

UNIVERSIDAD DE EL SALVADOR
FACULTAD MULTIDISCIPLINARIA DE OCCIDENTE
DEPARTAMENTO DE INGENIERÍA



TÉCNICAS DE PROGRAMACIÓN EN INTERNET (TPI)

REPORTE DEL CORTO #2

DOCENTE: Ing. Xenia Ivette Peñate Godoy

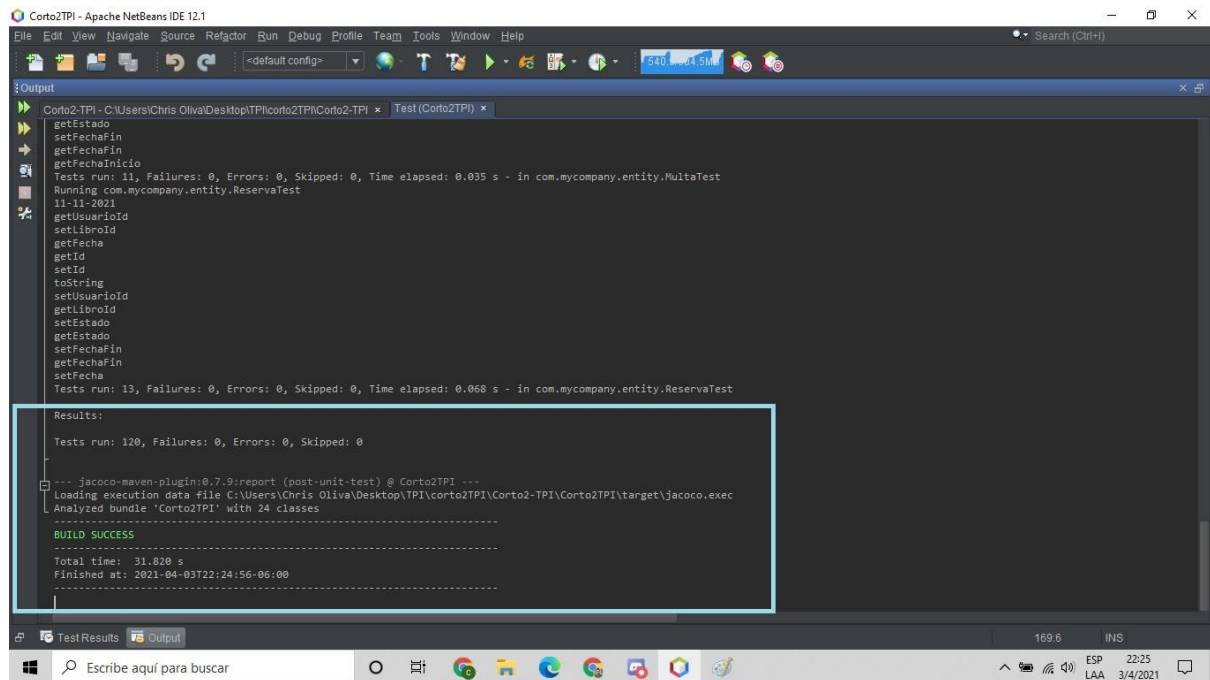
| Alumnos | Carnet |
|---|----------------|
| Br. Martínez Lima, Natalia Sofía | ML17002 |
| Br. Meda Marguez, Christian Eduardo | MM17017 |
| Br. Méndez Medina, Carlos Manuel | MM18018 |
| Br. Oliva Maravilla, Christian Alexander | OM18003 |
| Br. Portillo Merlos, Melvin Ernesto | MP18008 |
| Br. Vargas Morán, Mauricio Enrique | VM18042 |

Informe de pruebas aplicadas

En el siguiente informe se presentarán las pruebas realizadas a nuestro proyecto relacionado a la base de datos que se creó con el script que se encuentra contenido en el repositorio de Github ya que esta es la única manera en la que pudimos dar solución respecto a la problemática presentada durante la evaluación, se realizaron pruebas del tipo unitario tanto a las Entity como a los Controller de manera que pudiéramos comprobar de que todos sus métodos y funciones estuvieran trabajando de manera correcta, eficiente y cumpliendo su proposito.

Para hacer la pruebas utilizamos los Frameworks de Mockito y JUnit en sus versiones 2.23.4 y 5.3.1 respectivamente, además usamos un plugin llamado Jacoco para comprobar las coberturas de los test.

