Pruebas realizadas con Mockito   
  
Creacion de la clase ContactoControllerTest.java con el siguiente código:  
  
`package com.agenda.agenda;

import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.Test;

import org.junit.jupiter.api.extension.ExtendWith;

import org.mockito.junit.jupiter.MockitoExtension;

import java.util.List;

import static org.junit.jupiter.api.Assertions.\*;

@ExtendWith(MockitoExtension.class)

class ContactoControllerTest {

private ContactoController contactoController;

@BeforeEach

void setUp() {

contactoController = new ContactoController();

}

@Test

void testAgregarContacto() {

Contacto contacto = new Contacto("Juan Pérez", "3001234567", "juan.perez@email.com");

String resultado = contactoController.addContacto(contacto);

assertEquals("Contacto agregado: Juan Pérez", resultado);

}

@Test

void testAgregarContactoDuplicado() {

Contacto contacto = new Contacto("Juan Pérez", "3001234567", "juan.perez@email.com");

contactoController.addContacto(contacto); // Se agrega por primera vez

String resultado = contactoController.addContacto(contacto); // Se intenta agregar de nuevo

assertEquals("El contacto ya existe.", resultado);

}

@Test

void testObtenerContactos() {

contactoController.addContacto(new Contacto("Juan Pérez", "3001234567", "juan.perez@email.com"));

contactoController.addContacto(new Contacto("María Gómez", "3019876543", "maria.gomez@email.com"));

List<Contacto> contactos = contactoController.getContactos();

assertEquals(2, contactos.size());

assertEquals("Juan Pérez", contactos.get(0).getNombre());

assertEquals("María Gómez", contactos.get(1).getNombre());

}

}

Se realizan las pruebas con el comando MVNDTest arrojando los siguientes datos:  
  
C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda>mvnd test

[INFO] Processing build on daemon 0d9e1246

[INFO] Scanning for projects...

[WARNING]

[WARNING] Some problems were encountered while building the effective model for com.agenda:agenda:jar:0.0.1-SNAPSHOT

[WARNING] 'build.plugins.plugin.(groupId:artifactId)' must be unique but found duplicate declaration of plugin org.springframework.boot:spring-boot-maven-plugin @ line 91, column 12

[WARNING]

[WARNING] It is highly recommended to fix these problems because they threaten the stability of your build.

[WARNING]

[INFO] BuildTimeEventSpy is registered.

[INFO]

[WARNING] For this reason, future Maven versions might no longer support building such malformed projects.

[INFO] Using the SmartBuilder implementation with a thread count of 11

[WARNING]

[INFO]

[INFO] -------------------------< com.agenda:agenda >--------------------------

[INFO] Building agenda 0.0.1-SNAPSHOT

[INFO] from pom.xml

[INFO] --------------------------------[ jar ]---------------------------------

[INFO]

[INFO] --- resources:3.3.1:resources (default-resources) @ agenda ---

[INFO] Copying 1 resource from src\main\resources to target\classes

[INFO] Copying 1 resource from src\main\resources to target\classes

[INFO]

[INFO] --- compiler:3.13.0:compile (default-compile) @ agenda ---

[INFO] Nothing to compile - all classes are up to date.

[INFO]

[INFO] --- resources:3.3.1:testResources (default-testResources) @ agenda ---

[INFO] skip non existing resourceDirectory C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda\src\test\resources

[INFO]

[INFO] --- compiler:3.13.0:testCompile (default-testCompile) @ agenda ---

[INFO] Nothing to compile - all classes are up to date.

[INFO]

[INFO] --- surefire:3.5.2:test (default-test) @ agenda ---

[INFO] Using auto detected provider org.apache.maven.surefire.junitplatform.JUnitPlatformProvider

[INFO]

[INFO] -------------------------------------------------------

[INFO] T E S T S

[INFO] -------------------------------------------------------

[INFO] Running com.agenda.agenda.AgendaApplicationTests

[INFO] [stdout] 12:20:32.148 [main] INFO org.springframework.test.context.support.AnnotationConfigContextLoaderUtils -- Could not detect default configuration classes for test class [com.agenda.agenda.AgendaApplicationTests]: AgendaApplicationTests does not declare any static, non-private, non-final, nested classes annotated with @Configuration.

