

# UNIVERSIDAD MARIANO GÁLVEZ

## GUATEMALA

### CAMPUS JUTIAPA

# PROGRAMACIÓN

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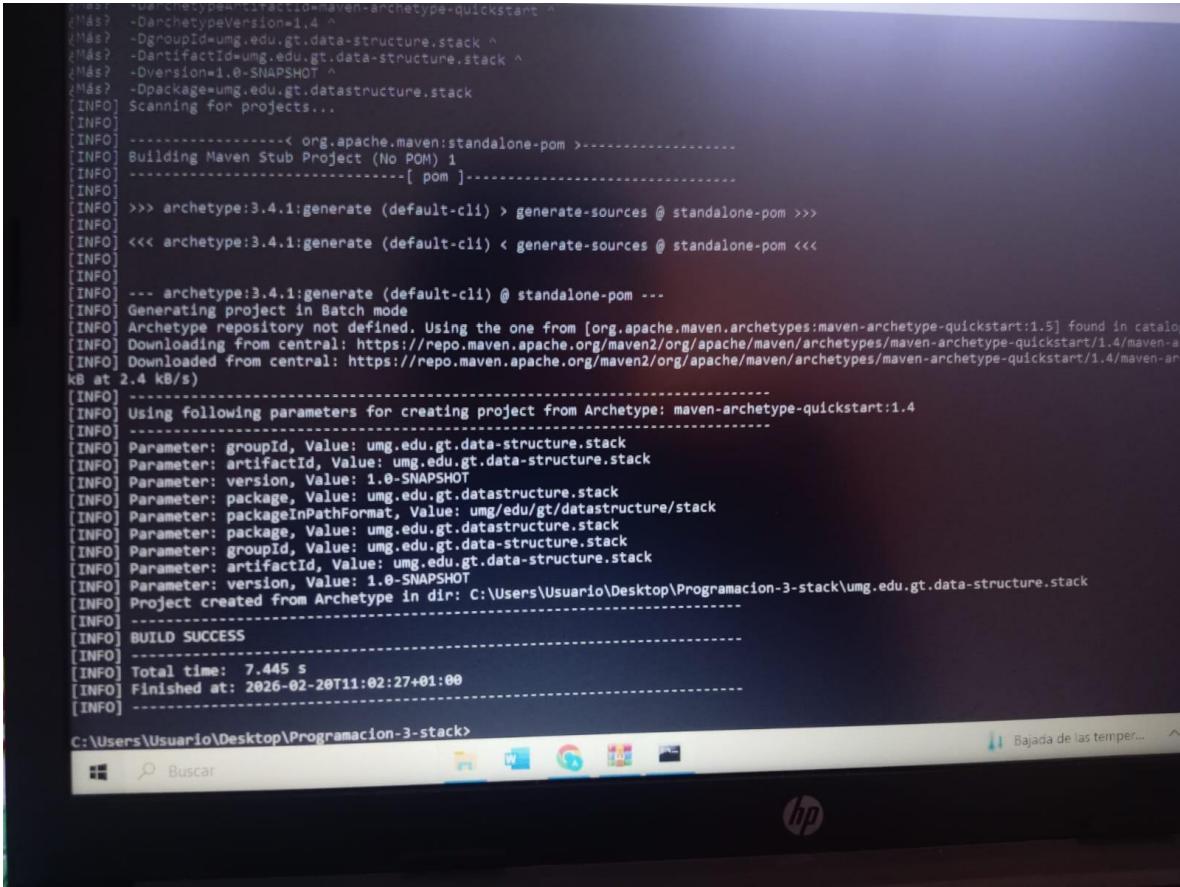
Carnet: 0905-2422-303





```
[INFO] -DarchetypeArtifactId=maven-archetype-quickstart ^  
[Más?]-DarchetypeVersion=1.4 ^  
[Más?]-DgroupId=umg.edu.gt.data-structure.stack ^  
[Más?]-DartifactId=umg.edu.gt.data-structure.stack ^  
[Más?]-Dversion=1.0-SNAPSHOT ^  
[Más?]-Dpackage=umg.edu.gt.datastructure.stack  
[INFO] Scanning for projects...  
[INFO]  
[INFO] -----< org.apache.maven:standalone-pom >-----  
[INFO] Building Maven Stub Project (No POM) 1  
[INFO] -----[ pom ]-----  
[INFO] >>> archetype:3.4.1:generate (default-cli) > generate-sources @ standalone-pom >>>  
[INFO] <<< archetype:3.4.1:generate (default-cli) < generate-sources @ standalone-pom <<<  
[INFO]  
[INFO] --- archetype:3.4.1:generate (default-cli) @ standalone-pom ---  
[INFO] Generating project in Batch mode  
[INFO] Archetype repository not defined. Using the one from [org.apache.maven.archetypes:maven-archetype-quickstart:1.5] found in catalog  
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.4/maven-archetype-quickstart-1.4.pom  
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.4/maven-archetype-quickstart-1.4.pom (2.4 kB at 2.4 kB/s)  
[INFO]  
[INFO] Using following parameters for creating project from Archetype: maven-archetype-quickstart:1.4  
[INFO]  
[INFO] Parameter: groupId, Value: umg.edu.gt.data-structure.stack  
[INFO] Parameter: artifactId, Value: umg.edu.gt.data-structure.stack  
[INFO] Parameter: version, Value: 1.0-SNAPSHOT  
[INFO] Parameter: package, Value: umg.edu.gt.datastructure.stack  
[INFO] Parameter: packageInPathFormat, Value: umg.edu.gt.datastructure.stack  
[INFO] Parameter: package, Value: umg.edu.gt.datastructure.stack  
[INFO] Parameter: groupId, Value: umg.edu.gt.data-structure.stack  
[INFO] Parameter: artifactId, Value: umg.edu.gt.data-structure.stack  
[INFO] Parameter: version, Value: 1.0-SNAPSHOT  
[INFO] Project created from Archetype in dir: C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack  
[INFO]  
[INFO] BUILD SUCCESS  
[INFO]  
[INFO] Total time: 7.445 s  
[INFO] Finished at: 2026-02-20T11:02:27+01:00  
[INFO]
```