Mostrando que todos los test fueron realizados con éxito, en total son 120 test

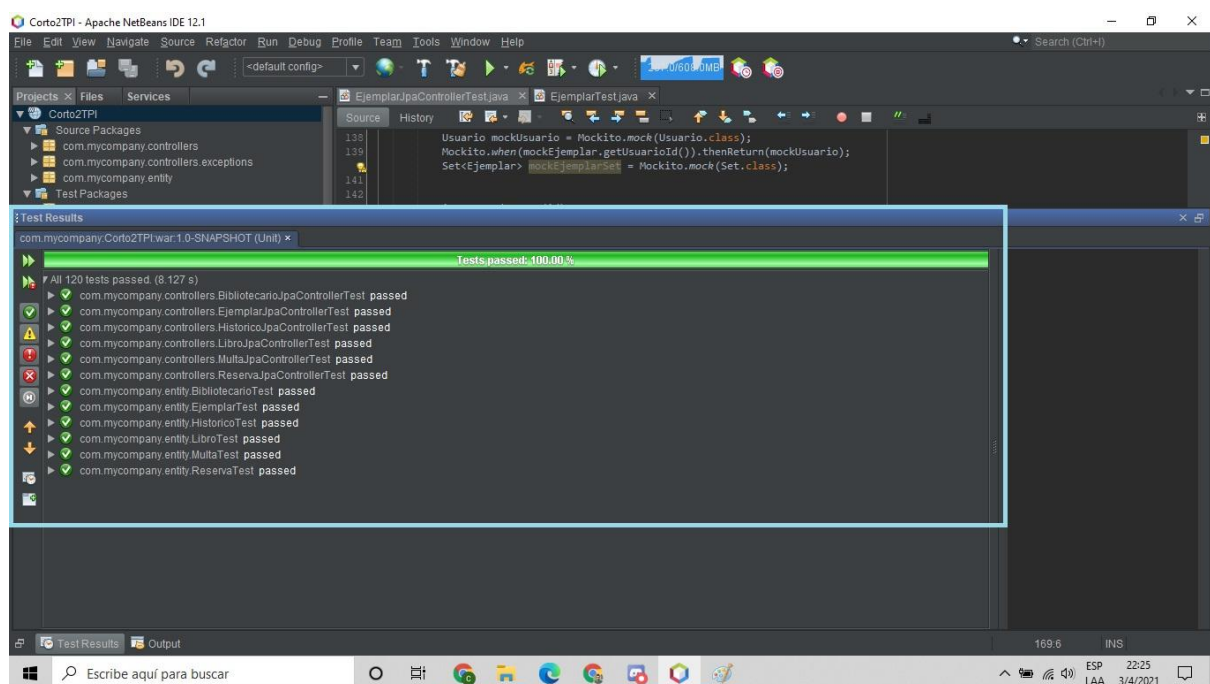


The screenshot shows the Apache NetBeans IDE 12.1 interface. The 'Output' window is open, displaying the results of a test run. The output text is as follows:

```
getEstado
setFechaFin
getFechaFin
getFechaInicio
Tests run: 11, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.035 s - in com.mycompany.entity.MultaTest
Running com.mycompany.entity.ReservaTest
11:11:2021
getUsuarioId
setLibroId
getFecha
getId
setId
toString
setUsuarioId
getLibroId
setEstado
getEstado
setFechaFin
getFechaFin
setFecha
Tests run: 13, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.068 s - in com.mycompany.entity.ReservaTest

Results:
Tests run: 120, Failures: 0, Errors: 0, Skipped: 0

--- jacoco-maven-plugin:0.7.9:report (post-unit-test) @ Corto2TPI ---
Loading execution data file C:\Users\Chris Oliva\Desktop\TPI\corto2TPI\Corto2-TPI\Corto2TPI\target\jacoco.exec
Analyzed bundle 'Corto2TPI' with 24 classes
BUILD SUCCESS
Total time: 31.820 s
Finished at: 2021-04-03T22:24:56-06:00
```

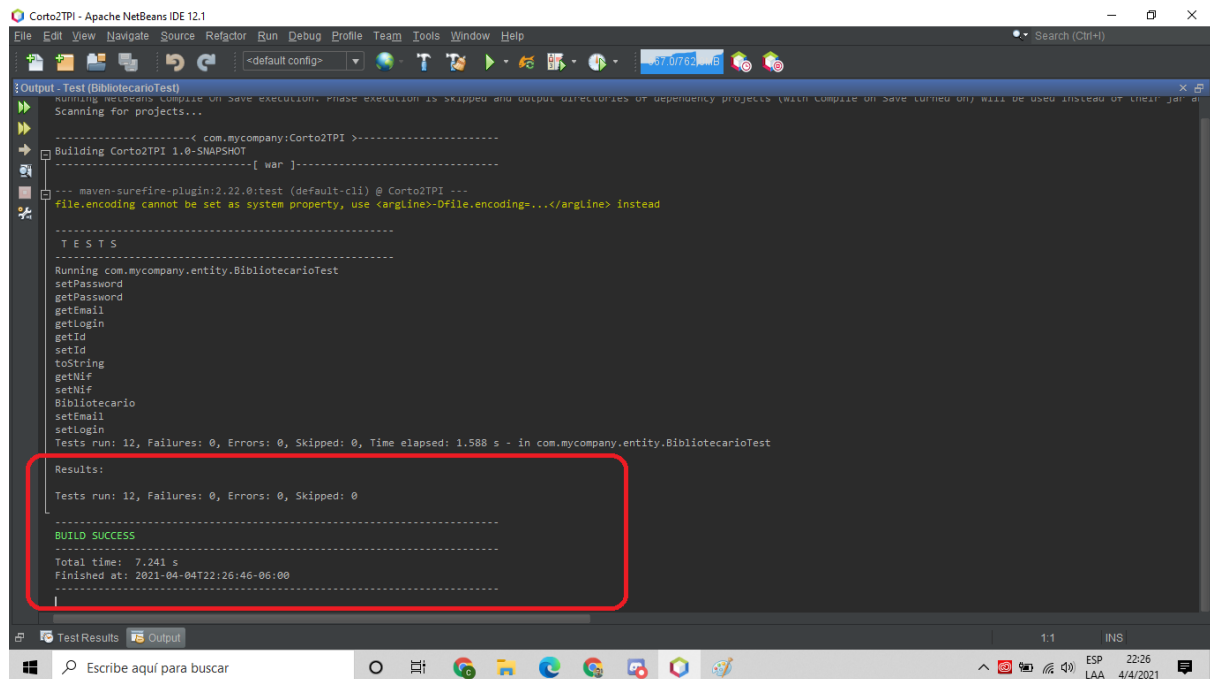


The screenshot shows the Apache NetBeans IDE 12.1 interface. The 'Test Results' window is open, displaying a list of test results. The results are as follows:

```
com.mycompany.Corto2TPI.war:1.0-SNAPSHOT (Unit)
Tests passed: 100.00 %
All 120 tests passed. (8.127 s)
com.mycompany.controllers.BibliotecaJpaControllerTest passed
com.mycompany.controllers.EjemplarJpaControllerTest passed
com.mycompany.controllers.HistoricoJpaControllerTest passed
com.mycompany.controllers.LibroJpaControllerTest passed
com.mycompany.controllers.MultaJpaControllerTest passed
com.mycompany.controllers.ReservaJpaControllerTest passed
com.mycompany.entity.BibliotecaTest passed
com.mycompany.entity.EjemplarTest passed
com.mycompany.entity.HistoricoTest passed
com.mycompany.entity.LibroTest passed
com.mycompany.entity.MultaTest passed
com.mycompany.entity.ReservaTest passed
```

TEST REALIZADOS EN BIBLIOTECARIO:

Pruebas realizadas en el Entity de la clase Bibliotecario, haciendo que los 12 métodos de este pasaran con éxito el testeo.