[INFO] [stdout] 12:20:32.322 [main] INFO org.springframework.boot.test.context.SpringBootTestContextBootstrapper -- Found @SpringBootConfiguration com.agenda.agenda.AgendaApplication for test class com.agenda.agenda.AgendaApplicationTests

[INFO] [stdout] 12:20:32.510 [main] INFO org.springframework.boot.devtools.restart.RestartApplicationListener -- Restart disabled due to context in which it is running

[INFO] [stdout]

[INFO] [stdout] . \_\_\_\_ \_ \_\_ \_ \_

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[INFO] [stdout] :: Spring Boot :: (v3.4.4)

[INFO] [stdout]

[INFO] [stdout] 2025-03-29T12:20:32.941-05:00 INFO 26528 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : Starting AgendaApplicationTests using Java 24 with PID 26528 (started by roman.urrego in C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda)

[INFO] [stdout] 2025-03-29T12:20:32.943-05:00 INFO 26528 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : No active profile set, falling back to 1 default profile: "default"

[INFO] [stdout] 2025-03-29T12:20:33.732-05:00 INFO 26528 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.

[INFO] [stdout] 2025-03-29T12:20:33.827-05:00 INFO 26528 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 77 ms. Found 1 JPA repository interface.

[INFO] [stdout] 2025-03-29T12:20:34.269-05:00 INFO 26528 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...

[INFO] [stdout] 2025-03-29T12:20:34.480-05:00 INFO 26528 --- [agenda] [ main] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection conn0: url=jdbc:h2:mem:agenda user=SA

[INFO] [stdout] 2025-03-29T12:20:34.482-05:00 INFO 26528 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.

[INFO] [stdout] 2025-03-29T12:20:34.540-05:00 INFO 26528 --- [agenda] [ main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]

[INFO] [stdout] 2025-03-29T12:20:34.610-05:00 INFO 26528 --- [agenda] [ main] org.hibernate.Version : HHH000412: Hibernate ORM core version 6.6.11.Final

[INFO] [stdout] 2025-03-29T12:20:34.654-05:00 INFO 26528 --- [agenda] [ main] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level cache disabled

[INFO] [stdout] 2025-03-29T12:20:35.127-05:00 INFO 26528 --- [agenda] [ main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: ignoring JPA class transformer

[INFO] [stdout] 2025-03-29T12:20:35.217-05:00 WARN 26528 --- [agenda] [ main] org.hibernate.orm.deprecation : HHH90000025: H2Dialect does not need to be specified explicitly using 'hibernate.dialect' (remove the property setting and it will be selected by default)

[INFO] [stdout] 2025-03-29T12:20:35.236-05:00 INFO 26528 --- [agenda] [ main] org.hibernate.orm.connections.pooling : HHH10001005: Database info:

Database JDBC URL [Connecting through datasource 'HikariDataSource (HikariPool-1)']

Database driver: undefined/unknown

Database version: 2.3.232

Autocommit mode: undefined/unknown

Isolation level: undefined/unknown

Minimum pool size: undefined/unknown

Maximum pool size: undefined/unknown

[INFO] [stdout] 2025-03-29T12:20:36.004-05:00 INFO 26528 --- [agenda] [ main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)

[INFO] [stdout] 2025-03-29T12:20:36.041-05:00 INFO 26528 --- [agenda] [ main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'

[INFO] [stdout] 2025-03-29T12:20:36.231-05:00 WARN 26528 --- [agenda] [ main] 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

[INFO] [stdout] 2025-03-29T12:20:36.268-05:00 INFO 26528 --- [agenda] [ main] o.s.b.a.w.s.WelcomePageHandlerMapping : Adding welcome page: class path resource [static/index.html]

[INFO] [stdout] 2025-03-29T12:20:37.029-05:00 INFO 26528 --- [agenda] [ main] o.s.b.a.h2.H2ConsoleAutoConfiguration : H2 console available at '/h2-console'. Database available at 'jdbc:h2:mem:agenda'

[INFO] [stdout] 2025-03-29T12:20:37.116-05:00 INFO 26528 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : Started AgendaApplicationTests in 4.62 seconds (process running for 5.813)

[WARNING] [stderr] Mockito is currently self-attaching to enable the inline-mock-maker. This will no longer work in future releases of the JDK. Please add Mockito as an agent to your build what is described in Mockito's documentation: <https://javadoc.io/doc/org.mockito/mockito-core/latest/org/mockito/Mockito.html#0.3>

