

**Bootcamp NAO x TecMilenio**  
**Campus Monterrey**

**GROUP 1**

**Java and JavaScript.**  
**Programming Procedures**

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**11/11/25**

**Becalos**



# Executive Summary

```
MINGW64:/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
$ cd "C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings"
$ mvn test
[INFO] Scanning for projects...
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 0:062 s
[INFO] Finished at: 2025-11-11T16:55:29-06:00
[INFO] -----
[ERROR] The goal you specified requires a project to execute but there is no POM in this directory (C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings). Please verify that you invoked Maven from the correct directory. > [Help 1]
[INFO] -----
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MissingProjectException
sofi108LAPTOP-DSV3V34H MINGW64 ~/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
$ mvn test
[INFO] Scanning for projects...
[INFO] -----
[INFO] <!-- com.digitalbooking:back -->
[INFO] building back 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] [ jar ] -----
[WARNING] The artifact mysql:mysql-connector-java:jar:8.0.32 has been relocated to com.mysql:mysql-connector-j:jar:8.0.32: MySQL Connector/J artifacts moved to reverse-DNS compliant Maven 2+ coordinates.
[INFO] -----
[INFO] --- jacoco:0.8.1:prepare-agent (default) @ back ---
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.24/plexus-utils-3.0.24.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.24/plexus-utils-3.0.24.pom (4.1 kB at 5.5 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/file-management/1.2.1/file-management-1.2.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/file-management/1.2.1/file-management-1.2.1.pom (33 kB at 16 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/10/maven-shared-components-10.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/10/maven-shared-components-10.pom (8.4 kB at 55 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-parent/9/maven-parent-9.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-parent/9/maven-parent-9.pom (33 kB at 130 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (1.5 kB at 7.7 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-2.0.6/maven-2.0.6.pom
-----
```

Open your preferred IDE. In my case, I use Visual Studio. Create a new project and clone the project from the GitHub repository. Then run the command **mvn test**.

```
MINGW64:/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/2.0.6/maven-2.0.6.pom (9.0 kB at 43 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven-parent/5/maven-parent-5.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom (15 kB at 74 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/8/maven-shared-components-8.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/8/maven-shared-components-8.pom (1.4 kB at 23 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/10/maven-shared-components-10.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-components/10/maven-shared-components-10.pom (8.4 kB at 55 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-parent/9/maven-parent-9.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-parent/9/maven-parent-9.pom (33 kB at 130 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (1.5 kB at 7.7 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-2.0.6/maven-2.0.6.pom
-----
```

JaCoCo results:

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MINGW64/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-repository-metadata/2.0.2/maven-repository-metadata-2.0.2.jar (20 kB at 65 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-artifact/2.0.2/maven-artifact-2.0.2.jar (78 kB at 227 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/hamcrest/hamcrest-core/1.3/hamcrest-core-1.3.jar (78 kB at 227 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/classworlds/classworlds/1.1-alpha-2/classworlds-1.1-alpha-2.jar (43 kB at 107 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/wagon/wagon-provider-api/1.0-alpha-6/wagon-provider-api-1.0-alpha-6.jar (43 kB at 107 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/reporting/maven-reporting/3.0/maven-reporting-api-3.0.jar (10 kB at 100 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/reporting/maven-reporting/3.0/maven-reporting-api-3.0.jar (10 kB at 100 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/doxia/doxia-sink-api/1.0/doxia-sink-api-1.0.jar (10 kB at 18 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/doxia/doxia-sink-api/1.0/doxia-sink-api-1.0.jar (10 kB at 18 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/jacoco/jacoco.agent/0.8.10/org.jacoco.agent-0.8.10-runtime.jar (38 kB at 62 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/jacoco/jacoco.core/0.8.10/org.jacoco.core-0.8.10.jar (38 kB at 62 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/com/codehaus/plexus/plexus-container-default/1.0-alpha-9/plexus-container-default-1.0-alpha-9.jar (195 kB at 2 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/jacoco/jacoco.report/0.8.10/org.jacoco.report-0.8.10.jar (131 kB at 115 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/jacoco/jacoco.report/0.8.10/org.jacoco.report-0.8.10.jar (131 kB at 115 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/jacoco/jacoco.agent/0.8.10/org.jacoco.agent-0.8.10-runtime.jar (20 kB at 235 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/reporting/maven-reporting/3.0/maven-reporting-api-3.0.jar (11 kB at 7.0 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/reporting/maven-reporting/3.0/maven-reporting-api-3.0.jar (11 kB at 7.0 kB/s)
[INFO] argline set to "-javaagent:c:\Users\sofi0\m2\repository\org\jacoco\org.jacoco.agent\0.8.10\org.jacoco.agent-0.8.10-runtime.jar=destfile=c:\Users\sofi0\0
owndows\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\jacoco.exec"
[INFO]
[INFO] --- resources:3.3.0:resources (default-resources) @ back ---
[INFO] Copying 1 resource
[INFO] Copying 1 resource
[INFO]
[INFO] --- compiler:3.10.1:compile (default-compile) @ back ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 118 source files to C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\classes
[INFO]
[INFO] --- resources:3.3.0:testResources (default-testResources) @ back ---
[INFO] skip non existing resourceDirectory C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\src\test\resources
[INFO]
[INFO] --- compiler:3.10.1:testCompile (default-testCompile) @ back ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 5 source files to C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\test-classes
[INFO]
[INFO] --- surefire:2.22.2:test (default-test) @ back ---
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/maven-surefire-common/2.22.2/maven-surefire-common-2.22.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/maven-surefire-common/2.22.2/maven-surefire-common-2.22.2.jar (528 kB at 1.1 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugin-api/2.2.1/maven-plugin-api-2.2.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-booter/2.22.2/surefire-booter-2.22.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-api/2.22.2/surefire-api-2.22.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/logger-api/2.22.2/surefire-logger-api-2.22.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire-booter/2.22.2/surefire-booter-2.22.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugin-api/2.2.1/maven-plugin-api-2.2.1.jar (12 kB at 110 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugin-api/2.2.1/maven-plugin-api-2.2.1.jar (12 kB at 110 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-booter/2.22.2/surefire-logger-api-2.22.2.jar (13 kB at 112 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugin-tools/plexus/plexus-utils/1.5.15/plexus-utils-1.5.15.jar (228 kB at 220 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/plugin-tools/plexus/plexus-utils/1.5.15/plexus-utils-1.5.15.jar (228 kB at 220 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/plugin-tools/plexus/plexus-annotations/3.5.2/maven-plugin-annotations-3.5.2.jar (14 kB at 110 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven/maven-plugin-descriptor/2.2.1/maven-plugin-descriptor-2.2.1.jar