The screenshot shows the Apache NetBeans IDE interface with the 'Output - Test (BibliotecarioTest)' window open. The output displays the results of running tests for the Bibliotecario entity. A red box highlights the 'Results' section, which shows 'Tests run: 12, Failures: 0, Errors: 0, Skipped: 0' and 'BUILD SUCCESS'. The total time for the tests was 7.241 seconds, and they finished at 2021-04-04T22:26:06:00.

```
Running NetBeans Compile On Save execution. Phase execution is skipped and output directories of dependency projects (with Compile on Save turned on) will be used instead of their jar files. Scanning for projects...

-----< com.mycompany:Corto2TPI >-----
Building Corto2TPI 1.0-SNAPSHOT
-----[ war ]-----

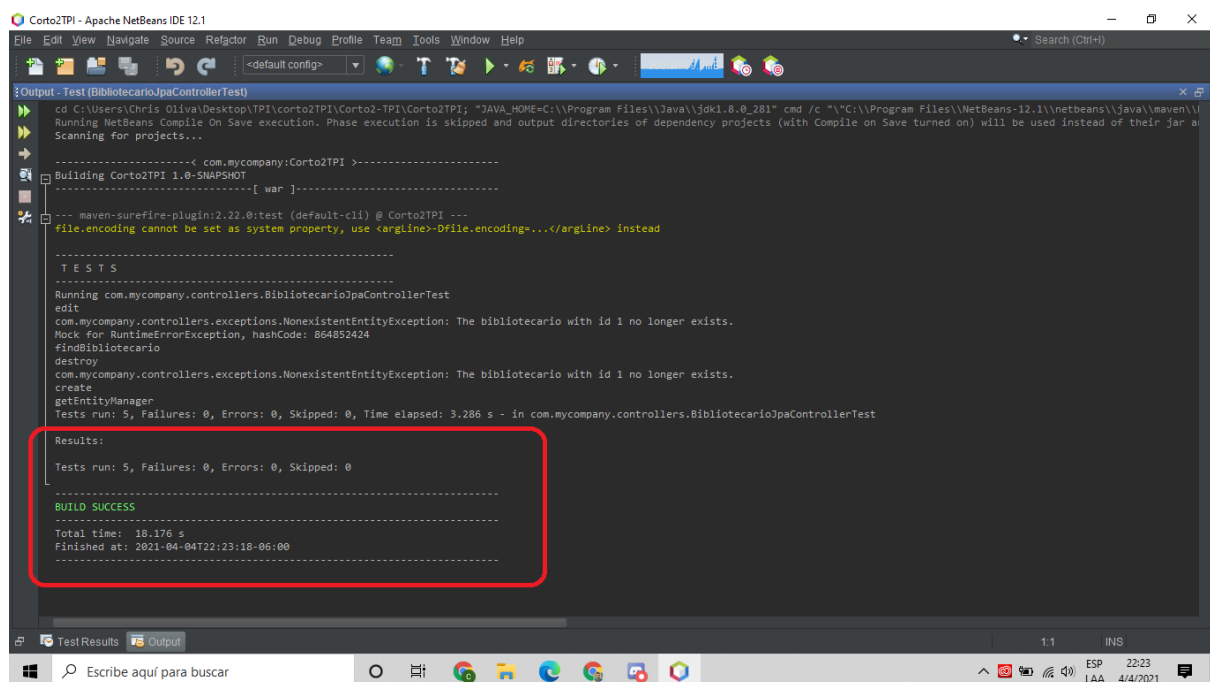
--- maven-surefire-plugin:2.22.0:test (default-cli) @ Corto2TPI ---
file.encoding cannot be set as system property, use <argLine>-Dfile.encoding=...</argLine> instead

T E S T S
-----
Running com.mycompany.entity.BibliotecarioTest
setPassword
getPassword
getEmail
getLogin
getId
setId
toString
getNif
setNif
Bibliotecario
setEmail
setLogin
Tests run: 12, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.588 s - in com.mycompany.entity.BibliotecarioTest

Results:
Tests run: 12, Failures: 0, Errors: 0, Skipped: 0

BUILD SUCCESS
Total time: 7.241 s
Finished at: 2021-04-04T22:26:06:00
```

Pruebas realizadas en el Controller de la clase Bibliotecario, haciendo que los 5 métodos de este pasaran con éxito el testeo.