C:\Users\Usuario\Desktop\Programacion-3-stack>



Es el maven almacenados que no están actualizados.

```
[INFO] --- surefire:3.2.5:test (default-test) @ stackHandler ---
[INFO] Using auto detected provider org.apache.maven.surefire.junit.JUnit3Provider
[INFO]
[INFO] -----
[INFO] T E S T S
[INFO] -----
[INFO] Running umg.edu.gt.handler.AppTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.024 s -- in umg.edu.gt.handler.AppTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
[INFO] --- jar:3.4.1:jar (default-jar) @ stackHandler ---
[INFO] Building jar: C:\Users\yudis\OneDrive\Desktop\TAREAPR0000\data-structure-stack-practice\stackHandler\target\stackHandler-1.0.0.jar
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 4.387 s
[INFO] Finished at: 2026-02-20T00:28:12-06:00
[INFO] -----
```

Se esta ejecutandolos procesos de una terminal consola y pruebas de software, probablemente java.

```
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-parent/24/commons-parent-24.0.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-parent/24/commons-parent-24.0.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-parent/24/commons-parent-24.0.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-parent/24/commons-parent-24.0.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-compress/1.11/commons-compress-1.11.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-compress/1.11/commons-compress-1.11.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.pom (1.9 kB at 11 kB/s)
Downloaded  central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.pom (1.9 kB at 12 kB/s)
Downloaded  central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-archiver/3.4/plexus-archiver-3.4.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-archiver/3.4/plexus-archiver-3.4.pom
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-archiver/3.1.1/maven-archiver-3.1.1.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/3.0.1/maven-shared-utils-3.0.1.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-io/2.7.1/plexus-io-2.7.1.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-compress/1.11/commons-compress-1.11.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-archiver/3.1.1/maven-archiver-3.1.1.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/iq80/snappy/snappy/0.4/snappy-0.4.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.pom (86 kB)
Downloaded  central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/3.0.1/maven-shared-utils-3.0.1.jar
Downloaded  central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.jar (100 kB at 159 kB/s)
Downloaded  central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-compress/1.11/commons-compress-1.11.jar
[INFO] Building jar: C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack\target\umg.edu.gt.data-structure.stack.jar
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 01:24 min
[INFO] Finished at: 2026-02-20T11:11:48+01:00
[INFO]
```