[WARNING] [stderr] Java HotSpot(TM) 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended

[WARNING] [stderr] WARNING: A Java agent has been loaded dynamically (C:\Users\roman.urrego\.m2\repository\net\bytebuddy\byte-buddy-agent\1.15.11\byte-buddy-agent-1.15.11.jar)

[WARNING] [stderr] WARNING: If a serviceability tool is in use, please run with -XX:+EnableDynamicAgentLoading to hide this warning

[WARNING] [stderr] WARNING: If a serviceability tool is not in use, please run with -Djdk.instrument.traceUsage for more information

[WARNING] [stderr] WARNING: Dynamic loading of agents will be disallowed by default in a future release

[WARNING] [stderr] WARNING: A terminally deprecated method in sun.misc.Unsafe has been called

[WARNING] [stderr] WARNING: sun.misc.Unsafe::objectFieldOffset has been called by net.bytebuddy.dynamic.loading.ClassInjector$UsingUnsafe$Dispatcher$CreationAction (file:/C:/Users/roman.urrego/.m2/repository/net/bytebuddy/byte-buddy/1.15.11/byte-buddy-1.15.11.jar)

[WARNING] [stderr] WARNING: Please consider reporting this to the maintainers of class net.bytebuddy.dynamic.loading.ClassInjector$UsingUnsafe$Dispatcher$CreationAction

[WARNING] [stderr] WARNING: sun.misc.Unsafe::objectFieldOffset will be removed in a future release

[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 6.227 s -- in com.agenda.agenda.AgendaApplicationTests

[INFO] Running com.agenda.agenda.ContactoControllerTest

[INFO] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.039 s -- in com.agenda.agenda.ContactoControllerTest

[INFO]

[INFO] Results:

[INFO]

[INFO] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0

[INFO]

[INFO] ------------------------------------------------------------------------

[INFO] BUILD SUCCESS

[INFO] ------------------------------------------------------------------------

[INFO] Total time: 7.920 s (Wall Clock)

[INFO] Finished at: 2025-03-29T12:20:38-05:00

[INFO] ------------------------------------------------------------------------

Arrojando que las 4 pruebas configuradas en la clase se ejecutaron sin problemas  
  
Pruebas de Integración con WebTestClient

Se crea la clase ContactoControllerwebTest.java con el siguiente código   
```package com.agenda.agenda;

import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.Test;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.boot.test.autoconfigure.web.reactive.AutoConfigureWebTestClient;

import org.springframework.boot.test.context.SpringBootTest;

import org.springframework.http.HttpStatus;

import org.springframework.http.MediaType;

import org.springframework.test.web.reactive.server.WebTestClient;

import java.util.HashMap;

import java.util.Map;

@SpringBootTest

@AutoConfigureWebTestClient

public class ContactoControllerTest {

@Autowired

private WebTestClient webTestClient;

@Autowired

private ContactoController contactoController;

@BeforeEach

void setUp() {

contactoController.limpiarListaContactos(); // Limpiar la lista antes de cada prueba

}

@Test

public void testAgregarContacto() {

Map<String, Object> contacto = new HashMap<>();

contacto.put("nombre", "Juan Pérez");

contacto.put("telefono", "3001234567");

contacto.put("email", "juan.perez@email.com");

webTestClient.post().uri("/api/contactos")

.contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto).exchange().expectStatus().isCreated()

.expectBody().jsonPath("$.nombre").isEqualTo("Juan Pérez").jsonPath("$.telefono")

.isEqualTo("3001234567").jsonPath("$.email").isEqualTo("juan.perez@email.com");

}

@Test

public void testAgregarContactoDuplicado() {

Map<String, Object> contacto = new HashMap<>();

contacto.put("nombre", "Juan Pérez");

contacto.put("telefono", "3001234567");

contacto.put("email", "juan.perez@email.com");

webTestClient.post().uri("/api/contactos")

.contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto).exchange().expectStatus().isCreated();

webTestClient.post().uri("/api/contactos")

.contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto).exchange().expectStatus()

.isEqualTo(HttpStatus.CONFLICT)

.expectBody().isEmpty(); // Cambiado para verificar que el cuerpo esté vacío (null)

}

@Test

public void testObtenerContactos() {

Map<String, Object> contacto1 = new HashMap<>();

contacto1.put("nombre", "Juan Pérez");

contacto1.put("telefono", "3001234567");

contacto1.put("email", "juan.perez@email.com");

Map<String, Object> contacto2 = new HashMap<>();

contacto2.put("nombre", "María Gómez");

contacto2.put("telefono", "3019876543");

contacto2.put("email", "maria.gomez@email.com");

webTestClient.post().uri("/api/contactos")

.contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto1).exchange().expectStatus().isCreated();

webTestClient.post().uri("/api/contactos")

.contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto2).exchange().expectStatus().isCreated();

webTestClient.get().uri("/api/contactos")

.exchange().expectStatus().isOk().expectBody().jsonPath("$[0].nombre").isEqualTo("Juan Pérez")

.jsonPath("$[1].nombre").isEqualTo("María Gómez");

}

@Test

public void testEliminarContacto() {

Map<String, Object> contacto = new HashMap<>();

contacto.put("nombre", "Juan Pérez");

contacto.put("telefono", "3001234567");

contacto.put("email", "juan.perez@email.com");

webTestClient.post().uri("/api/contactos").contentType(MediaType.APPLICATION\_JSON).bodyValue(contacto)

.exchange().expectStatus().isCreated();

webTestClient.delete().uri("/api/contactos/Juan Pérez")

.exchange().expectStatus().isOk().expectBody(String.class).isEqualTo("Contacto eliminado: Juan Pérez");

webTestClient.get().uri("/api/contactos").exchange().expectStatus().isOk().expectBody()

.jsonPath("$[?(@.nombre == 'Juan Pérez')]").doesNotExist();

}

@Test

public void testLimpiarContactos() {

webTestClient.delete().uri("/api/contactos/limpiar").exchange().expectStatus().isOk().expectBody(String.class)

.isEqualTo("Todos los contactos han sido eliminados.");

webTestClient.get().uri("/api/contactos").exchange().expectStatus().isOk().expectBody().jsonPath("$").isEmpty();

}

}