The screenshot shows the Apache NetBeans IDE interface with the 'Output - Test (BibliotecarioJpaControllerTest)' window open. The output displays the results of running tests for the Bibliotecario controller. A red box highlights the 'Results' section, which shows 'Tests run: 5, Failures: 0, Errors: 0, Skipped: 0' and 'BUILD SUCCESS'. The total time for the tests was 3.286 seconds, and they finished at 2021-04-04T22:23:18:06:00.

```
cd C:\Users\Chris Oliva\Desktop\TPI\corto2TPI\Corto2TPI\Corto2TPI; "JAVA_HOME=C:\Program Files\Java\jdk1.8.0_281" cmd /c "%C:\Program Files\NetBeans-12.1\netbeans\java\maven\
Running NetBeans Compile On Save execution. Phase execution is skipped and output directories of dependency projects (with Compile on Save turned on) will be used instead of their jar files. Scanning for projects...

-----< com.mycompany:Corto2TPI >-----
Building Corto2TPI 1.0-SNAPSHOT
-----[ war ]-----

--- maven-surefire-plugin:2.22.0:test (default-cli) @ Corto2TPI ---
file.encoding cannot be set as system property, use <argLine>-Dfile.encoding=...</argLine> instead

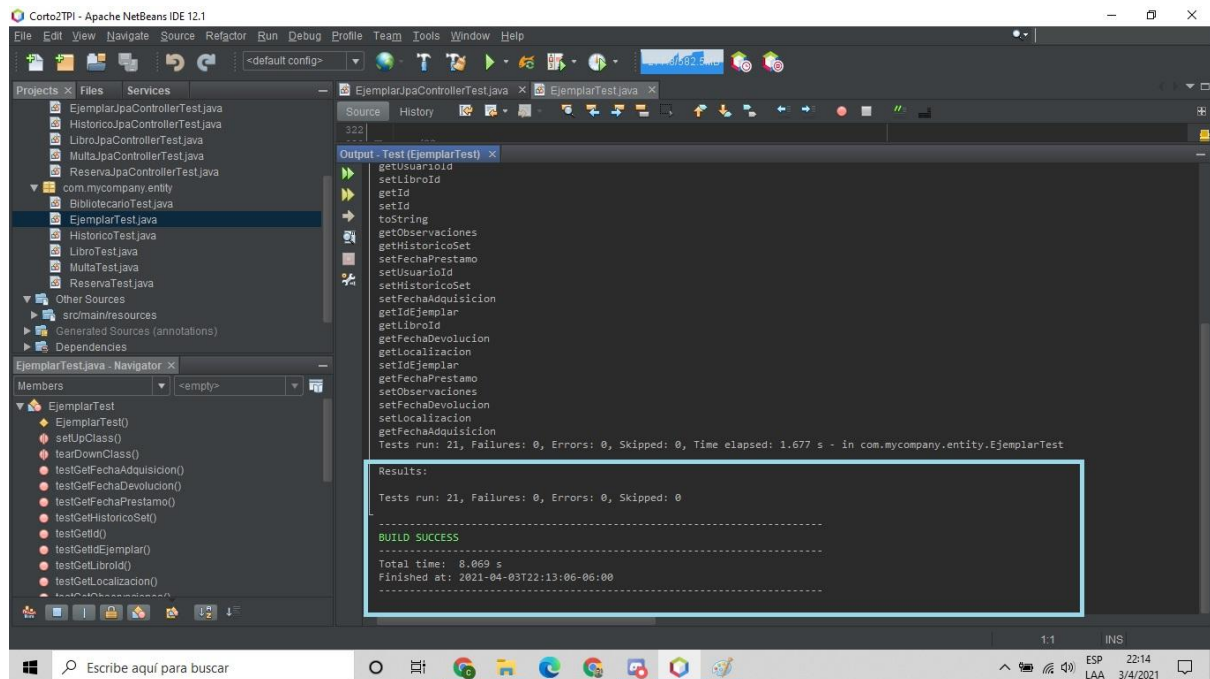
T E S T S
-----
Running com.mycompany.controllers.BibliotecarioJpaControllerTest
edit
com.mycompany.controllers.exceptions.NonexistentEntityException: The bibliotecario with id 1 no longer exists.
Mock for RuntimeException, hashCode: 864852424
findBibliotecario
destroy
com.mycompany.controllers.exceptions.NonexistentEntityException: The bibliotecario with id 1 no longer exists.
create
getEntityManager
Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 3.286 s - in com.mycompany.controllers.BibliotecarioJpaControllerTest

Results:
Tests run: 5, Failures: 0, Errors: 0, Skipped: 0

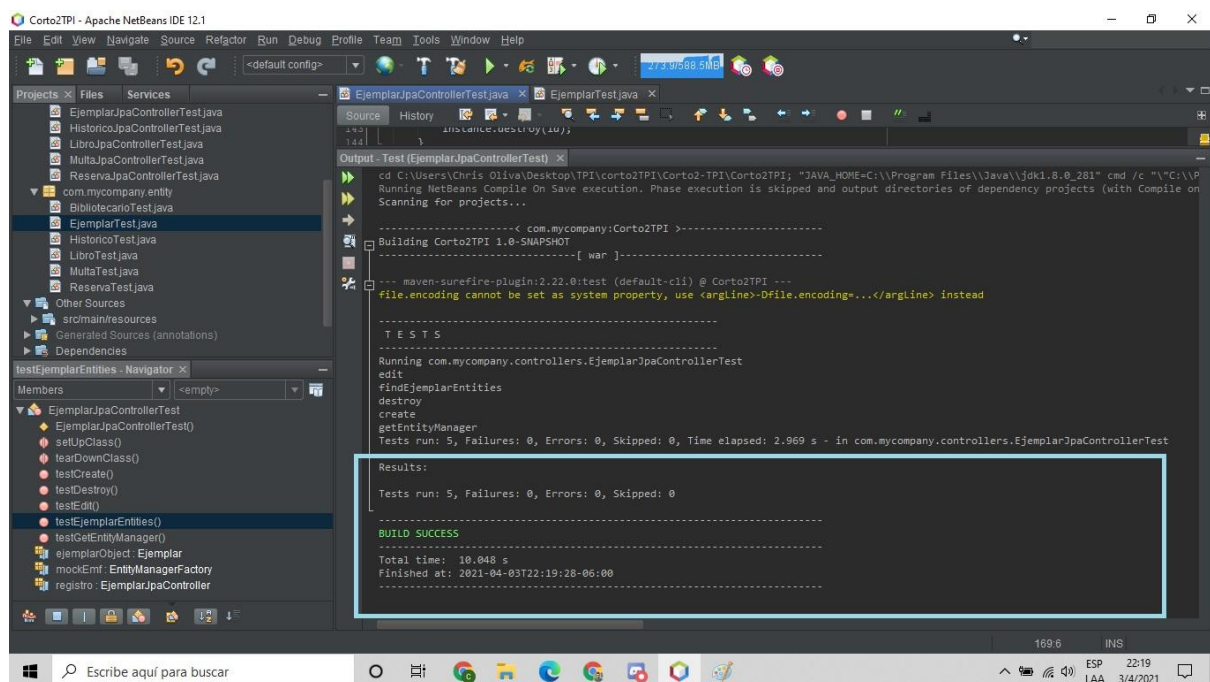
BUILD SUCCESS
Total time: 3.286 s
Finished at: 2021-04-04T22:23:18:06:00
```

TEST REALIZADOS EN EJEMPLAR:

Pruebas realizadas en el Entity de la clase Ejemplar, haciendo que los 21 métodos de este pasaran con éxito el testeo.