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MINGW64/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugin-descriptor/2.2.1/maven-plugin-descriptor-2.2.1.jar (39 kB at 95 kB/s)
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/com/codehaus/plexus/plexus-container-default/1.0-alpha-9-stable/plexus-container-default-1.0-alpha-9-stable-1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-api/2.22.2/surefire-api-2.22.2.jar (186 kB at 357 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/junit/junit/4.12/junit-4.12.jar (135 kB at 1 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire-booter/2.22.2/surefire-booter-2.22.2.jar (274 kB at 375 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-interpolation/1.11/surefire-interpolation-1.11.jar (228 kB at 220 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/settings/2.2.1/maven-settings-2.2.1.jar (228 kB at 220 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/codehaus/plexus/plexus-utils/1.5.15/plexus-utils-1.5.15.jar (228 kB at 220 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/codehaus/plexus/plexus-plexus-container-default/1.0-alpha-9-stable/plexus-plexus-container-default-1.0-alpha-9-stable-1.jar (194 kB at 184 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-profile/2.2.1/maven-profile-2.2.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/junit/junit/4.12/junit-4.12.jar (135 kB at 1 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-artifact-manager/2.2.1/maven-artifact-manager-2.2.1.jar (156 kB at 143 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-project/2.2.1/maven-project-2.2.1.jar (156 kB at 143 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/backport-util-concurrent/backport-util-concurrent/3.1/backport-util-concurrent-3.1.jar (49 kB at 41 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-settings/2.2.1/maven-settings-2.2.1.jar (49 kB at 41 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-registry/2.2.1/maven-plugin-registry-2.2.1.jar (35 kB at 29 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-profile/2.2.1/maven-profile-2.2.1.jar (35 kB at 29 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-artifact-manager/2.2.1/maven-artifact-manager-2.2.1.jar (68 kB at 54 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-model/2.2.1/maven-model-2.2.1.jar (88 kB at 61 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin/2.2.1/maven-plugin-2.2.1.jar (30 kB at 22 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-core/2.2.1/maven-core-2.2.1.jar (80 kB at 60 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-artifact/2.2.1/maven-artifact-2.2.1.jar (80 kB at 60 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/codehaus/plexus/plexus-interpolation/1.11/plexus-interpolation-1.11.jar (51 kB at 56 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/slf4j/slf4j-api/1.5.6/slf4j-api-1.5.6.jar (8 kB at 61 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/maven/maven-model/2.2.1/maven-model-2.2.1.jar (88 kB at 61 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/slf4j/slf4j-api/1.5.6/slf4j-api-1.5.6.jar (8 kB at 61 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/maven/maven-plugin-parameter-documenter/2.2.1/maven-plugin-parameter-documenter-2.2.1.jar (22 kB at 13 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/slf4j/jcl-over-slf4j/1.5.6/jcl-over-slf4j-1.5.6.jar (8.8 kB at 5.4 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-repository-metadata/2.2.1/maven-repository-metadata-2.2.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/jcl-over-slf4j/1.5.6/jcl-over-slf4j-1.5.6.jar (17 kB at 9.9 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-error-diagnostics/2.2.1/maven-error-diagnostics-2.2.1.jar (10 kB at 105 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-core/2.2.1/maven-core-2.2.1.jar (10 kB at 105 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/backport-util-concurrent/backport-util-concurrent/3.1/backport-util-concurrent-3.1.jar (332 kB at 193 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/classworlds/classworlds/1.1/classworlds-1.1.jar (26 kB at 15 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-toolchain/2.2.1/maven-toolchain-2.2.1.jar (67 kB at 60 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-assembly/2.2.1/maven-assembly-2.2.1.jar (39 kB at 20 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/codehaus/plexus/plexus-avax/0.9.10/plexus-avax-0.9.10.jar (39 kB at 21 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-error-diagnostics/2.2.1/maven-error-diagnostics-2.2.1.jar (13 kB at 7.1 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm/6.2/asm-6.2.jar (111 kB at 52 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/thoughtworks/qdox/qdox/2.0-M8/qdox-2.0-M8.jar (316 kB at 136 kB/s)