```

Se ejecutan las pruebas arrojando los siguientes resultados:

```[INFO] Scanning for projects...

[INFO]

[INFO] �[1m-------------------------< �[0;36mcom.agenda:agenda�[0;1m >--------------------------�[m

[INFO] �[1mBuilding agenda 0.0.1-SNAPSHOT�[m

[INFO] from pom.xml

[INFO] �[1m--------------------------------[ jar ]---------------------------------�[m

[INFO]

[INFO] �[1m--- �[0;32mresources:3.3.1:resources�[m �[1m(default-resources)�[m @ �[36magenda�[0;1m ---�[m

[INFO] Copying 1 resource from src\main\resources to target\classes

[INFO] Copying 1 resource from src\main\resources to target\classes

[INFO]

[INFO] �[1m--- �[0;32mcompiler:3.13.0:compile�[m �[1m(default-compile)�[m @ �[36magenda�[0;1m ---�[m

[INFO] Nothing to compile - all classes are up to date.

[INFO]

[INFO] �[1m--- �[0;32mresources:3.3.1:testResources�[m �[1m(default-testResources)�[m @ �[36magenda�[0;1m ---�[m

[INFO] skip non existing resourceDirectory C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda\src\test\resources

[INFO]

[INFO] �[1m--- �[0;32mcompiler:3.13.0:testCompile�[m �[1m(default-testCompile)�[m @ �[36magenda�[0;1m ---�[m

[INFO] Recompiling the module because of �[1mchanged source code�[m.

[INFO] Compiling 2 source files with javac [debug parameters release 21] to target\test-classes

[INFO]

[INFO] �[1m--- �[0;32msurefire:3.5.2:test�[m �[1m(default-test)�[m @ �[36magenda�[0;1m ---�[m

[INFO] Using auto detected provider org.apache.maven.surefire.junitplatform.JUnitPlatformProvider

[INFO]

[INFO] -------------------------------------------------------

[INFO] T E S T S

[INFO] -------------------------------------------------------

[INFO] Running com.agenda.agenda.�[1mAgendaApplicationTests�[m

16:58:22.885 [main] INFO org.springframework.test.context.support.AnnotationConfigContextLoaderUtils -- Could not detect default configuration classes for test class [com.agenda.agenda.AgendaApplicationTests]: AgendaApplicationTests does not declare any static, non-private, non-final, nested classes annotated with @Configuration.

16:58:22.993 [main] INFO org.springframework.boot.test.context.SpringBootTestContextBootstrapper -- Found @SpringBootConfiguration com.agenda.agenda.AgendaApplication for test class com.agenda.agenda.AgendaApplicationTests

16:58:23.156 [main] INFO org.springframework.boot.devtools.restart.RestartApplicationListener -- Restart disabled due to context in which it is running

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:: Spring Boot :: (v3.4.4)

2025-03-29T16:58:23.431-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : Starting AgendaApplicationTests using Java 21.0.6 with PID 18592 (started by roman.urrego in C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda)

2025-03-29T16:58:23.432-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : No active profile set, falling back to 1 default profile: "default"

2025-03-29T16:58:23.969-05:00 INFO 18592 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.

2025-03-29T16:58:24.083-05:00 INFO 18592 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 105 ms. Found 1 JPA repository interface.

2025-03-29T16:58:24.380-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...

2025-03-29T16:58:24.572-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection conn0: url=jdbc:h2:mem:agenda user=SA

2025-03-29T16:58:24.573-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.

2025-03-29T16:58:24.619-05:00 INFO 18592 --- [agenda] [ main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]

2025-03-29T16:58:24.666-05:00 INFO 18592 --- [agenda] [ main] org.hibernate.Version : HHH000412: Hibernate ORM core version 6.6.11.Final