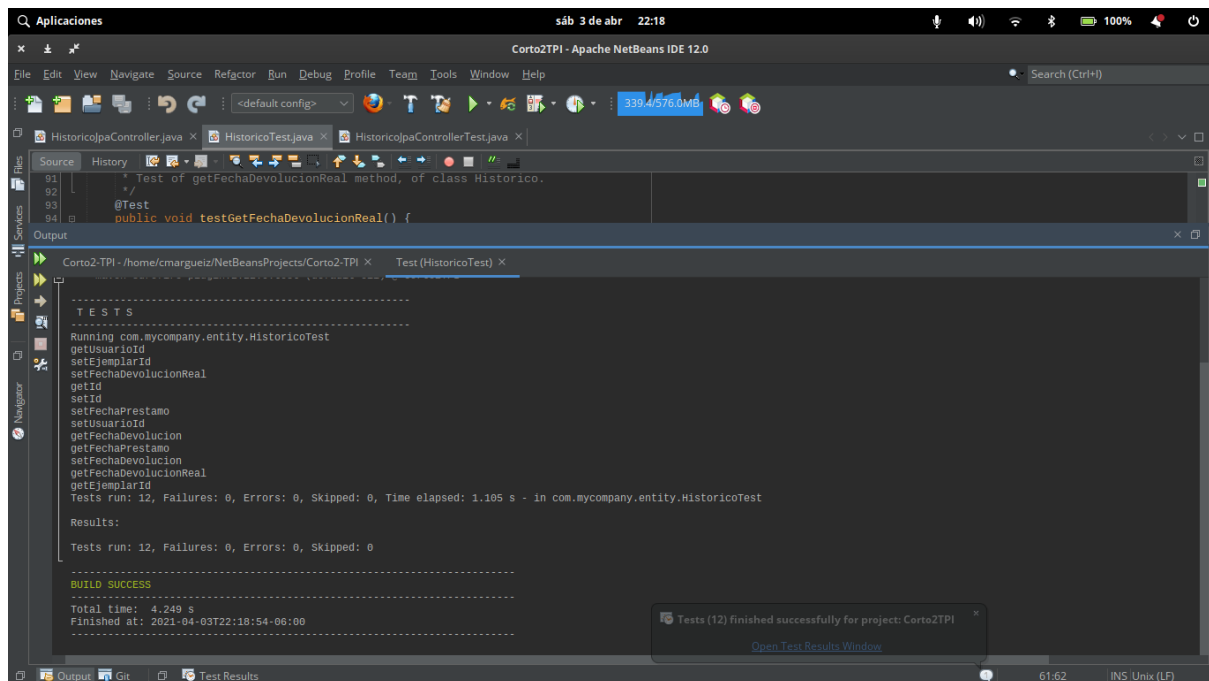


Pruebas realizadas en el Controller de la clase Ejemplar, haciendo que los 5 métodos de este pasaran con éxito el testeo.

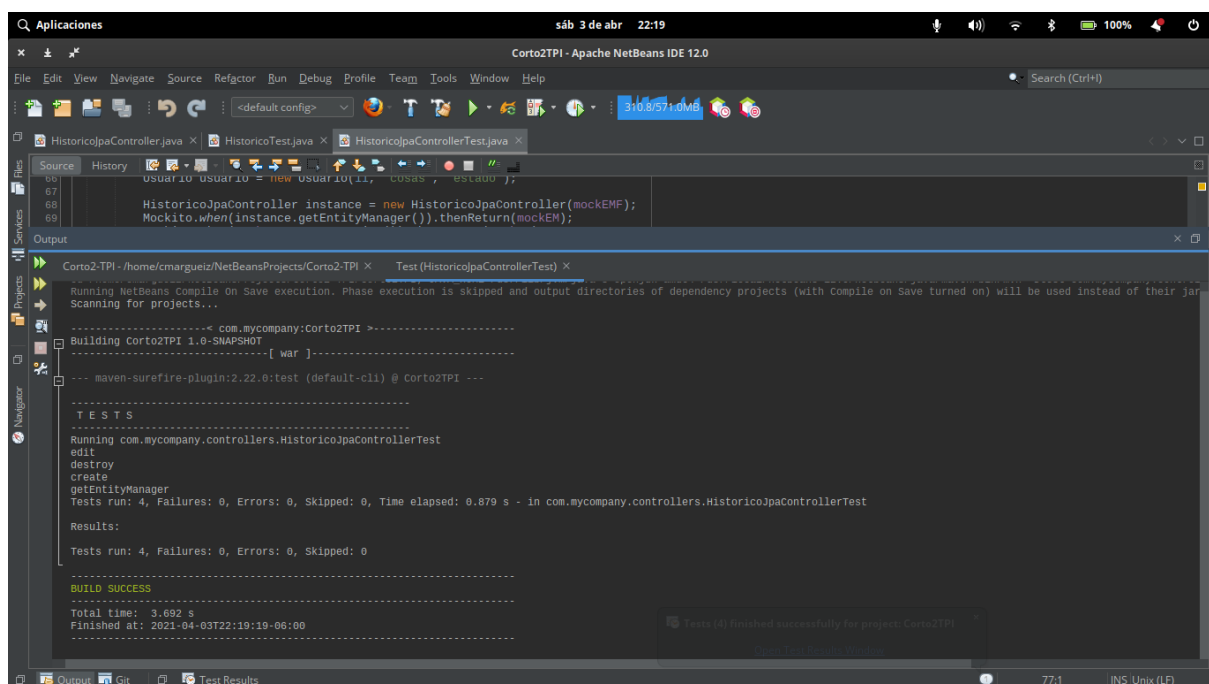


TEST REALIZADOS EN HISTÓRICO:

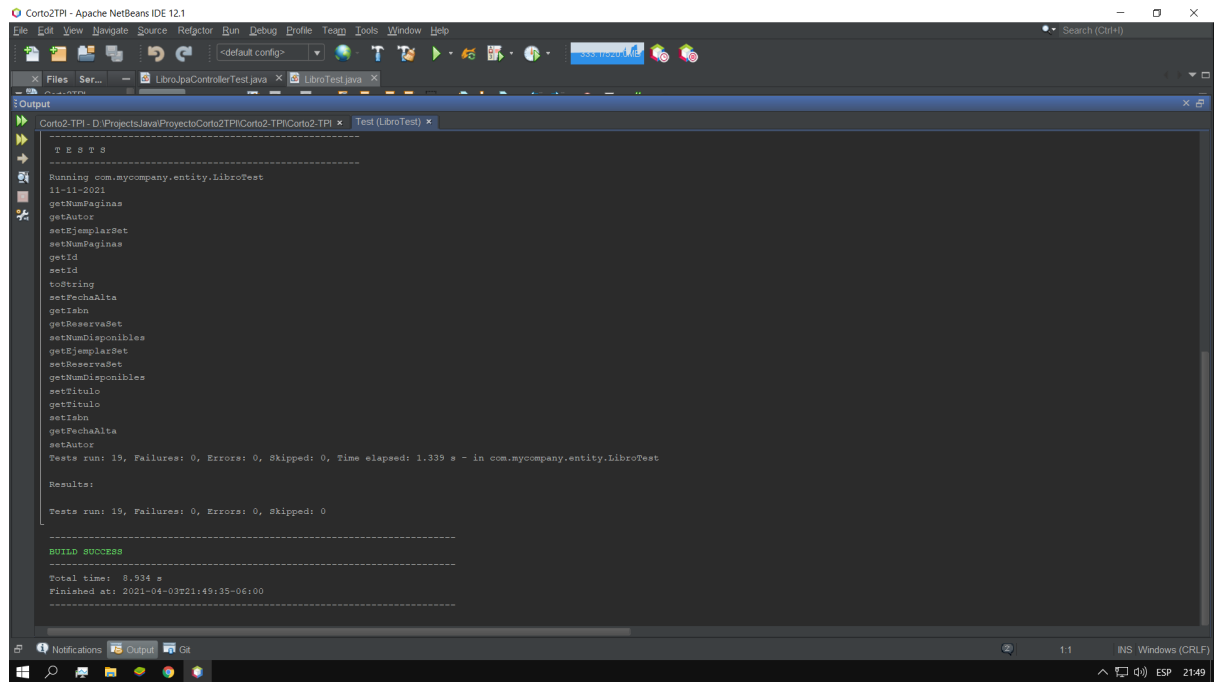
Pruebas realizadas en el Entity de la clase Histórico, haciendo que los 12 métodos de este pasaran con éxito el testeo.