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MINGW64:/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
g for 18.306)
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 18.386 s - in com.digitalbooking.back.BackendApplicationTests
[INFO] Running com.digitalbooking.back.recommendations.attractions.service.AttractionsServiceTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.016 s - in com.digitalbooking.back.recommendations.attractions.service.AttractionsServiceTest
[INFO] Running com.digitalbooking.back.recommendations.common.service.RecommendationAggregatorServiceTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.19 s - in com.digitalbooking.back.recommendations.common.service.RecommendationAggregatorServiceTest
[INFO] Running com.digitalbooking.back.recommendations.nearbycities.service.TestNearbycitiesService
[ERROR] Tests run: 1, Failures: 0, Errors: 1, Skipped: 0, Time elapsed: 0.021 s <<< FAILURE! - in com.digitalbooking.back.recommendations.nearbycities.service.TestNearbycitiesService
[ERROR] shouldReturnNearbyCities Time elapsed: 0.02 s <<< ERROR!
org.mockito.exceptions.missing.InjectMocksException:
Cannot instantiate @InjectMocks field named 'service' of type 'class com.digitalbooking.back.bookStayApp.recommendations.nearbycities.service.NearbyCityService'.
You haven't provided the instance at field declaration so I tried to construct the instance.
However the constructor or the initialization block threw an exception : Cannot invoke "org.springframework.web.reactive.function.client.webClient$Builder.baseUrl(String)" because "builder" is null
Caused by: java.lang.NullPointerException: Cannot invoke "org.springframework.web.reactive.function.client.webClient$Builder.baseUrl(String)" because "builder" is null
[INFO] Running com.digitalbooking.back.recommendations.restaurants.service.RestaurantsServiceTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0 s - in com.digitalbooking.back.recommendations.restaurants.service.RestaurantsServiceTest
2025-11-11T16:57:19.535+06:00 INFO 11996 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit 'default'
2025-11-11T16:57:19.537+06:00 INFO 11996 --- [ionShutdownHook] .SchemaDropperImplDelayedDropActionImpl : HHH000477: Starting delayed evictData of schema as part of Session close processing
2025-11-11T16:57:19.554+06:00 INFO 11996 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown initiated...
2025-11-11T16:57:19.556+06:00 INFO 11996 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.
[INFO]
[INFO] Results:
[INFO]
[ERROR] Errors:
[ERROR]   testNearbycitiesService.shouldReturnNearbyCities » InjectMocks
Cannot instantiate...
[INFO]
[ERROR] Tests run: 5, Failures: 0, Errors: 1, Skipped: 0
[INFO]
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 25.969 s
[INFO] Finished at: 2025-11-11T16:57:20+06:00
[INFO]
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:2.22.2:test (default-test) on project back: There are test failures.
[ERROR]
[ERROR] Please refer to C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] > [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

```
MINGW64:/c/Users/sofi0/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend
$ npm test
npm ERR! code ENOENT
npm ERR! syscall open
npm ERR! path C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\package.json
npm ERR! errno -404
npm ERR! enoent ENOENT: no such file or directory, open 'C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\package.json'
npm ERR! enoent This is related to npm not being able to find a file.
npm ERR! enoent

npm ERR! A complete log of this run can be found in:
npm ERR!     C:\Users\sofi0\AppData\Local\npm-cache\_logs\2025-11-11T22_57_54_332Z-debug-0.log

coffee0@DESKTOP-DSV3V34H MINGW64 ~/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/backend (feature/pruebas-jacoco)
$ mvn test
[INFO] Scanning for projects...
