

# Empower your Spring-Applications with Python-Features on GraalVM



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# Speaker

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# Agenda

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**Motivation**

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**GraalVM**

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**Demonstration**

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**Conclusion**

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01

# Project-Matcher

# Project-Matcher

Get      /employee



Put      /employee/{id}



...

```
class Employee {  
    Long id;  
    String name;  
    List<String> skills;  
}
```



# Project-Matcher

```
class Project {  
    List<String> skills;  
}
```

Post      /recommendation

Get      /employee

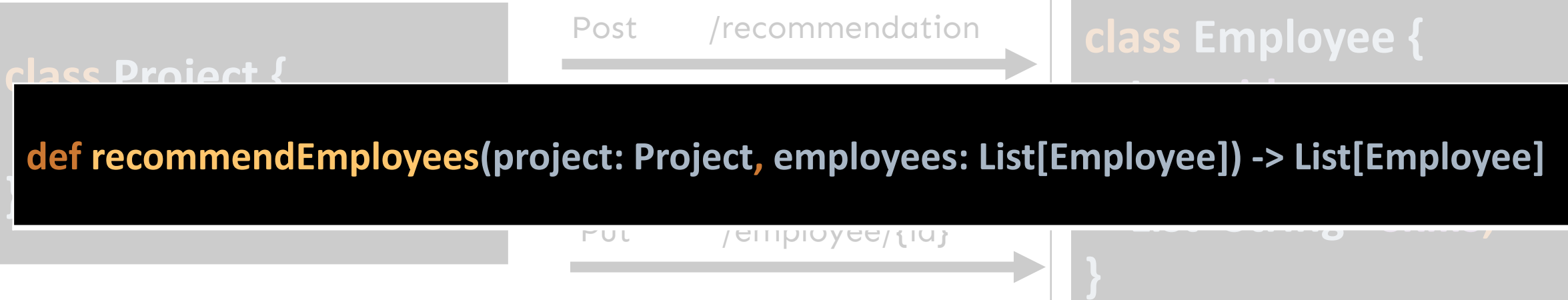
Put      /employee/{id}

...

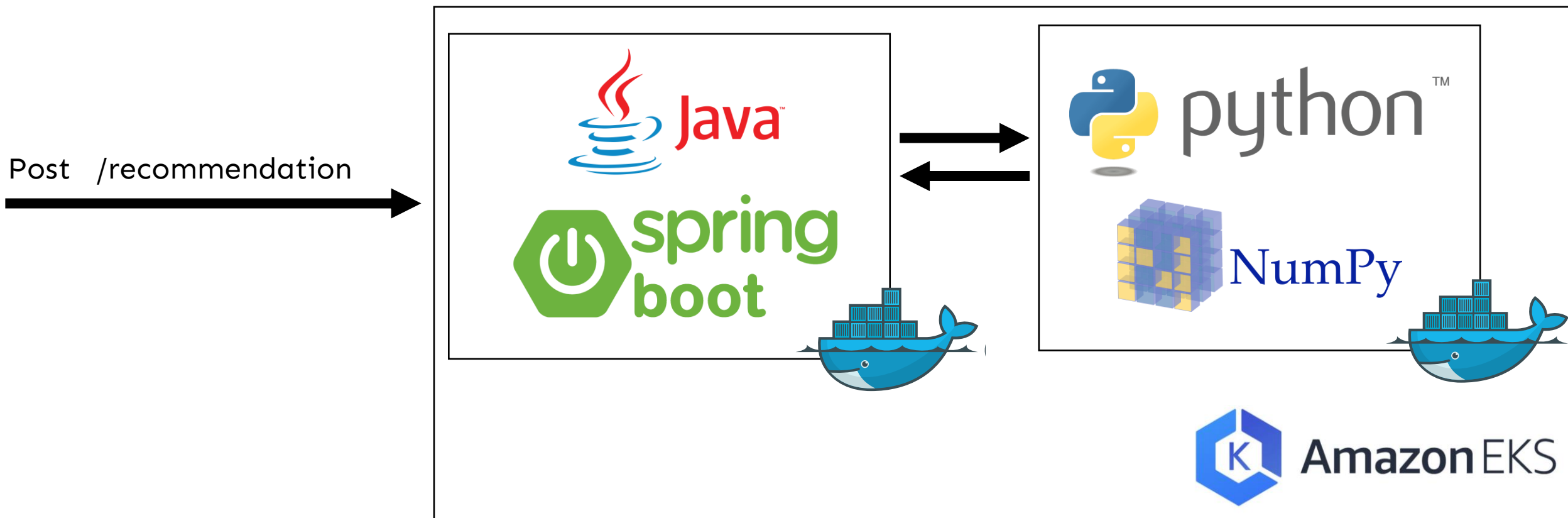
```
class Employee {  
    Long id;  
    String name;  
    List<String> skills;  
}
```