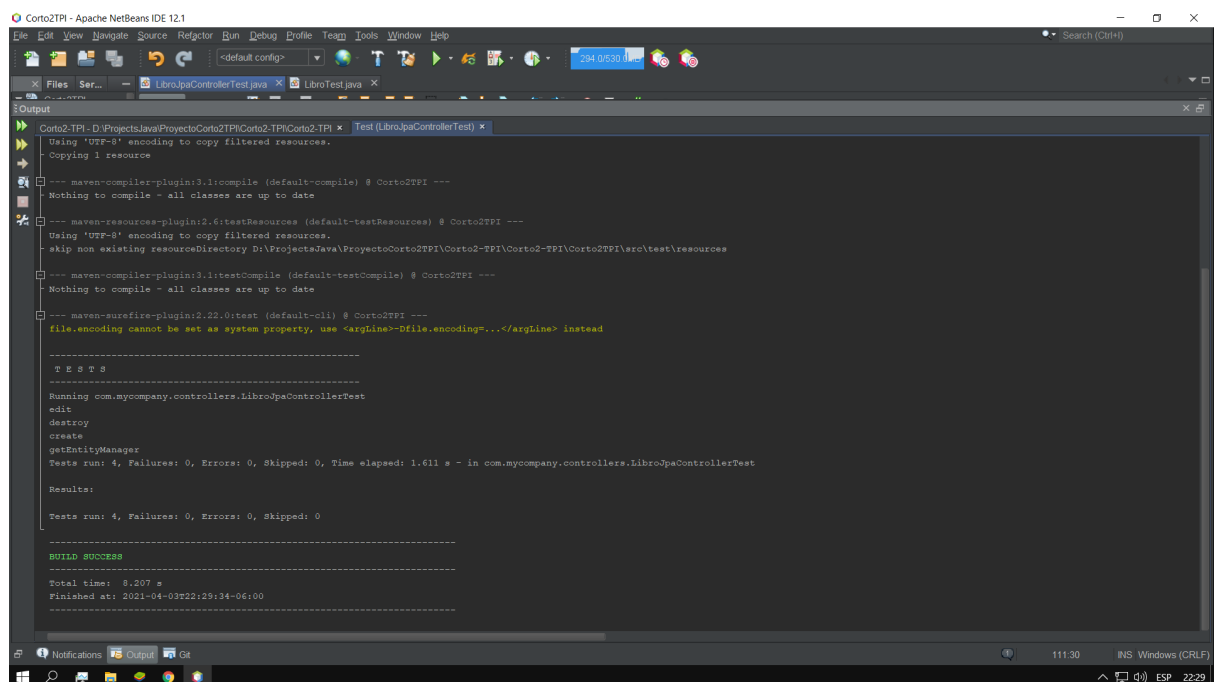
Pruebas realizadas en el Controller de la clase Histórico, haciendo que los 5 métodos de este pasaran con éxito el testeo.



TEST REALIZADOS EN LIBRO:



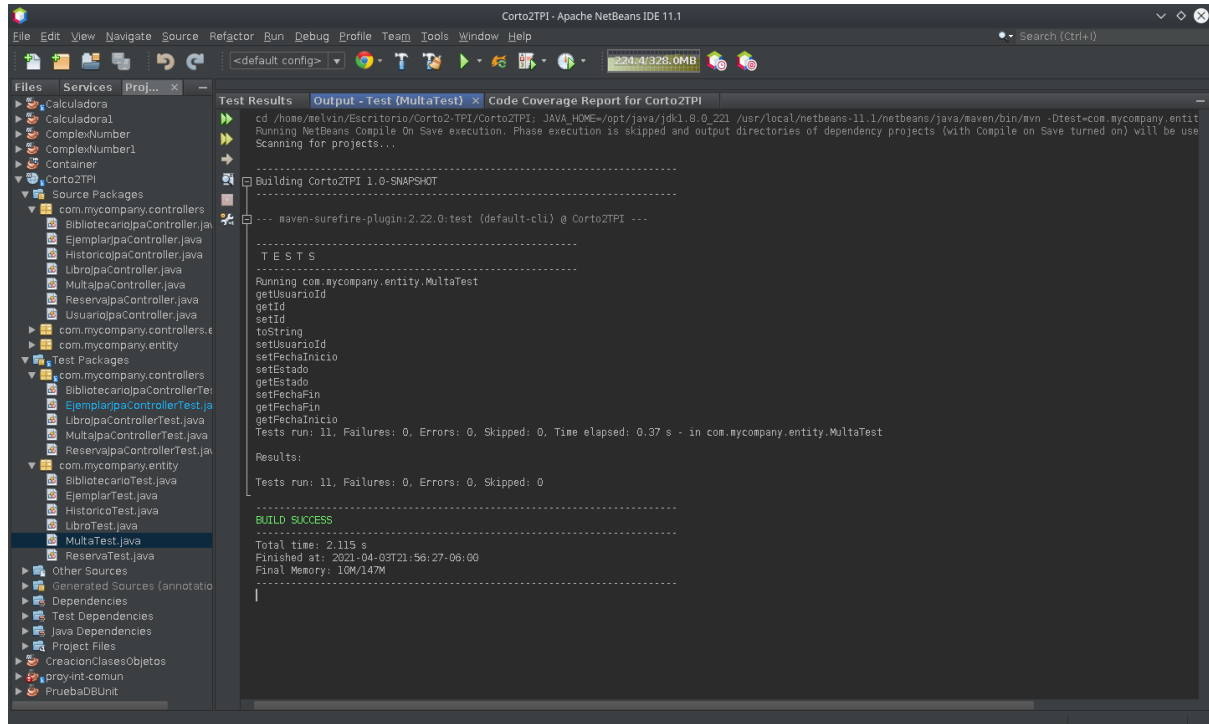
Mostrando cómo se aplicaron los test en Entity Libro y todos pasaron con éxito en total 19 test