2025-03-29T16:58:24.704-05:00 INFO 18592 --- [agenda] [ main] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level cache disabled

2025-03-29T16:58:25.117-05:00 INFO 18592 --- [agenda] [ main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: ignoring JPA class transformer

2025-03-29T16:58:25.188-05:00 WARN 18592 --- [agenda] [ main] org.hibernate.orm.deprecation : HHH90000025: H2Dialect does not need to be specified explicitly using 'hibernate.dialect' (remove the property setting and it will be selected by default)

2025-03-29T16:58:25.212-05:00 INFO 18592 --- [agenda] [ main] org.hibernate.orm.connections.pooling : HHH10001005: Database info:

Database JDBC URL [Connecting through datasource 'HikariDataSource (HikariPool-1)']

Database driver: undefined/unknown

Database version: 2.3.232

Autocommit mode: undefined/unknown

Isolation level: undefined/unknown

Minimum pool size: undefined/unknown

Maximum pool size: undefined/unknown

2025-03-29T16:58:25.819-05:00 INFO 18592 --- [agenda] [ main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)

2025-03-29T16:58:25.848-05:00 INFO 18592 --- [agenda] [ main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'

2025-03-29T16:58:26.816-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.AgendaApplicationTests : Started AgendaApplicationTests in 3.674 seconds (process running for 4.546)

Mockito is currently self-attaching to enable the inline-mock-maker. This will no longer work in future releases of the JDK. Please add Mockito as an agent to your build what is described in Mockito's documentation: <https://javadoc.io/doc/org.mockito/mockito-core/latest/org/mockito/Mockito.html#0.3>

WARNING: A Java agent has been loaded dynamically (C:\Users\roman.urrego\.m2\repository\net\bytebuddy\byte-buddy-agent\1.15.11\byte-buddy-agent-1.15.11.jar)

WARNING: If a serviceability tool is in use, please run with -XX:+EnableDynamicAgentLoading to hide this warning

WARNING: If a serviceability tool is not in use, please run with -Djdk.instrument.traceUsage for more information

WARNING: Dynamic loading of agents will be disallowed by default in a future release

OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended

[INFO] �[1;32mTests run: �[0;1;32m1�[m, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 4.587 s -- in com.agenda.agenda.�[1mAgendaApplicationTests�[m

[INFO] Running com.agenda.agenda.�[1mContactoControllerTest�[m

2025-03-29T16:58:27.350-05:00 INFO 18592 --- [agenda] [ main] t.c.s.AnnotationConfigContextLoaderUtils : Could not detect default configuration classes for test class [com.agenda.agenda.ContactoControllerTest]: ContactoControllerTest does not declare any static, non-private, non-final, nested classes annotated with @Configuration.

2025-03-29T16:58:27.368-05:00 INFO 18592 --- [agenda] [ main] .b.t.c.SpringBootTestContextBootstrapper : Found @SpringBootConfiguration com.agenda.agenda.AgendaApplication for test class com.agenda.agenda.ContactoControllerTest

2025-03-29T16:58:27.374-05:00 INFO 18592 --- [agenda] [ main] o.s.b.d.r.RestartApplicationListener : Restart disabled due to context in which it is running

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:: Spring Boot :: (v3.4.4)

2025-03-29T16:58:27.409-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.ContactoControllerTest : Starting ContactoControllerTest using Java 21.0.6 with PID 18592 (started by roman.urrego in C:\Users\roman.urrego\Documents\universidad\Desarrollo de software 2\prjectoagendagithub2\agenda)

2025-03-29T16:58:27.410-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.ContactoControllerTest : No active profile set, falling back to 1 default profile: "default"