# Project-Matcher



# Architecture





# Architecture

Post /recommendation



02

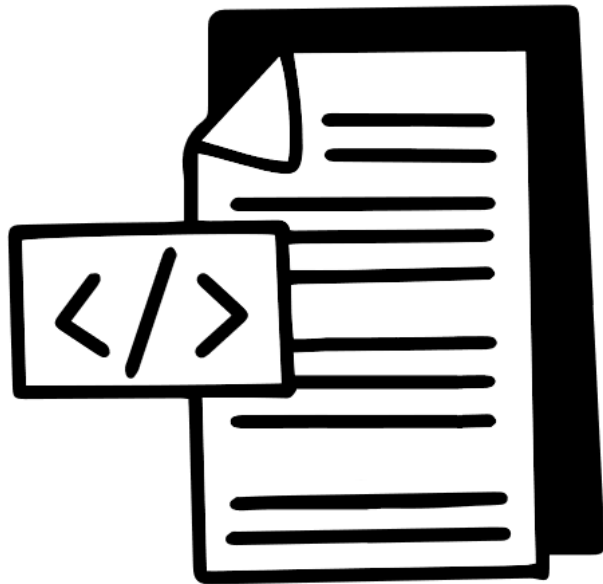
**GraalVM**

# GraalVM

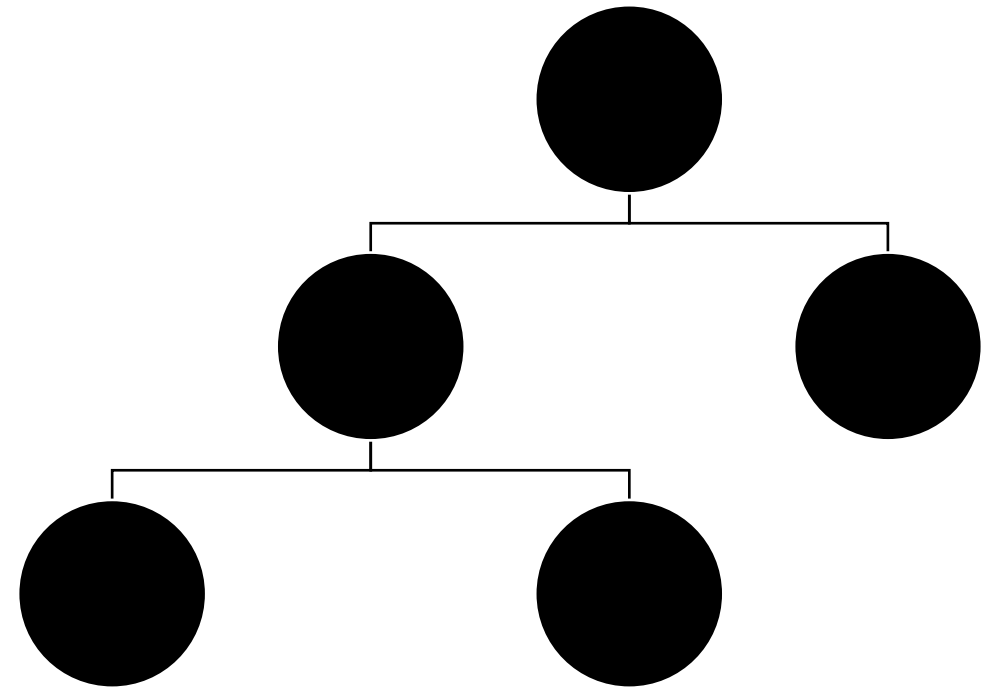
- Native Image is only one feature of GraalVM
- GraalVM is a Java Development Kit (JDK)
- GraalVM has it's own Java Virtual Machine (JVM)



