Apache Groovy es un lenguaje poderoso,
opcionalmente “Typed” y dinámico,

“Groovy, el segundo lenguaje mas utilizado en ecosistemas Java “

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Lengujes del Ecosistema Java (JVM)

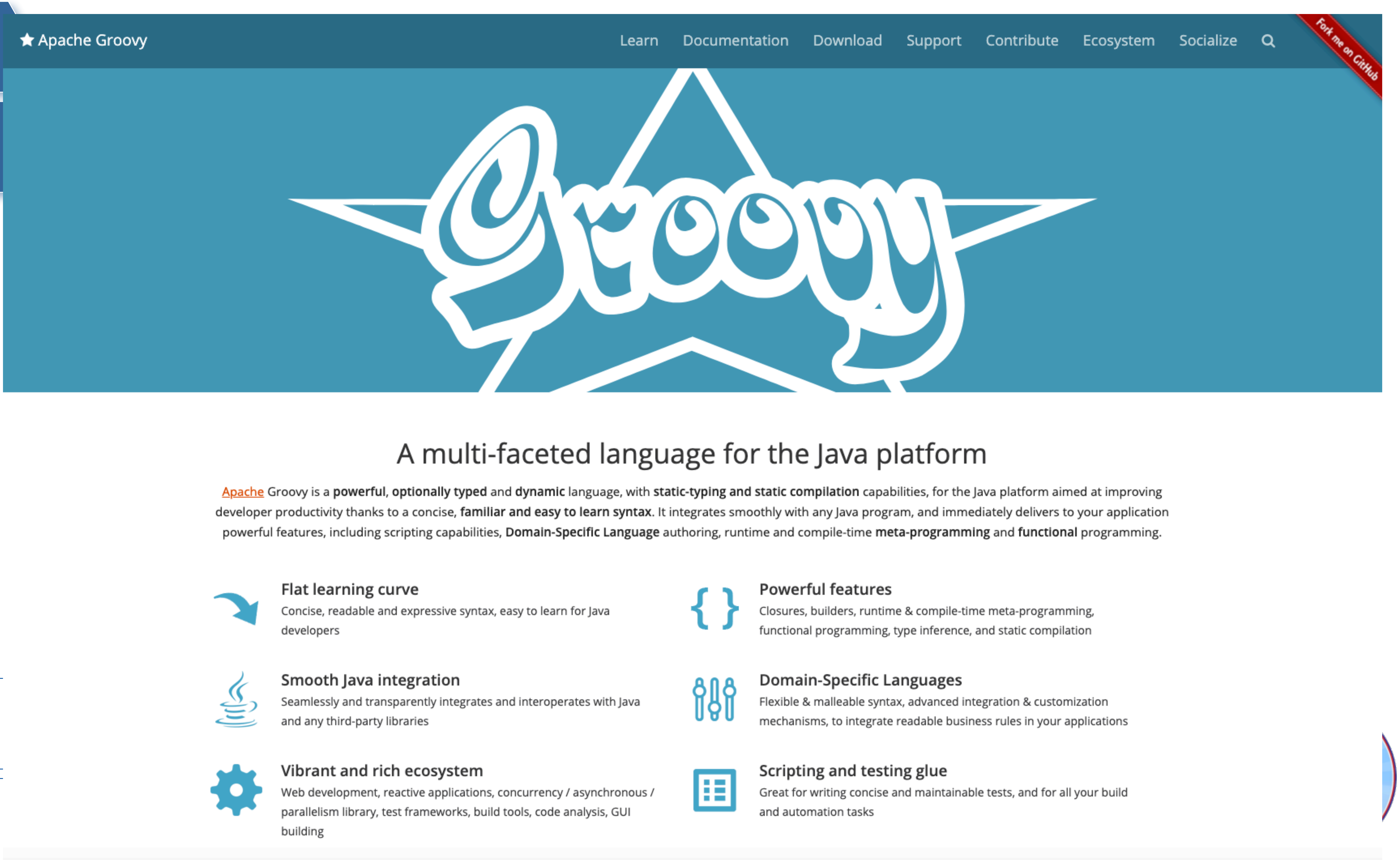
Java
Groovy
Kotlin
Scala
Ceylon
Clojure
Fantom
JRuby
Xtend
Jython
PANAMÁ
JUG

Java

```java
class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello, World!");
    }
}
```

Groovy

```groovy
println("Hello, World!")
```



A multi-faceted language for the Java platform

Apache Groovy is a **powerful**, **optionally typed** and **dynamic** language, with **static-typing and static compilation** capabilities, for the Java platform aimed at improving developer productivity thanks to a concise, **familiar and easy to learn syntax**. It integrates smoothly with any Java program, and immediately delivers to your application powerful features, including scripting capabilities, **Domain-Specific Language** authoring, runtime and compile-time **meta-programming** and **functional** programming.

