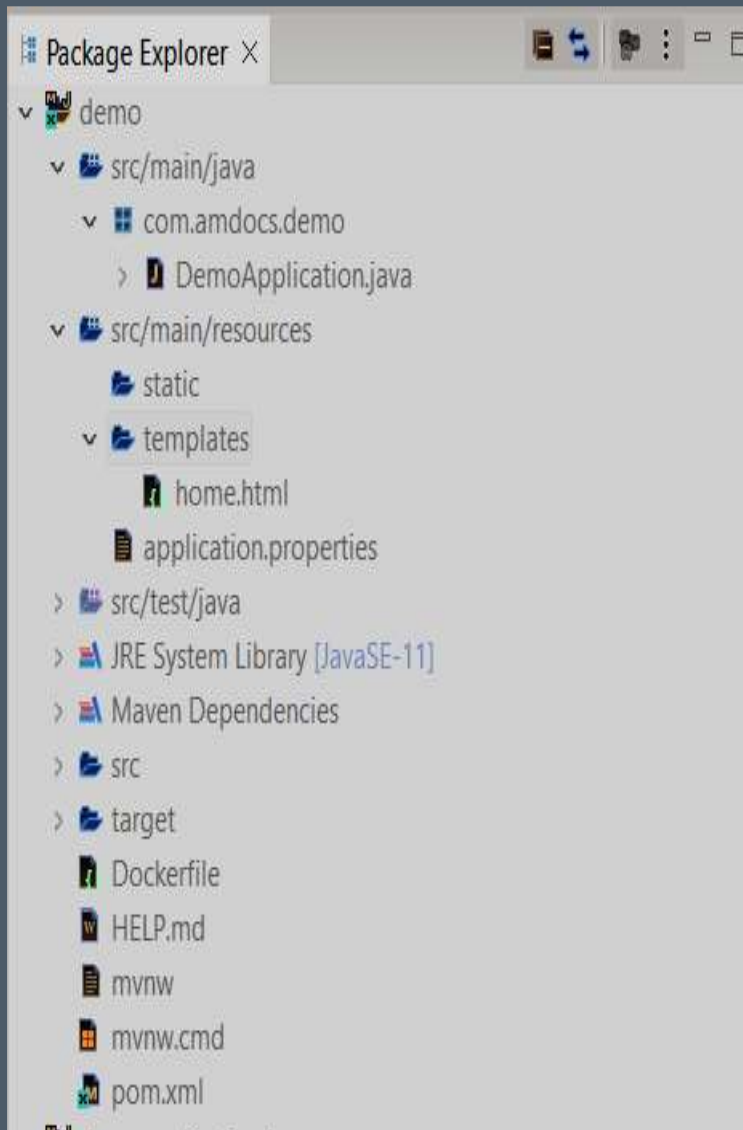
```java
package com.amdocs.demo;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;

@SpringBootApplication
@Controller
public class DemoApplication {

    public static void main(String[] args) {
        SpringApplication.run(DemoApplication.class, args);
    }

    @GetMapping("/")
    public String home(Model model) {
        model.addAttribute("mainMessage", "Welcome to My Awesome World!");
        model.addAttribute("subMessage", "Explore the wonders of web development");
        return "home";
    }
}
```
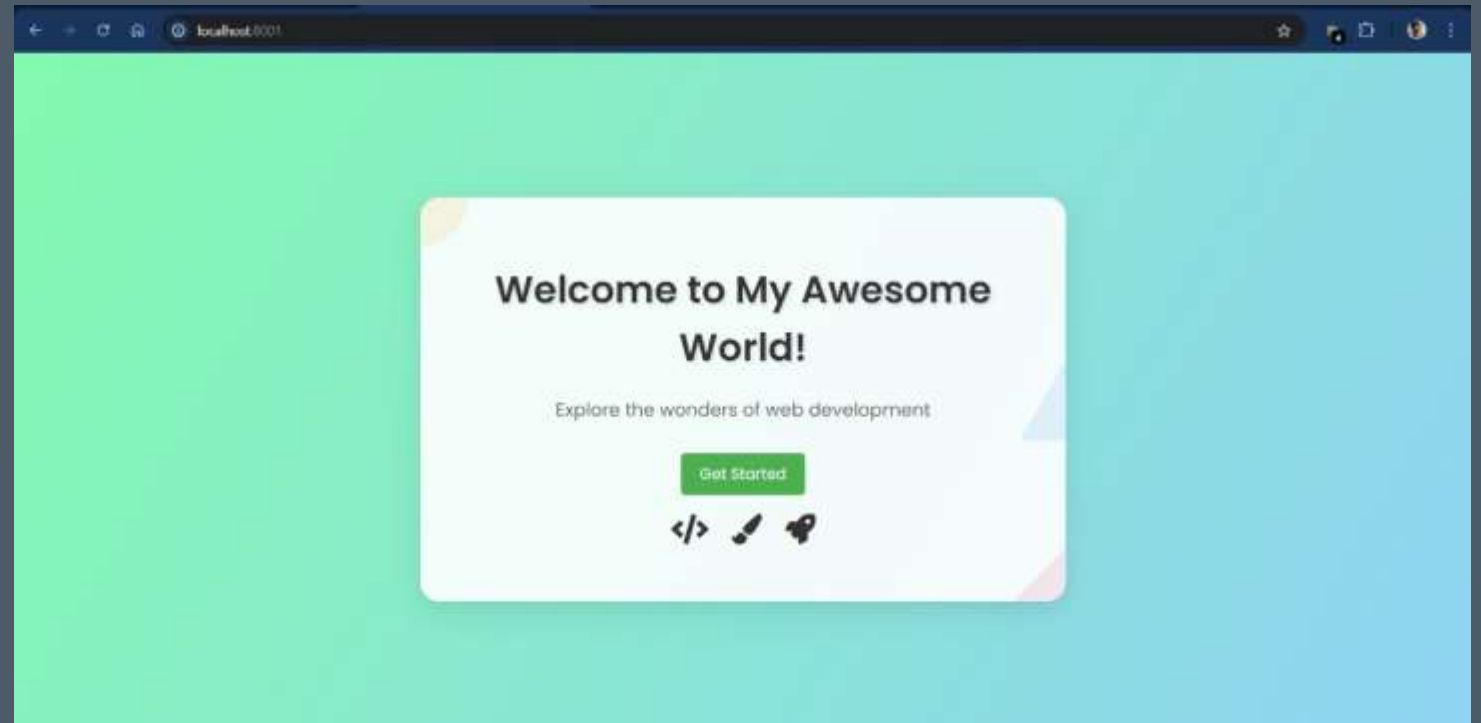
```
            .   ____          _            __ _ _
           /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
          ( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
           \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
            '  |____| .__|_| |_|_| |_\__, | / / / /
           =========|_|==============|___/=/_/_/_/
           :: Spring Boot ::               (v2.7.13)

2024-07-31 23:44:50.837  INFO 10212 --- [           main] com.amdocs.demo.DemoApplication          : Starting DemoApplication using Java 21.0.4 on DESKTOP-00
2024-07-31 23:44:50.844  INFO 10212 --- [           main] com.amdocs.demo.DemoApplication          : No active profile set, falling back to 1 default profile
2024-07-31 23:44:52.786  INFO 10212 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8001 (http)
2024-07-31 23:44:52.806  INFO 10212 --- [           main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2024-07-31 23:44:52.806  INFO 10212 --- [           main] org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache Tomcat/9.0.76]
2024-07-31 23:44:52.980  INFO 10212 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing Spring embedded WebApplicationContext
2024-07-31 23:44:52.980  INFO 10212 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in
2024-07-31 23:44:53.525  INFO 10212 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8001 (http) with context path
2024-07-31 23:44:53.535  INFO 10212 --- [           main] com.amdocs.demo.DemoApplication          : Started DemoApplication in 3.502 seconds (JVM running fo
```