[INFO]
[INFO] Building back 0.0.1-SNAPSHOT
[INFO]   from pom.xml
[INFO]   [ jar ]
[WARNING] The artifact mysql:mysql-connector-java:jar:8.0.32 has been relocated to com.mysql:mysql-connector-j:jar:8.0.32: MySQL Connector/J artifacts moved to reverse-DNS compliant Maven 2+ coordinates.
[INFO]
[INFO] --- jacoco:0.8.10:prepare-agent (default) @ back ---
[INFO] aquiline set to "javaagent:C:\Users\sofi0\m2\repository\org\jacoco\org.jacoco.agent\0.8.10\org.jacoco.agent-0.8.10-runtime.jar=destfile=C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\jacoco.exec"
[INFO]
[INFO] --- resources:3.3.0:resources (default-resources) @ back ---
[INFO] Copying 1 resource
[INFO] Copying 1 resource
[INFO]
[INFO] --- compiler:3.10.1:compile (default-compile) @ back ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- resources:3.3.0:testResources (default-testResources) @ back ---
[INFO] skip non existing resourceDirectory C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\src\test\resources
[INFO]
[INFO] --- compiler:3.10.1:testCompile (default-testCompile) @ back ---
[INFO] Change detected - recompiling the module!
[INFO] Compiling 5 source files to C:\Users\sofi0\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\test-classes
[INFO]
[INFO] --- surefire:2.22.2:test (default-test) @ back ---
[INFO]
[INFO] ----- T E S T S -----
[INFO] -----
[INFO] Running com.digitalbooking.back.BackendApplicationTests
16:59:49.056 [main] DEBUG org.springframework.boot.test.context.SpringBootTestBootstrapper - Neither @ContextConfiguration nor @ContextHierarchy found for test class [BackendApplicationTests]: using SpringBootTestContext
```

```

MINGW64:/c/Users/sofi/Downloads/TechnoReady-In Mexico/Technoready_c7_tests/Backend
[INFO] Running com.digitalbooking.back.recommendations.nearbycities.service.TestNearbyCitiesService
[ERROR] Tests run: 1, Failures: 0, Errors: 1, Skipped: 0. Time elapsed: 0.024 s <<< FAILURE! - in com.digitalbooking.back.recommendations.nearbycities.service.TestNearbyCitiesService
[ERROR]     shouldReturnNearbyCities. Time elapsed: 0.023 s <<< ERROR!
org.mockito.exceptions.missing.InjectMocksException:
Caused by: java.lang.NullPointerException: Cannot invoke "org.springframework.web.reactive.function.client.WebClientBuilder.baseUrl(String)" because "builder" is null

[INFO] Running com.digitalbooking.back.recommendations.restaurants.service.RestaurantsServiceTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0. Time elapsed: 0 s - in com.digitalbooking.back.recommendations.restaurants.service.RestaurantsServiceTest
2025-11-11T17:00:04.453-06:00 INFO 21596 --- [ionshutdownhook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit 'default'
2025-11-11T17:00:04.453-06:00 INFO 21596 --- [ionshutdownhook] .SchemaDropImpl$DelayedDropActionImpl : HHH00477: Starting delayed evictData of schema as part of SessionFactory shut-down
2025-11-11T17:00:04.453-06:00 INFO 21596 --- [ionshutdownhook] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Shutdown initiated...
2025-11-11T17:00:04.453-06:00 INFO 21596 --- [ionshutdownhook] com.zaxxer.hikari.HikariDataSource      : HikariPool-1 - Shutdown completed.
[INFO]
[INFO] Results:
[INFO]
[ERROR] Errors:
[ERROR]   TestNearbyCitiesService.shouldReturnNearbyCities » InjectMocks
Caused by instant...
[INFO]
[ERROR] Tests run: 5, Failures: 0, Errors: 1, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO]
[INFO] Total time: 20.637 s
[INFO] Finished at: 2025-11-11T17:00:05-06:00
[INFO]
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:2.22.2:test (default-test) on project back: There are test failures.
[ERROR]
[ERROR] Please refer to C:\Users\sofi\Downloads\TechnoReady-In Mexico\Technoready_c7_tests\backend\target\surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] > [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException

```

In JaCoCo's HTML report, it is common to see messages such as:

- “Classes in red have no coverage”
- “No coverage information for class”
- “Method not covered”
- “This class was not executed during the test run”

These messages indicate that:

- JaCoCo did analyze the class, but no methods were executed during testing.
- There is no coverage in that class, which affects your 90% goal.

## 🔍 How to identify what to improve?

In the HTML report:

- Classes in red have no coverage.
- Classes in yellow have partial coverage.

- Classes in green are fully covered.

So we work on each class to see:

- Which methods were covered
- Which lines were not executed
- Which branches (if, else, try, catch) were left untested

### How to improve coverage?

To reach your 90% goal, focus on:

- Service classes and business logic: create unit tests with `@SpringBootTest` or `@WebMvcTest`
- Controllers (`@RestController`): use `MockMvc` to simulate HTTP requests
- Validations and exceptions: test error cases, invalid inputs, etc.
- Conditional branches: make sure to cover all paths (if, else, switch, try-catch)

```
sof108 APTOP-DSV3V34H MINGW64 ~/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/
backend (feature/pruebas-jacoco)
$ mnun jacoco:report
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.digitalbooking:back >-----
[INFO] building back 0.0.1-SNAPSHOT
[INFO]   from pom.xml
[INFO]   [ jar ]
[INFO]
[INFO] --- jacoco:0.8.10:report (default-cli) @ back ---
[INFO] Loading execution data file C:\Users\sof10\Downloads\TechnoReady-In Mexico\Technoready_c7_testings\backend\target\jacoco.exec
[INFO] Analyzed bundle back with 113 classes
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.701 s
[INFO] Finished at: 2025-11-11T23:20:35-06:00
[INFO]

sof108 APTOP-DSV3V34H MINGW64 ~/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/
backend (feature/pruebas-jacoco)
$ start target/site/jacoco/index.html
/usr/bin/start: line 8: C:/Program Files/Java/jdk-17.0.0.1/bin: Is a directory
sof108 APTOP-DSV3V34H MINGW64 ~/Downloads/TechnoReady-In Mexico/Technoready_c7_testings/
backend (feature/pruebas-jacoco)
```

