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**MAVEN MÁS DEPENDENCIAS**

**CURSO: PROGRAMACIÓN III**

**SEMANA: DOS**

**SEMESTRE: 5TO**

**CICLO: 2026**

TEMA:

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**SEMANA: DOS**

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```
Microsoft Windows [Versión 10.0.26100.7623]
(c) Microsoft Corporation. Todos los derechos reservados.

:\Users\yudis>java-version
java-version" no se reconoce como un comando interno o externo,
programa o archivo por lotes ejecutable.

:\Users\yudis>java -version

penjdk version "11.0.30" 2026-01-20
penJDK Runtime Environment Temurin-11.0.30+7 (build 11.0.30+7)
penJDK 64-Bit Server VM Temurin-11.0.30+7 (build 11.0.30+7, mixed mode)

:\Users\yudis>mvn -version
Apache Maven 3.9.12 (848fbb4b4bf2d427b72bdb2471c22fced7ebd9a7a1)
Maven home: C:\apache-maven-3.9.12-bin\apache-maven-3.9.12
Java version: 11.0.30, vendor: Eclipse Adoptium, runtime: C:\Program Files\Eclipse Adoptium\jdk-11.0.
Default locale: es_GT, platform encoding: Cp1252
OS name: "windows 11", version: "10.0", arch: "amd64", family: "windows"

:\Users\yudis>
```

Ejecuta el comando esta escrito luego el correcto muestra que el desarrollo esta bien configurado.



```
C:\Windows\System32\cmd.exe
[INFO] -----
[INFO] T E S T S
[INFO] -----
[INFO] Running umg.edu.gt.data_structure.stack.AppTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.041 s -- in umg.edu.gt.data_structure.stack.AppTest
[INFO] Results:
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] --- jar:3.4.1:jar (default-jar) @ stack ---
[INFO] Building jar: C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\umg.edu.gt.data-structure.stack\target\stack-1.0.0.jar
[INFO]
[INFO] --- install:3.1.2:install (default-install) @ stack ---
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-util/1.9.18/maven-resolver-util-1.9.18.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-util/1.9.18/maven-resolver-util-1.9.18.pom (2.9 kB at 3.2 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver/1.9.18/maven-resolver-1.9.18.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver/1.9.18/maven-resolver-1.9.18.pom (22 kB at 131 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-api/1.9.18/maven-resolver-api-1.9.18.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-api/1.9.18/maven-resolver-api-1.9.18.pom (2.7 kB at 1.8 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-util/1.9.18/maven-resolver-util-1.9.18.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-util/1.9.18/maven-resolver-util-1.9.18.jar (196 kB at 519 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-api/1.9.18/maven-resolver-api-1.9.18.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/resolver/maven-resolver-api/1.9.18/maven-resolver-api-1.9.18.jar (157 kB at 307 kB/s)
[INFO] Installing C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\umg.edu.gt.data-structure.stack\pom.xml to C:\Users\yudis\.m2\repository\umg\edu\gt\data-structure\stack\stack\1.0.0\stack-1.0.0.pom
[INFO] Installing C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\umg.edu.gt.data-structure.stack\target\stack-1.0.0.jar to C:\Users\yudis\.m2\repository\umg\edu\gt\data-structure\stack\stack\1.0.0\stack-1.0.0.jar
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 8.200 s
[INFO] Finished at: 2026-02-19T23:22:43-06:00
[INFO] -----
C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\umg.edu.gt.data-structure.stack>
```

Ejecuta las prueba, que compilo el proyecto y genero el archivo. Sin errores se confirma con el mensaje de BUILD SUCCES



```
C:\Windows\System32\cmd.exe X + v
[INFO] --- compiler:3.13.0:compile (default-compile) @ stackHandler ---
[INFO] Recompiling the module because of changed source code.
[WARNING] File encoding has not been set, using platform encoding windows-1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file with javac [debug target 1.8] to target\classes
[WARNING] bootstrap class path not set in conjunction with -source 8
[INFO] --- resources:3.3.1:testResources (default-testResources) @ stackHandler ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\src\test\resources
[INFO] --- compiler:3.13.0:testCompile (default-testCompile) @ stackHandler ---
[INFO] Recompiling the module because of changed dependency.
[WARNING] File encoding has not been set, using platform encoding windows-1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file with javac [debug target 1.8] to target\test-classes
[WARNING] bootstrap class path not set in conjunction with -source 8
[INFO] --- surefire:3.2.5:test (default-test) @ stackHandler ---
[INFO] Using auto detected provider org.apache.maven.surefire.junit.JUnit3Provider
[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: 0.021 s -- in umg.edu.gt.handler.AppTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] --- jar:3.3.0:jar (default-jar) @ stackHandler ---
[INFO] Building jar: C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\target\stackHandler-1.0.0.jar
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 6.052 s
[INFO] Finished at: 2026-02-20T11:05:58-06:00
[INFO]
C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>
```

La captura muestra la ejecución del proyecto Maven, donde se compila el código y se genera el archivo SUCCES confirma que todo funciona correctamente.