# Truffle Framework



Source Code

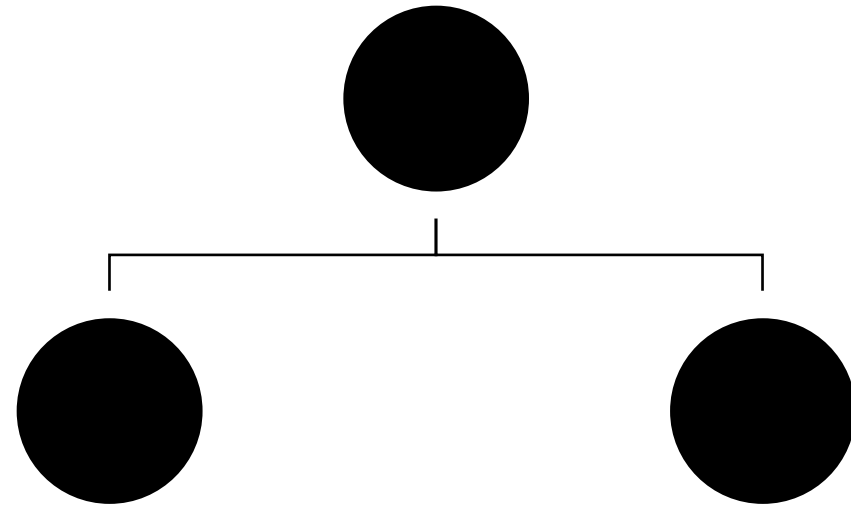


Abstract Syntax Tree (AST)