Es el proceso de descargo varias dependencias de repositorios centrales.

```
[INFO] Total time: 9.533 s
[INFO] Finished at: 2026-02-20T18:59:16+01:00
[INFO] -----[jar]-----[INFO] --< umg.edu.gt.data-structure.stack:umg.edu.gt.data-structure.stack >---[INFO] Building umg.edu.gt.data-structure.stack 1.0-SNAPSHOT
[INFO]   from pom.xml
[INFO] -----[INFO] --- exec:3.6.3:java (default-cli) @ umg.edu.gt.data-structure.stack ---
Prueba 1: {[()]}
Es válida? true
Prueba 2: {[()]}
Es válida? false
[INFO] -----[INFO] BUILD SUCCESS
[INFO] -----[INFO] Total time: 1.242 s
[INFO] Finished at: 2026-02-20T18:59:48+01:00
[INFO] -----
```

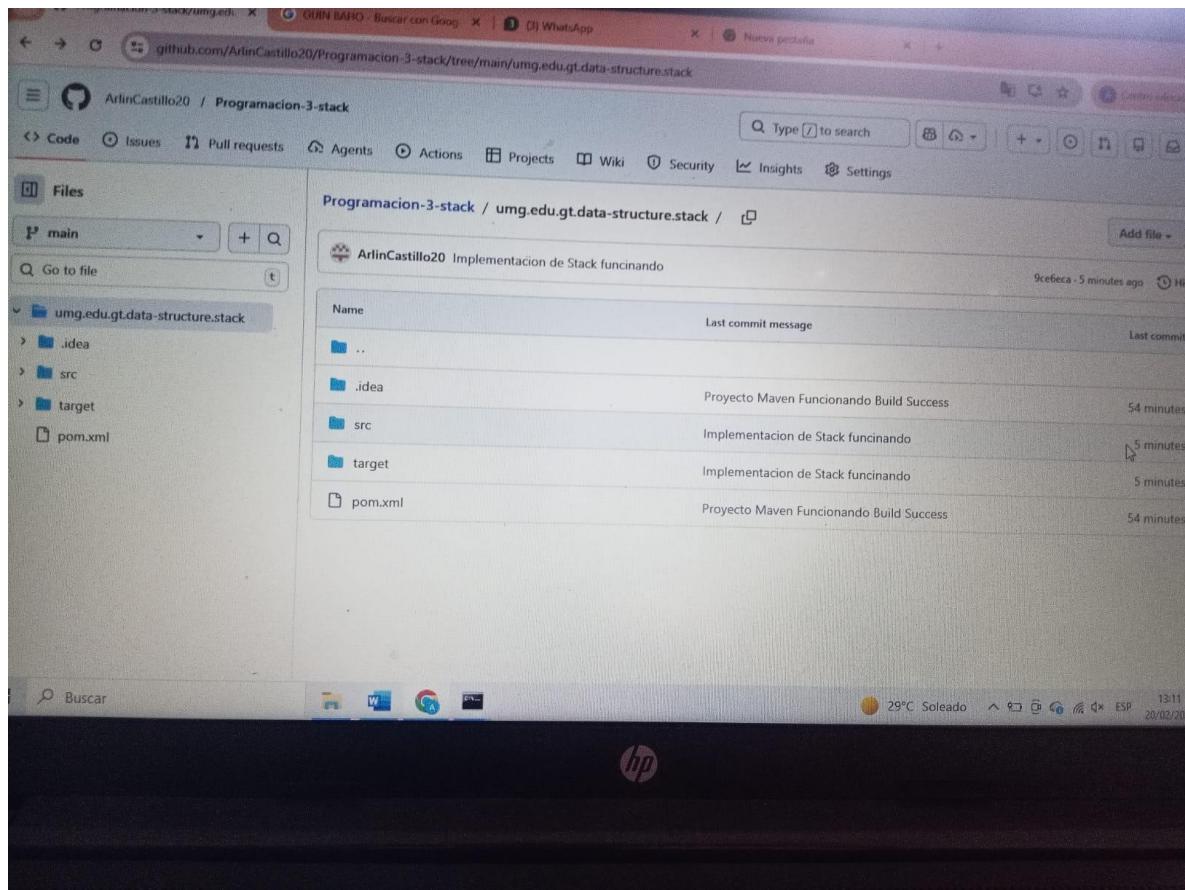
Es la ejecución del proyecto de programación, indicado que la prueba de validacion es el proceso correo