Continuous Deployment Using Jenkins
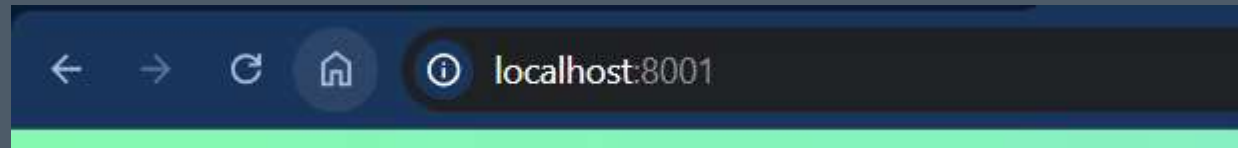
application.properties ✕ Dockerfile home.ht

```
spring.application.name=demo
server.port=8001
spring.thymeleaf.prefix=classpath:/templ
spring.thymeleaf.suffix=.html
```

Package
demo

New   >
Go Into

Open in New Window
Open Type Hierarchy   F4
Show In   Alt+Shift+W >
Show in Local Terminal   >

Copy   Ctrl+C
Copy Qualified Name
Paste   Ctrl+V
Delete   Delete

Remove from Context   Ctrl+Alt+Shift+Down
Build Path   >
Source   Alt+Shift+S >
Refactor   Alt+Shift+T >

Import...
Export...

