How to run h2explore application from VS code IDE:

1. Open the “h2exploreApplication.java
2. Click “Run Java” from the VS code IDE, this will build the h2exploreApplication and start it as an web service application. Make sure the build is success without any error.
3. Start the Internet explore “Edge” or Chrome or other explorers.
4. Type in the URL: <http://localhost:8080/console/>, you will see the following page:

Graphical user interface, application

Description automatically generated

1. Type in the path to the database which is configured in the C:\TTS\Projects\Springboot\h2explore\src\main\resources\application.properties file as following:

spring.datasource.url=jdbc:h2:mem:testdb

1. Then click “Connect”. If the connection is successful, you will see the following screen:

Graphical user interface, application, Word

Description automatically generated

The output of the console will look like this:

Windows PowerShell

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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\TTS\Projects\Springboot\h2explore> & 'C:\Users\ssshu\.vscode\extensions\redhat.java-1.16.0-win32-x64\jre\17.0.6-win32-x86\_64\bin\java.exe' '@C:\Users\ssshu\AppData\Local\Temp\cp\_ejoobt33c4d5lr8b82hdtj5x6.argfile' 'com.tts.h2explore.H2exploreApplication'

00:27:28.054 [Thread-0] DEBUG org.springframework.boot.devtools.restart.classloader.RestartClassLoader - Created RestartClassLoader org.springframework.boot.devtools.restart.classloader.RestartClassLoader@27c6ea25

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:: Spring Boot :: (v2.7.10)

2023-04-07 00:27:28.385 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Starting H2exploreApplication using Java 17.0.6 on LAPTOP-NU226LT0 with PID 3100 (C:\TTS\Projects\Springboot\h2explore\target\classes started by ssshu in C:\TTS\Projects\Springboot\h2explore)

2023-04-07 00:27:28.386 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : No active profile set, falling back to 1 default profile: "default"

2023-04-07 00:27:28.429 INFO 3100 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtools.add-properties' to 'false' to disable

2023-04-07 00:27:28.429 INFO 3100 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting the 'logging.level.web' property to 'DEBUG'

2023-04-07 00:27:28.885 INFO 3100 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.

2023-04-07 00:27:28.932 INFO 3100 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 38 ms. Found 1 JPA repository interfaces.

2023-04-07 00:27:29.507 INFO 3100 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)

2023-04-07 00:27:29.523 INFO 3100 --- [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]

2023-04-07 00:27:29.523 INFO 3100 --- [ restartedMain] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.73]

2023-04-07 00:27:29.597 INFO 3100 --- [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext

2023-04-07 00:27:29.597 INFO 3100 --- [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1168 ms

2023-04-07 00:27:29.638 INFO 3100 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...

2023-04-07 00:27:29.795 INFO 3100 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.

2023-04-07 00:27:29.811 INFO 3100 --- [ restartedMain] o.s.b.a.h2.H2ConsoleAutoConfiguration : H2 console available at '/console'. Database available at 'jdbc:h2:mem:testdb'

2023-04-07 00:27:29.961 INFO 3100 --- [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]

2023-04-07 00:27:30.020 INFO 3100 --- [ restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.6.15.Final

2023-04-07 00:27:30.145 INFO 3100 --- [ restartedMain] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.2.Final}

2023-04-07 00:27:30.266 INFO 3100 --- [ restartedMain] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.H2Dialect

Hibernate: drop table if exists customer CASCADE

Hibernate: drop sequence if exists hibernate\_sequence

Hibernate: create sequence hibernate\_sequence start with 1 increment by 1

Hibernate: create table customer (id bigint not null, first\_name varchar(255), last\_name varchar(255), primary key (id))

2023-04-07 00:27:30.681 INFO 3100 --- [ restartedMain] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]

2023-04-07 00:27:30.688 INFO 3100 --- [ restartedMain] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'

2023-04-07 00:27:30.946 WARN 3100 --- [ restartedMain] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning

2023-04-07 00:27:31.141 WARN 3100 --- [ restartedMain] ion$DefaultTemplateResolverConfiguration : Cannot find template location: classpath:/templates/ (please add some templates, check your Thymeleaf configuration, or set spring.thymeleaf.check-template-location=false)

2023-04-07 00:27:31.225 INFO 3100 --- [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729

2023-04-07 00:27:31.258 INFO 3100 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''

2023-04-07 00:27:31.266 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Started H2exploreApplication in 3.189 seconds (JVM running for 3.626)

Hibernate: call next value for hibernate\_sequence

Hibernate: insert into customer (first\_name, last\_name, id) values (?, ?, ?)

Hibernate: call next value for hibernate\_sequence

Hibernate: insert into customer (first\_name, last\_name, id) values (?, ?, ?)

Hibernate: call next value for hibernate\_sequence

Hibernate: insert into customer (first\_name, last\_name, id) values (?, ?, ?)

Hibernate: call next value for hibernate\_sequence

Hibernate: insert into customer (first\_name, last\_name, id) values (?, ?, ?)

Hibernate: call next value for hibernate\_sequence

Hibernate: insert into customer (first\_name, last\_name, id) values (?, ?, ?)

2023-04-07 00:27:31.338 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customers found with findAll():

2023-04-07 00:27:31.338 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : -------------------------------

Hibernate: select customer0\_.id as id1\_0\_, customer0\_.first\_name as first\_na2\_0\_, customer0\_.last\_name as last\_nam3\_0\_ from customer customer0\_

2023-04-07 00:27:31.423 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=1, firstName=Michael, lastName=Smith]

2023-04-07 00:27:31.424 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=2, firstName=Aaron, lastName=Moon]

2023-04-07 00:27:31.424 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=3, firstName=Kim, lastName=Lassiter]

2023-04-07 00:27:31.424 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=4, firstName=Joan, lastName=Daniels]

2023-04-07 00:27:31.424 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=5, firstName=Eric, lastName=Patterson]

2023-04-07 00:27:31.424 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication :

Hibernate: select customer0\_.id as id1\_0\_0\_, customer0\_.first\_name as first\_na2\_0\_0\_, customer0\_.last\_name as last\_nam3\_0\_0\_ from customer customer0\_ where customer0\_.id=?

2023-04-07 00:27:31.433 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer found with findById(1L):

2023-04-07 00:27:31.433 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : --------------------------------

2023-04-07 00:27:31.433 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=1, firstName=Michael, lastName=Smith]

2023-04-07 00:27:31.433 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication :

2023-04-07 00:27:31.433 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer found with findByLastName('Patterson'):

2023-04-07 00:27:31.434 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : --------------------------------------------

Hibernate: select customer0\_.id as id1\_0\_, customer0\_.first\_name as first\_na2\_0\_, customer0\_.last\_name as last\_nam3\_0\_ from customer customer0\_ where customer0\_.last\_name=?

2023-04-07 00:27:31.462 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication : Customer [id=5, firstName=Eric, lastName=Patterson]

2023-04-07 00:27:31.462 INFO 3100 --- [ restartedMain] com.tts.h2explore.H2exploreApplication :