The screenshot shows a Windows desktop environment. In the center is a command prompt window titled 'C:\Windows\System32\cmd.exe'. The window contains the following log output:

```
TESTS -----
[INFO] Running umg.edu.gt.datastructure.stack.AppTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.068 s - 1
[INFO]
[INFO] Results:
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] On [INFO] --- jar:2.3.0:jar (default-jar) @ umg.edu.gt.data-structure.stack ---
[INFO] Building jar: C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data
[INFO] Esta-structure.stack-1.0-SNAPSHOT.jar
[INFO]
[INFO] --- install:2.5.2:install (default-install) @ umg.edu.gt.data-structure.sta
[INFO] Installing C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-st
[INFO] ructure.stack-1.0-SNAPSHOT.jar to C:\Users\Usuario\.m2\repository\umg\edu\gt\data
[INFO] ture.stack\1.0-SNAPSHOT\umg.edu.gt.data-structure.stack-1.0-SNAPSHOT.jar
[INFO] Installing C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-st
[INFO] ructure.stack-1.0-SNAPSHOT\umg.edu.gt\data-structure\stack\umg.edu.gt.data-structure.stack
[INFO] -1.0-SNAPSHOT.pom
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 7.591 s
[INFO] Finished at: 2026-02-20T14:54:39+01:00
[INFO]
```

The command prompt window has a tab bar at the top with the following tabs: 'Inicio', 'Compartir', 'Vista', 'Herramientas de copia de seguridad' (selected), and 'Sin copia de seguridad'. The status bar at the bottom of the window shows the path 'C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack>'.

La compilación y instalación del proyecto jar fue exitosa.



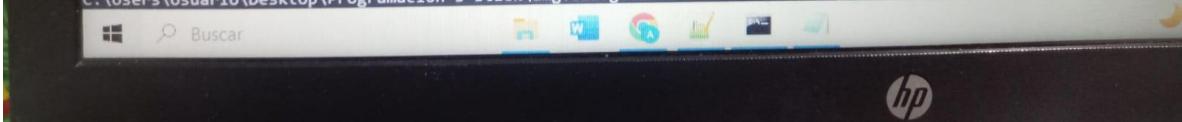
Aquí muestra como si esta subido el git hub.

```
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] --- jar:3.3.0:jar (default-jar) @ umg.edu.gt.data-structure.stack ---
[INFO] Building jar: C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack\target\umg.edu.gt.
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 9.150 s
[INFO] Finished at: 2026-02-20T19:28:08+01:00
[INFO] -----
```

C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack>Cmvn exec:java -Dexec.mainClass=umg.edu
"Cmvn" no se reconoce como un comando interno o externo,
programa o archivo por lotes ejecutable.

```
C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack>mvn exec:java -Dexec.mainClass=umg.edu
[INFO] Scanning for projects...
[INFO]
[INFO] --< umg.edu.gt.data-structure.stack:umg.edu.gt.data-structure.stack >---
[INFO] Building umg.edu.gt.data-structure.stack 1.0-SNAPSHOT
[INFO]   from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- exec:3.6.3:java (default-cli) @ umg.edu.gt.data-structure.stack ---
Cantidad: 3
Nodo inicial: c
Pop: c
Cantidad luego pop: 2
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.430 s
[INFO] Finished at: 2026-02-20T19:33:07+01:00
[INFO] -----
```

C:\Users\Usuario\Desktop\Programacion-3-stack\umg.edu.gt.data-structure.stack>



Son comandos ejecutando proyectos jabado llamado data.