Source   >

Refresh   F5
Close Project
Close Unrelated Projects
Assign Working Sets...

Coverage As   >
Run As   >
Debug As   >
Restore from Local History...
Maven   >
Team   >
Compare With   >
GitHub   >
Configure   >

TestNG   >

Properties   Alt+Enter

demo

Problems @ Javadoc Declaration Console ✕

noApplication [Java Application] C:\Program Files\Java\
4-07-31 23:44:50.844 INFO 10212 --- [

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
9 TestNG Test   Alt+Shift+X, N

Run Configurations...
Demo (Maven Build)

Docker File

```
1  # Use an official Java runtime as a parent image
2  FROM openjdk:17
3
4  # Set the working directory in the container
5  EXPOSE 8001
6
7  # Copy the packaged jar file into the container
8  ADD target/demo.jar demo.jar
9
10 # Run the jar file
11 ENTRYPOINT ["java", "-jar", "demo.jar"]
12
```

Docker Build

```
D:\Devops\demo>docker build -t demo .
[+] Building 1.5s (7/7) FINISHED                                                    docker:desktop-linux
 => [internal] load build definition from Dockerfile                                               0.0s
 => => transferring dockerfile: 311B                                                               0.0s
 => [internal] load metadata for docker.io/library/openjdk:17                                      1.3s
 => [internal] load .dockerignore                                                                  0.0s
 => => transferring context: 2B                                                                    0.0s
 => [internal] load build context                                                                  0.0s
 => => transferring context: 65B                                                                   0.0s
 => [1/2] FROM docker.io/library/openjdk:17@sha256:528707881fdb9562eb819128a9f85ae7fe000e2fbaeaf9f87662e7b3f38cb7  0.0s
 => CACHED [2/2] ADD target/demo.jar demo.jar                                                      0.0s
 => exporting to image                                                                             0.0s
 => => exporting layers                                                                            0.0s
 => => writing image sha256:886338b3d6fccd9ad9134484e4893963952979b10fd0a4e92606d12a54e08d49       0.0s
 => => naming to docker.io/library/demo                                                            0.0s