# Truffle Framework

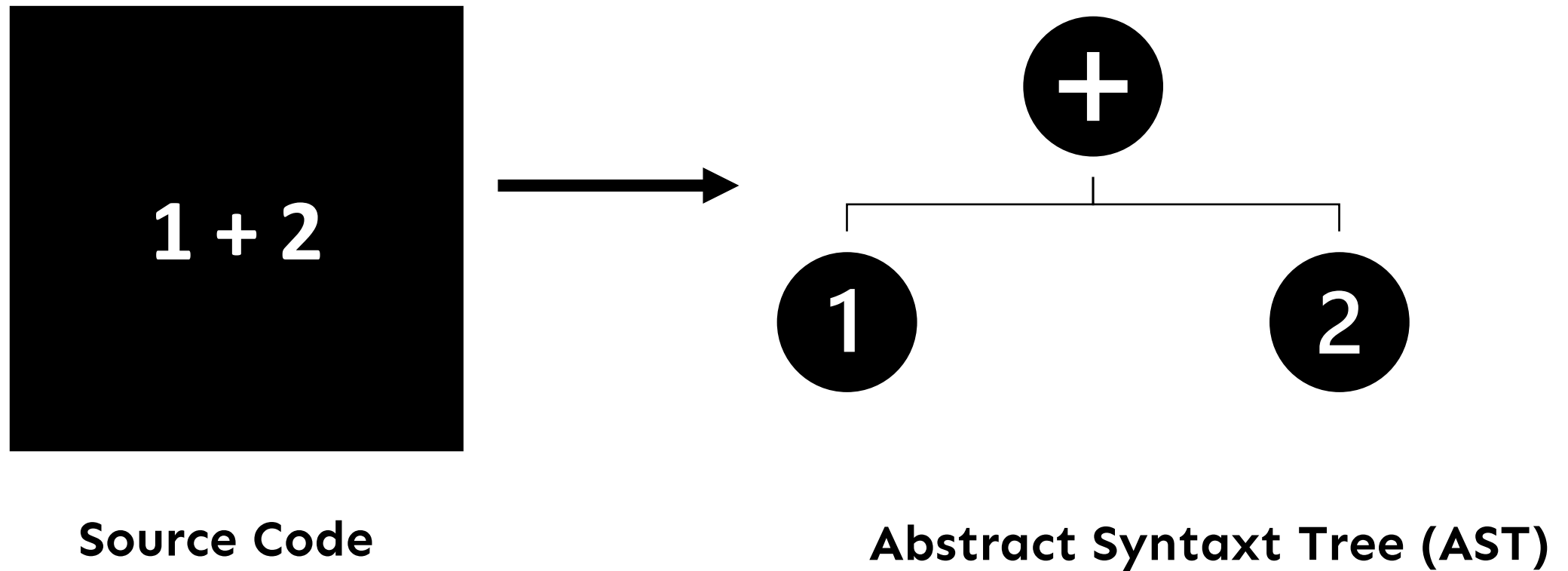
**1 + 2**

**Source Code**



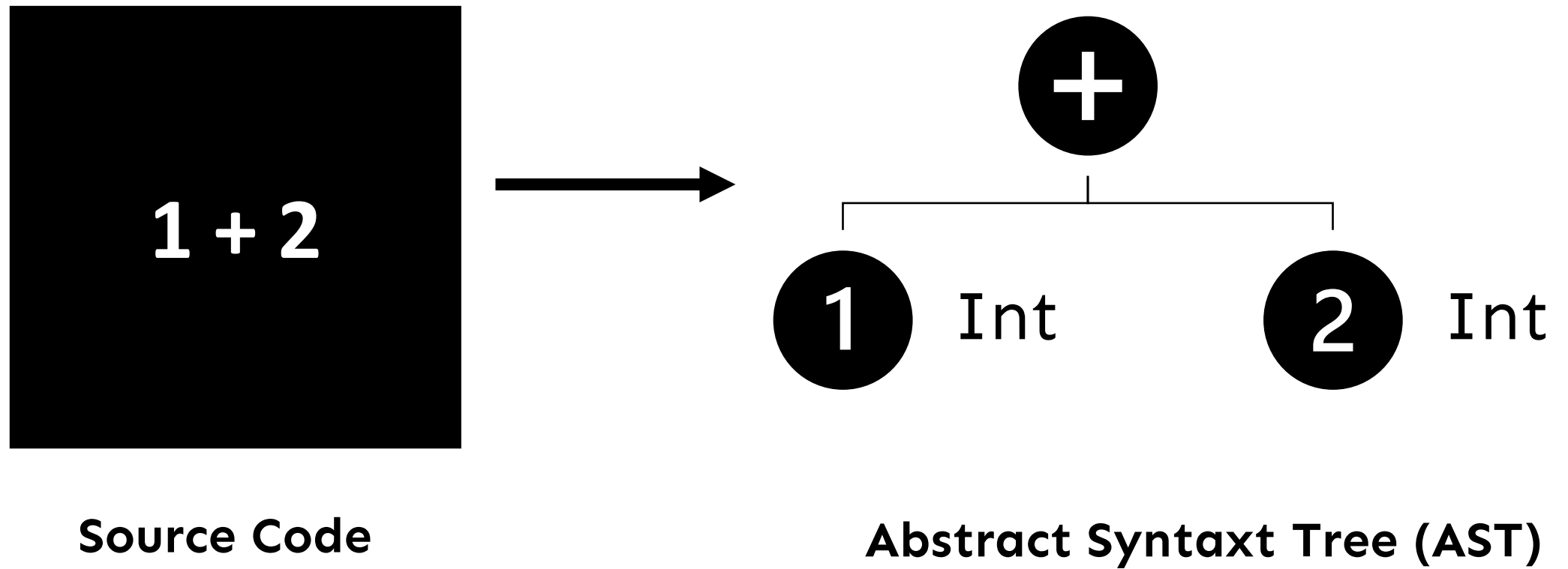
**Abstract Syntax Tree (AST)**

# Truffle Framework

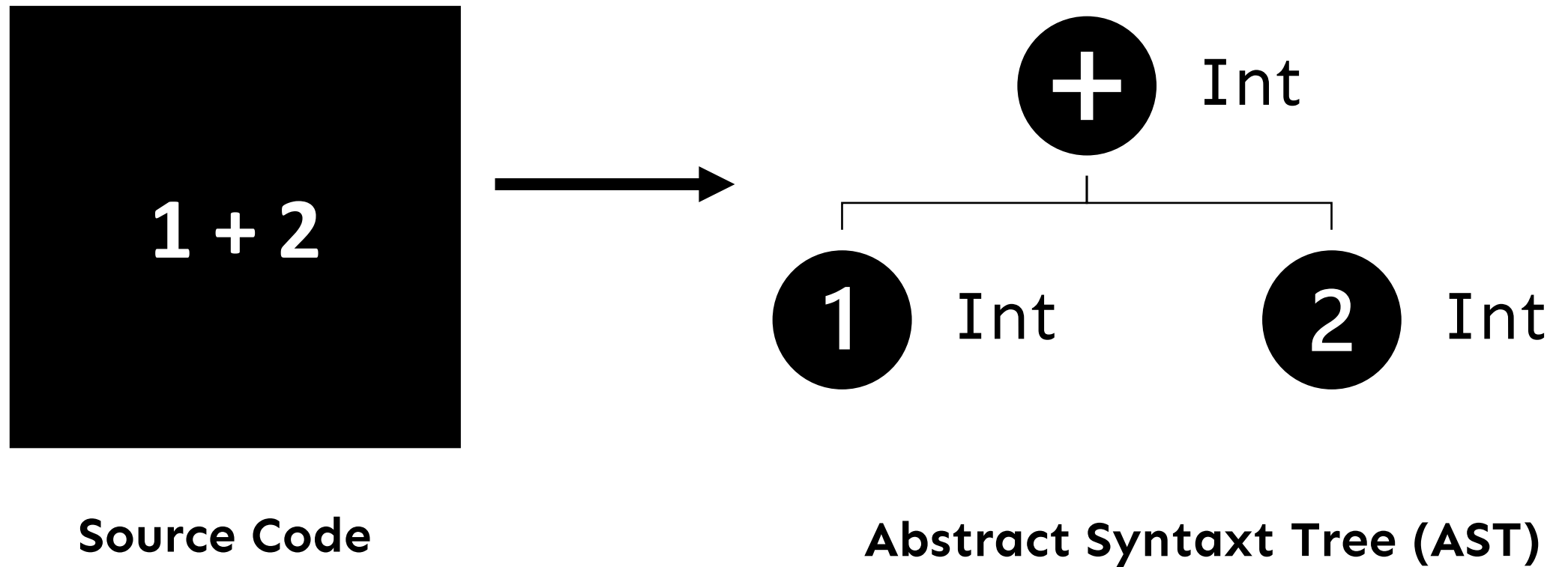