Flat learning curve

Concise, readable and expressive syntax, easy to learn for Java developers

Powerful features

Closures, builders, runtime & compile-time meta-programming, functional programming, type inference, and static compilation

Smooth Java integration

Seamlessly and transparently integrates and interoperates with Java and any third-party libraries

Domain-Specific Languages

Flexible & malleable syntax, advanced integration & customization mechanisms, to integrate readable business rules in your applications

Vibrant and rich ecosystem

Web development, reactive applications, concurrency / asynchronous / parallelism library, test frameworks, build tools, code analysis, GUI building

Scripting and testing glue

Great for writing concise and maintainable tests, and for all your build and automation tasks

Groovy CLI

- Groovy
  - Programación Orientada a objetos
  - POJO —> Plain Old Java Object
  - POGO—> Plain Old Groovy Object

- Groovy
  - Scripts

Groovy

- El punto y coma es opcional al final de una sentencia
- EL operador == funciona con Objetos (String)
- Palabra reservada “def”
- Gstring
- String multilinea ”””

- Groovy importa los siguientes paquetes
  - groovy.lang.*
  - groovy.util.*
  - java.lang.*
  - java.util.*
  - java.net.*
  - java.io.*

- Y las clases:
  - java.math.BigInteger
  - java.math.BigDecimal

Listas (ArrayList)

```
def lista0 =[ ]

def lista =[1,2,3,4,5]

def lista2 = [“uno”,”dos”,”tres”, “autobús”]
```

Map (HashMap)

```
def mapa0 = [ : ]

def mapa1 = [“UNO”:1111, “dos”: 2222]

def mapa2 =[“nombre”:”Juan Perez”, “id”:2020390]
```

Demo

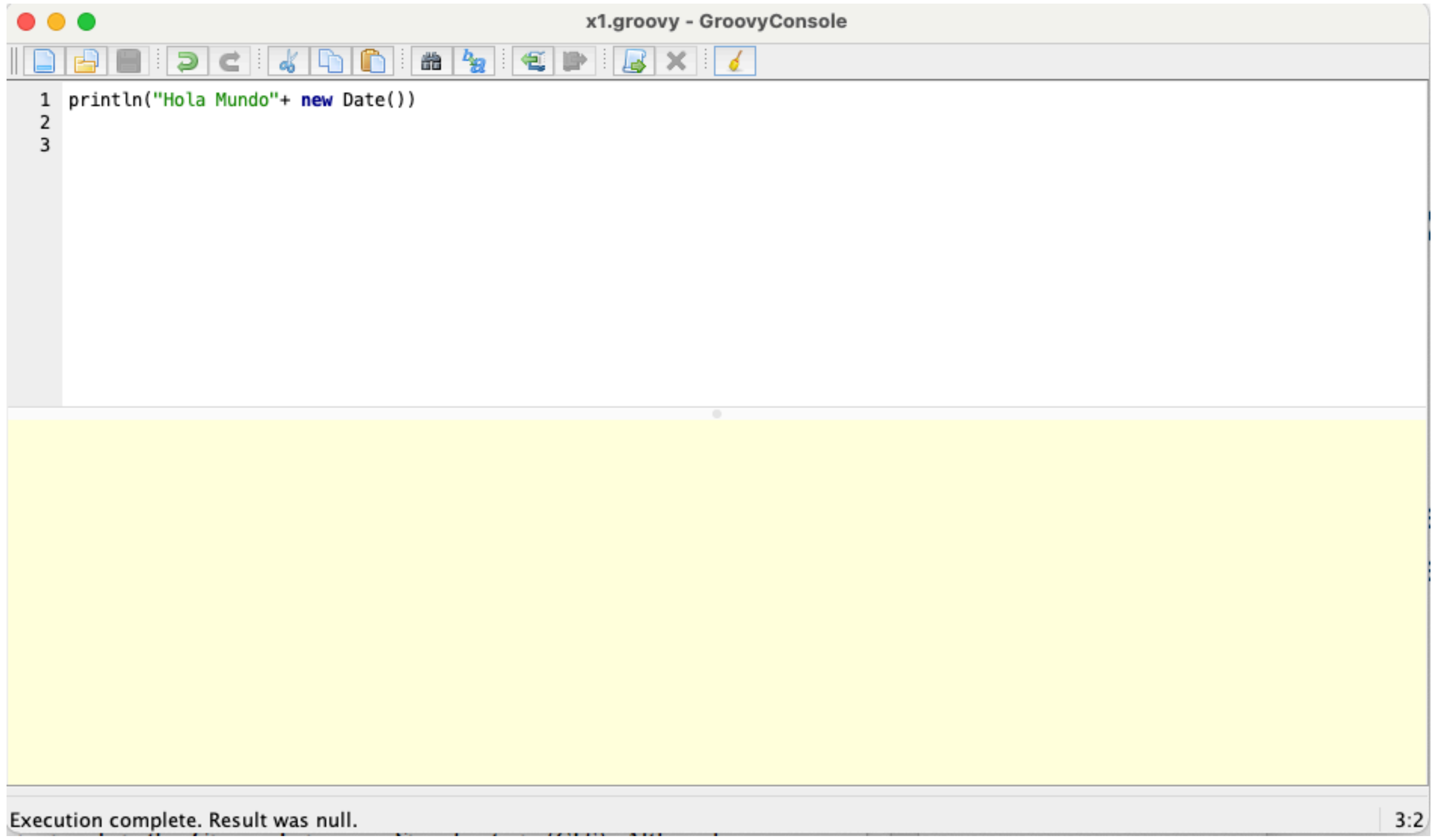
Groovy

Closures (encerramientos)

```
def number = 0
new File('data.txt').eachLine { line ->
    number++
    println "$number: $line"
}
```

Groovy

Consola groovyconsole



```
println("Hola Mundo"+ new Date())
```

```
Execution complete. Result was null.
```

GRAILS

Gradle

GPars

GEB

Ratpack

GRIFFON

MICRONAUT

PANAMÁ JUG