## JaCoCo results:

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.digitalbooking.back.management.security.auth	2 %	0 %	135 139	78 82	70 74	6	8					
com.digitalbooking.back.bookStayApp.products.controller	7 %	0 %	25 41	157 173	14 16	30 30	0 0	8 8				
com.digitalbooking.back.bookStayApp.products.service	10 %	0 %	23 39	107 123	12 12	28 28	0 0	8 8				
com.digitalbooking.back.management.security.users	4 %	0 %	73 75	16 19	38 38	40 40	1 1	3 3				
com.digitalbooking.back.bookStayApp.products.cto	0 %	n/a	90 90	51 51	90 90	90 90	4 4	4 4				
com.digitalbooking.back.bookStayApp.recommendations.restaurants.dto	8 %	0 %	37 39	8 10	18 20	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.attractions.dto	9 %	0 %	31 33	7 9	16 18	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.nearbycities.dto	8 %	0 %	23 24	6 7	13 14	0 0	1 1					
com.digitalbooking.back.management.security.config	65 %	0 %	19 29	41 89	12 22	0 0	4 4					
com.digitalbooking.back.bookStayApp.reserves.controller	11 %	0 %	8 14	43 49	6 6	12 12	0 0	3 3				
com.digitalbooking.back.management.categories.controller	17 %	0 %	8 18	44 54	7 7	17 17	0 0	5 5				
com.digitalbooking.back.management.locations.controller	8 %	0 %	6 10	36 40	3 3	7 7	0 0	2 2				
com.digitalbooking.back.bookStayApp.recommendations.common.dto	12 %	0 %	23 27	2 6	8 12	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.restaurants.domain	0 %	0 %	23 23	38 38	18 18	1 1	1 1					
com.digitalbooking.back.bookStayApp.products.domain	11 %	n/a	25 26	14 18	25 26	0 0	1 1					
com.digitalbooking.back.management.locations.dto	0 %	n/a	35 35	28 28	35 35	6 6	6 6					
com.digitalbooking.back.bookStayApp.recommendations.attractions.domain	0 %	0 %	21 21	34 34	16 16	1 1	1 1					
com.digitalbooking.back.management.locations.domain	13 %	n/a	23 26	16 21	23 26	0 0	3 3					
com.digitalbooking.back.bookStayApp.recommendations.nearbycities.domain	0 %	0 %	17 17	26 26	12 12	1 1	1 1					
com.digitalbooking.back.management.categories.dto	0 %	n/a	31 31	20 20	31 31	3 3	3 3					
com.digitalbooking.back.bookStayApp.recommendations.nearbycities.service	11 %	0 %	11 12	22 27	9 9	10 10	4 5					
com.digitalbooking.back.bookStayApp.reserves.dto	0 %	n/a	27 27	18 18	27 27	3 3	3 3					
com.digitalbooking.back.management.categories.service	33 %	n/a	5 15	20 30	5 5	15 15	0 0	5 5				
com.digitalbooking.back.management.features.controller	21 %	0 %	4 8	20 25	3 3	7 7	0 0	2 2				
com.digitalbooking.back.bookStayApp.address.dto	0 %	n/a	18 18	12 12	18 18	2 2	2 2					
com.digitalbooking.back.bookStayApp.address.domain	5 %	n/a	11 12	7 8	11 12	0 0	1 1					
com.digitalbooking.back.bookStayApp.policies.domain	5 %	n/a	11 12	7 8	11 12	0 0	1 1					
com.digitalbooking.back.management.categories.domain	5 %	n/a	11 12	7 8	11 12	0 0	1 1					
com.digitalbooking.back.bookStayApp.reserves.service	31 %	n/a	3 9	12 18	3 3	9 9	0 0	3 3				
com.digitalbooking.back.bookStayApp.images.domain	6 %	n/a	9 10	6 7	9 10	0 0	1 1					
com.digitalbooking.back.management.features.domain	17 %	n/a	7 8	5 7	7 7	0 0	1 1					
com.digitalbooking.back.management.locations.service	31 %	n/a	2 6	8 12	2 2	6 6	0 0	2 2				
com.digitalbooking.back.management.features.service	32 %	n/a	2 6	8 12	2 2	6 6	0 0	2 2				
com.digitalbooking.back.management.features.dto	0 %	n/a	8 8	7 7	8 8	2 2	2 2					
com.digitalbooking.back.bookStayApp.recommendations.common.exception	0 %	n/a	5 5	10 10	5 5	5 5	4 4					
com.digitalbooking.back.bookStayApp.policies.dto	0 %	n/a	7 7	5 5	7 7	1 1	1 1					
com.digitalbooking.back.bookStayApp.images.dto	0 %	n/a	5 5	4 4	5 5	5 5	1 1					
com.digitalbooking.back.bookStayApp.recommendations.common.controller	27 %	n/a	2 3	4 7	2 2	3 3	0 0	1 1				
com.digitalbooking.back.bookStayApp.recommendations.restaurants.controller	27 %	n/a	2 3	4 7	2 2	3 3	0 0	1 1				
com.digitalbooking.back.bookStayApp.recommendations.nearbycities.controller	27 %	n/a	2 3	4 7	2 2	3 3	0 0	1 1				
com.digitalbooking.back.bookStayApp.recommendations.attractions.controller	27 %	n/a	2 3	4 7	2 2	3 3	0 0	1 1				
com.digitalbooking.back.management.categories.exception	0 %	n/a	2 2	4 4	2 2	2 2	2 2					
com.digitalbooking.back.bookStayApp.products.exception	0 %	n/a	2 2	4 4	2 2	2 2	2 2					
com.digitalbooking.back	73 %	n/a	1 3	2 6	1 3	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.restaurants.service	100 %	n/a	0 2	0 2	0 2	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.attractions.service	100 %	n/a	0 2	0 2	0 2	0 0	1 1					
com.digitalbooking.back.bookStayApp.recommendations.common.service	100 %	n/a	0 2	0 9	0 2	0 0	1 1					
Total	6,244 of 7,230	13 %	424 of 424	0 %	848 976	984 1,179	636 764	44 115				

Our current test coverage is approximately 13%, based on the JaCoCo report. This means only a small portion of your code is being executed by your test suite. This is typical in early testing stages or when tests are focused on a limited set of classes.