```
C:\Windows\System32\cmd.exe
Directorio de C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\target
20/02/2026 11:05 <DIR> .
20/02/2026 11:27 <DIR> ..
20/02/2026 11:05 <DIR> classes
20/02/2026 11:05 <DIR> generated-sources
20/02/2026 11:05 <DIR> generated-test-sources
20/02/2026 11:05 <DIR> maven-archiver
20/02/2026 11:05 <DIR> maven-status
20/02/2026 11:05 2,828 stackHandler-1.0.0.jar
20/02/2026 11:05 <DIR> surefire-reports
20/02/2026 11:05 <DIR> test-classes
1 archivos 2,828 bytes
9 dirs 36,553,641,984 bytes Libres

C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>dir "%USERPROFILE%\m2\repository\umg\edu\gt\data-structure\stack\stack\1.0.0"
El volumen de la unidad C es Windows
El número de serie del volumen es: 00D0-671A

Directorio de C:\Users\yudis\m2\repository\umg\edu\gt\data-structure\stack\stack\1.0.0
20/02/2026 10:53 <DIR> .
19/02/2026 23:22 <DIR> ..
20/02/2026 10:53 3,848 stack-1.0.0.jar
20/02/2026 09:35 665 stack-1.0.0.pom
20/02/2026 10:53 180 _remote.repositories
3 archivos 4,693 bytes
2 dirs 36,553,510,912 bytes Libres

C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>java -cp "target\stackHandler-1.0.0.jar;%USERPROFILE%\m2\repository\umg\edu\gt\data-structure\stack\stack\1.0.0\stack-1.0.0.jar" umg.edu.gt.handler.App
Probando pila...
Tope actual: {
Pop: {
Pop: [
Pop: (
Pila vac??a: true

C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>
```

Es la ejecución del programa java desde consola usando archivo . jar generado por Maven. El programa prueba la estructura de datos pila, mostrando operaciones como top y pop y confirma que funciona correctamente.

```
C:\Windows\System32\cmd.exe
[WARNING] single version of the file is copied to the uber jar.
[WARNING] Usually this is not harmful and you can skip these warnings,
[WARNING] otherwise try to manually exclude artifacts based on
[WARNING] mvn dependency:tree -Ddetail=true and the above output.
[WARNING] See https://maven.apache.org/plugins/maven-shade-plugin/
[INFO] Replacing original artifact with shaded artifact.
[INFO] Replacing C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\target\stackHandler-1.0.0.jar with C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\target\stackHandler-1.0.0-shaded.jar
[INFO] BUILD SUCCESS
[INFO] Total time: 7.901 s
[INFO] Finished at: 2026-02-20T12:22:46-06:00
[INFO]

C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>dir target
El volumen de la unidad C es Windows
El número de serie del volumen es: 08D0-671A

Directorio de C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler\target

20/02/2026 12:22 <DIR> .
20/02/2026 12:22 <DIR> ..
20/02/2026 12:22 <DIR> classes
20/02/2026 12:22 <DIR> generated-sources
20/02/2026 12:22 <DIR> generated-test-sources
20/02/2026 12:22 <DIR> maven-archiver
20/02/2026 12:22 <DIR> maven-status
20/02/2026 12:22 3,964 original-stackHandler-1.0.0.jar
20/02/2026 12:22 7,583 stackHandler-1.0.0.jar
20/02/2026 12:22 <DIR> surefire-reports
20/02/2026 12:22 <DIR> test-classes
20/02/2026 12:22 2 archivos 11,467 bytes
20/02/2026 12:22 9 dirs 36,583,568,384 bytes libres

C:\Users\yudis\OneDrive\Desktop\TAREAPRO000\data-structure-stack-practice\stackHandler>java -jar target\stackHandler-1.0.0.jar
Caso v?lido: (a+b) * [c-d]
Resultado: true

Caso inv?lido: ([)]
Resultado: false
```

La consola muestra la construcción y ejecución de un proyecto java con ejecutable y luego prueba su funcionamiento.