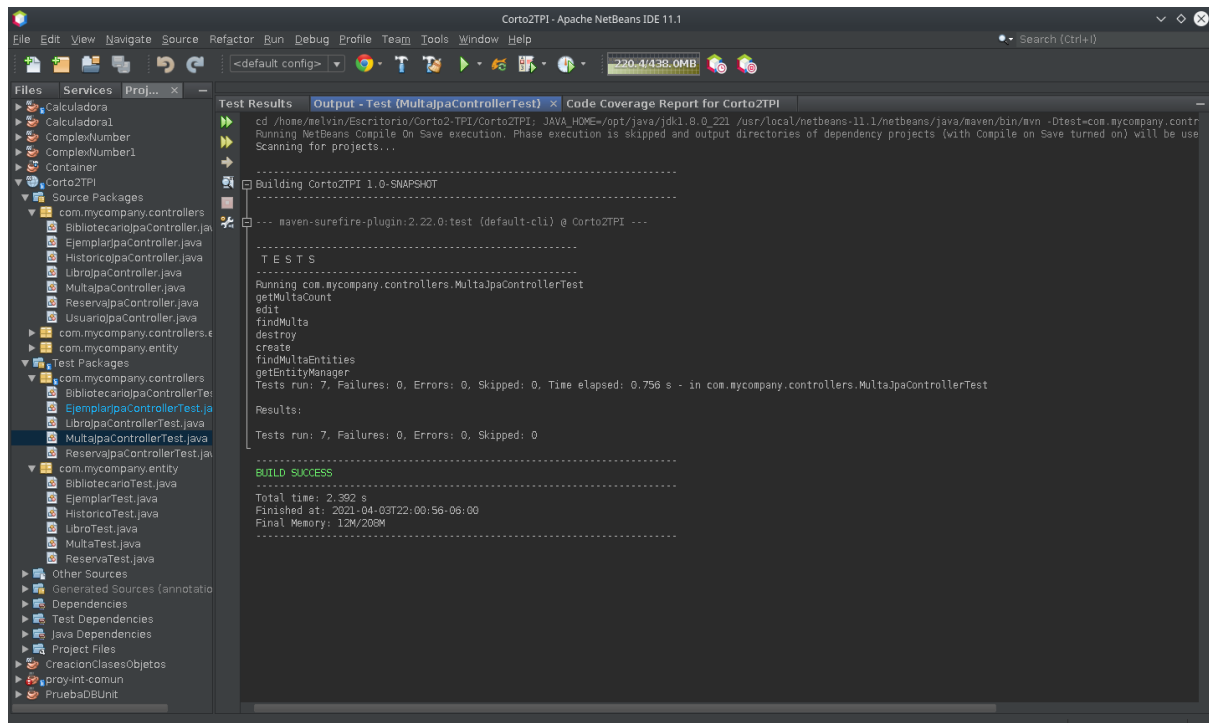
Mostrando cómo se aplicaron los test Controller Libro y todos pasaron con éxito en total 4.

TEST REALIZADOS EN MULTA:

Prueba en el Entity de Multa, todos los métodos pasaron exitosamente.

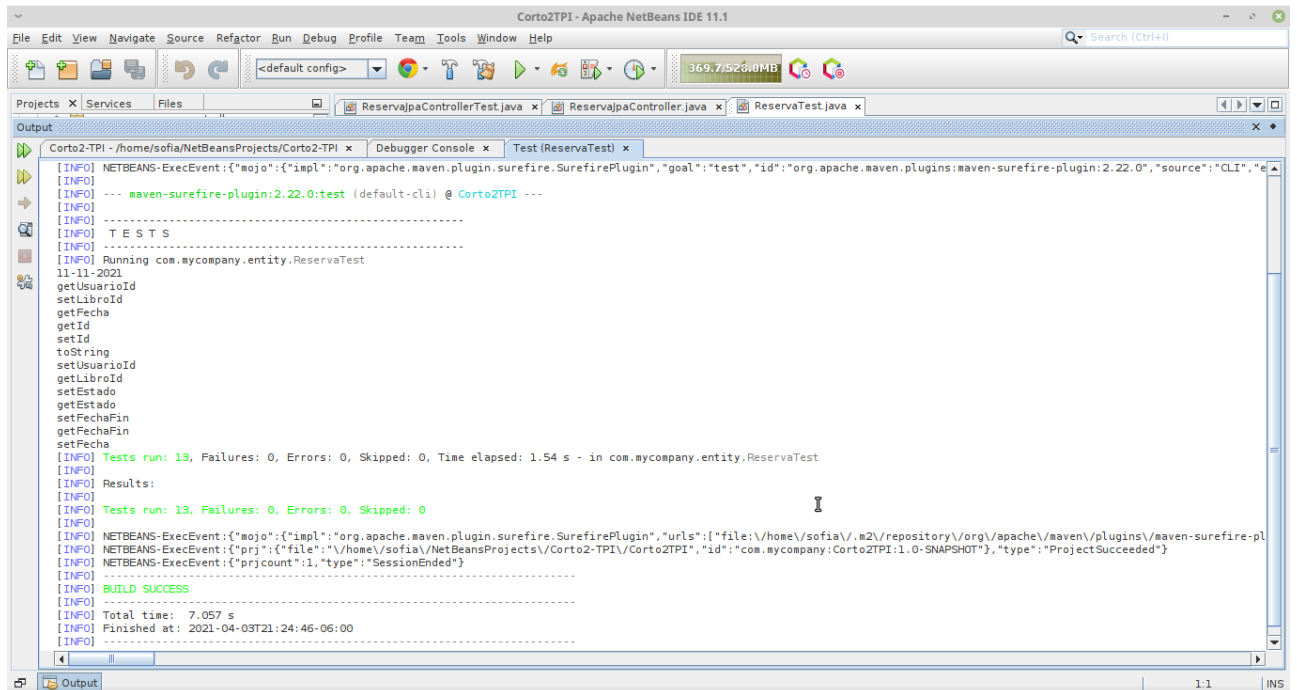


Prueba en el Controller de Multa, todos los métodos pasaron exitosamente.