View build details: docker-desktop://dashboard/build/desktop-linux/desktop-linux/uub4rz0id4dspi3pxr50acch2

What's next:
    View a summary of image vulnerabilities and recommendations → docker scout quickview

D:\Devops\demo>docker run -p 9090:8081 demo

  .   ____          _            __ _ _
 /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
 \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
  '  |____| .__|_| |_|_| |_\__, | / / / /
 =========|_|==============|___/=/_/_/_/
 :: Spring Boot ::                (v2.7.13)

2024-07-31 18:34:33.334  INFO 1 --- [           main] com.amdocs.demo.DemoApplication          : Starting DemoApplication v0.0.1-SNAPSHOT using Java 17.0.2 on b6c8af2d081a with PID 1 (/demo.jar started by root in /)
2024-07-31 18:34:33.346  INFO 1 --- [           main] com.amdocs.demo.DemoApplication          : No active profile set, falling back to 1 default profile: "default"
2024-07-31 18:34:34.540  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8010 (http)
2024-07-31 18:34:34.561  INFO 1 --- [           main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2024-07-31 18:34:34.562  INFO 1 --- [           main] org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache Tomcat/9.0.76]
2024-07-31 18:34:34.692  INFO 1 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]        : Initializing Spring embedded WebApplicationContext
2024-07-31 18:34:34.692  INFO 1 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1227 ms
2024-07-31 18:34:35.232  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8010 (http) with context path ''
2024-07-31 18:34:35.251  INFO 1 --- [           main] com.amdocs.demo.DemoApplication          : Started DemoApplication in 2.502 seconds (JVM running for 3.166)
```
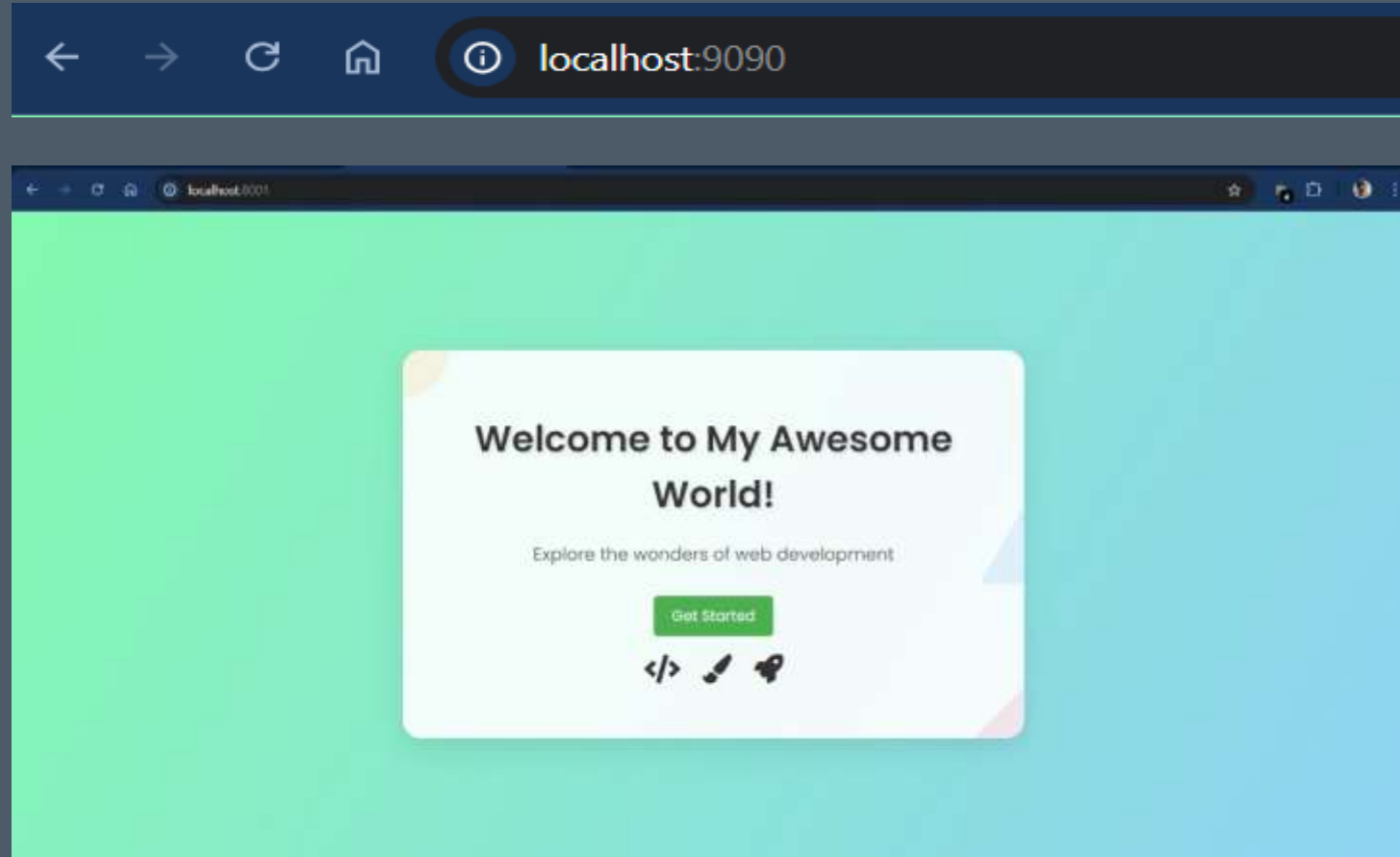
Port Mapping

Deployed Files into Docker

pavan765/demo:latest `IN USE`

48662b0ccfc7 ⧉

CREATED
1 day ago

Im

Layers (12)

0	ADD file:9893213a9ea238f53ac68d...	110.52 MB	
1	CMD ["/bin/bash"]	0 B	
2	set -eux; microdnf install gzip tar bi...	39.67 MB	
3	ENV JAVA_HOME=/usr/java/openjd...	0 B	
4	ENV PATH=/usr/java/openjdk-17/bi...	0 B	
5	ENV LANG=C.UTF-8	0 B	
6	ENV JAVA_VERSION=17.0.2	0 B	
7	set -eux; arch="$(objdump="$(com...	321.28 MB	
8	CMD ["jshell"]	0 B	
9	EXPOSE map[8001/tcp:{}]	0 B	
10	ADD target/demo.jar demo.jar # bu...	19.24 MB	

THANK YOU