2025-03-29T16:58:27.555-05:00 INFO 18592 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.

2025-03-29T16:58:27.563-05:00 INFO 18592 --- [agenda] [ main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 7 ms. Found 1 JPA repository interface.

2025-03-29T16:58:27.645-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-2 - Starting...

2025-03-29T16:58:27.646-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.pool.HikariPool : HikariPool-2 - Added connection conn10: url=jdbc:h2:mem:agenda user=SA

2025-03-29T16:58:27.646-05:00 INFO 18592 --- [agenda] [ main] com.zaxxer.hikari.HikariDataSource : HikariPool-2 - Start completed.

2025-03-29T16:58:27.648-05:00 INFO 18592 --- [agenda] [ main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]

2025-03-29T16:58:27.651-05:00 INFO 18592 --- [agenda] [ main] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level cache disabled

2025-03-29T16:58:27.660-05:00 INFO 18592 --- [agenda] [ main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: ignoring JPA class transformer

2025-03-29T16:58:27.662-05:00 WARN 18592 --- [agenda] [ main] org.hibernate.orm.deprecation : HHH90000025: H2Dialect does not need to be specified explicitly using 'hibernate.dialect' (remove the property setting and it will be selected by default)

2025-03-29T16:58:27.662-05:00 INFO 18592 --- [agenda] [ main] org.hibernate.orm.connections.pooling : HHH10001005: Database info:

Database JDBC URL [Connecting through datasource 'HikariDataSource (HikariPool-2)']

Database driver: undefined/unknown

Database version: 2.3.232

Autocommit mode: undefined/unknown

Isolation level: undefined/unknown

Minimum pool size: undefined/unknown

Maximum pool size: undefined/unknown

2025-03-29T16:58:27.698-05:00 INFO 18592 --- [agenda] [ main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)

2025-03-29T16:58:27.703-05:00 INFO 18592 --- [agenda] [ main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'

2025-03-29T16:58:27.858-05:00 INFO 18592 --- [agenda] [ main] c.agenda.agenda.ContactoControllerTest : Started ContactoControllerTest in 0.484 seconds (process running for 5.588)

[INFO] �[1;32mTests run: �[0;1;32m5�[m, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.848 s -- in com.agenda.agenda.�[1mContactoControllerTest�[m

[INFO]

[INFO] Results:

[INFO]

[INFO] �[1;32mTests run: 6, Failures: 0, Errors: 0, Skipped: 0�[m

[INFO]

[INFO] �[1m------------------------------------------------------------------------�[m

[INFO] �[1;32mBUILD SUCCESS�[m

[INFO] �[1m------------------------------------------------------------------------�[m

[INFO] Total time: 9.234 s

[INFO] Finished at: 2025-03-29T16:58:28-05:00

[INFO] �[1m------------------------------------------------------------------------�[m

```  
  
Este resultado confira que las 6 pruebas realizadas se ejecutaron sin problemas.   
  
Configuración del Pipeline CI/CD

Se recrea el directorio .github/workflows/ en el repositorio

A screenshot of a computer

AI-generated content may be incorrect.  
  
En código yaml se crea con el siguiente código

name: Java CI with Maven

on:

push:

branches: [ "main" ]

pull\_request:

branches: [ "main" ]

jobs:

build:

runs-on: ubuntu-latest

steps:

- uses: actions/checkout@v4

- name: Set up JDK 21

uses: actions/setup-java@v4

with:

java-version: '21'

distribution: 'temurin'

cache: maven

- name: Build with Maven

run: mvn -B package --file agenda/pom.xml  
  
  
Se procede con la ejecución arrojando el siguiente resultado:  
  
A screenshot of a computer

AI-generated content may be incorrect.  
  
A screenshot of a computer

AI-generated content may be incorrect.  
  
Confirmando que el resultado de las pruebas se llevaron acabo sin problemas.