TEST REALIZADOS EN RESERVA:

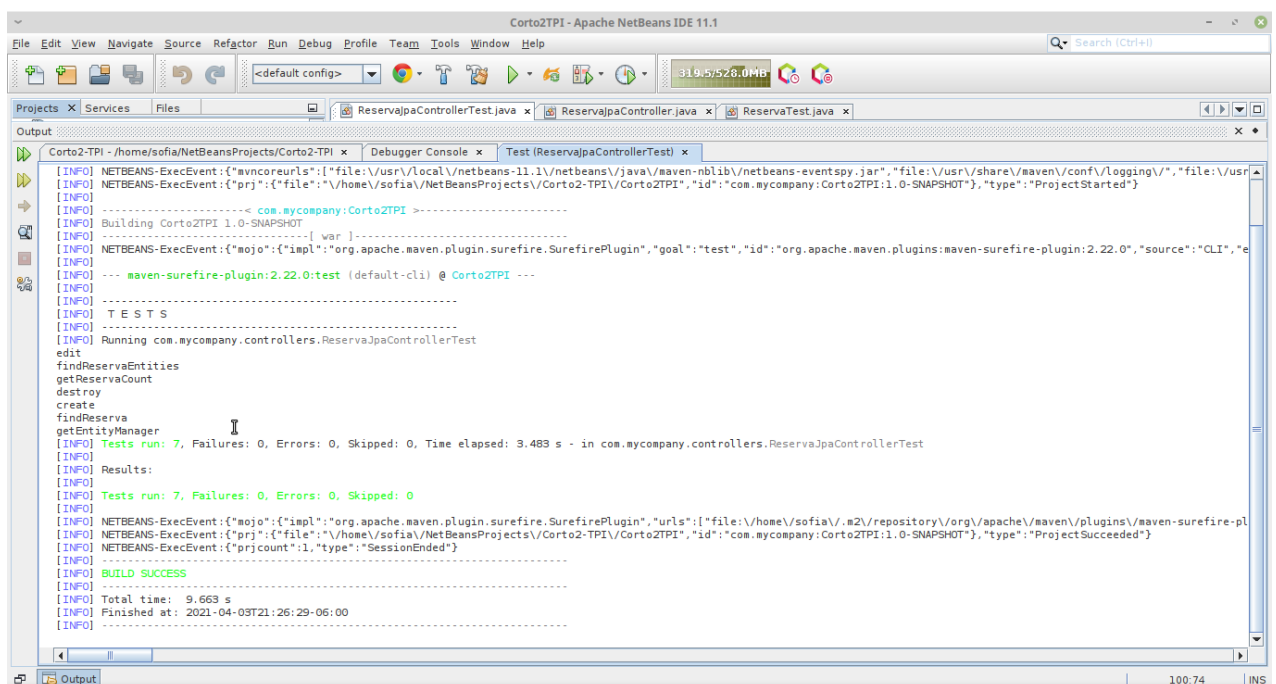
Prueba en el entity de la clase Reserva, y se muestra que todas corrieron con éxito.



The screenshot shows the Apache NetBeans IDE interface. The 'Output' window is open, displaying the results of a test run for the 'ReservaTest' class. The output includes the following information:

```
[INFO] NETBEANS-ExecEvent:{"mojo":{"impl":"org.apache.maven.plugin.surefire.SurefirePlugin","goal":"test","id":"org.apache.maven.plugins:maven-surefire-plugin:2.22.0","source":"CLI"},"e...
[INFO] --- maven-surefire-plugin:2.22.0:test (default-cli) @ Corto2TPI ---
[INFO]
[INFO] T E S T S
[INFO]
[INFO] Running com.mycompany.entity.ReservaTest
11-11-2021
getUserById
setLibroId
setFecha
getId
setId
toString
setUsuarioId
getLibroId
setEstado
getEstado
setFechaFin
getFechaFin
setFecha
[INFO] Tests run: 13, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.54 s - in com.mycompany.entity.ReservaTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 13, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] NETBEANS-ExecEvent:{"mojo":{"impl":"org.apache.maven.plugin.surefire.SurefirePlugin","urls":["file:/home/sofia/.m2/repository/org/apache/maven/plugins/maven-surefire-pl
[INFO] NETBEANS-ExecEvent:{"prj":{"file":"/home/sofia/NetBeansProjects/Corto2-TPI/Corto2TPI","id":"com.mycompany:Corto2TPI:1.0-SNAPSHOT"},"type":"ProjectSucceeded"}
[INFO] NETBEANS-ExecEvent:{"prjcount":1,"type":"SessionEnded"}
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 7.057 s
[INFO] Finished at: 2021-04-03T21:24:46-06:00
[INFO]
```

Prueba en el controller de la clase Reserva, la cual como se puede observar todos corrieron con éxito.



The screenshot shows the Apache NetBeans IDE interface. The 'Output' window is open, displaying the results of a test run for the 'ReservaJpaControllerTest' class. The output includes the following information:

```
[INFO] NETBEANS-ExecEvent:{"mvncoreurl":{"file":"/usr/local/netbeans-11.1/netbeans/java/maven-nblib/netbeans-events.jar","file":"/usr/share/maven/conf/logging/","file":"/usr
[INFO] NETBEANS-ExecEvent:{"prj":{"file":"/home/sofia/NetBeansProjects/Corto2-TPI/Corto2TPI","id":"com.mycompany:Corto2TPI:1.0-SNAPSHOT"},"type":"ProjectStarted"}
[INFO]
[INFO] < com.mycompany:Corto2TPI >
[INFO] Building Corto2TPI 1.0-SNAPSHOT
[INFO]
[INFO] [ war ]
[INFO] NETBEANS-ExecEvent:{"mojo":{"impl":"org.apache.maven.plugin.surefire.SurefirePlugin","goal":"test","id":"org.apache.maven.plugins:maven-surefire-plugin:2.22.0","source":"CLI"},"e
[INFO] --- maven-surefire-plugin:2.22.0:test (default-cli) @ Corto2TPI ---
[INFO]
[INFO] T E S T S
[INFO]
[INFO] Running com.mycompany.controllers.ReservaJpaControllerTest
edit
findReservaEntities
getReservaCount
destroy
create
findReserva
getEntityManager
[INFO] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 3.483 s - in com.mycompany.controllers.ReservaJpaControllerTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] NETBEANS-ExecEvent:{"mojo":{"impl":"org.apache.maven.plugin.surefire.SurefirePlugin","urls":["file:/home/sofia/.m2/repository/org/apache/maven/plugins/maven-surefire-pl
[INFO] NETBEANS-ExecEvent:{"prj":{"file":"/home/sofia/NetBeansProjects/Corto2-TPI/Corto2TPI","id":"com.mycompany:Corto2TPI:1.0-SNAPSHOT"},"type":"ProjectSucceeded"}
[INFO] NETBEANS-ExecEvent:{"prjcount":1,"type":"SessionEnded"}
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 9.663 s
[INFO] Finished at: 2021-04-03T21:26:29-06:00
[INFO]
```