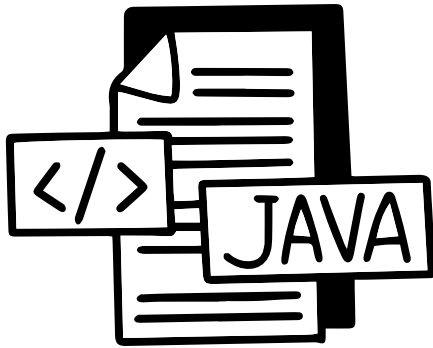
# Truffle Framework



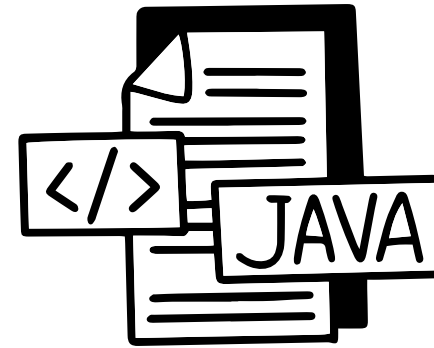
# Truffle Framework



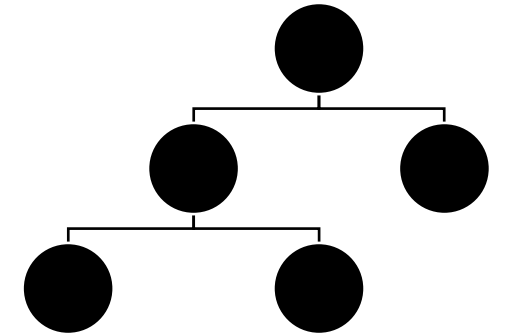
# OpenJDK vs. GraalVM



OpenJDK™



GraalVM™



# Demonstration

# Conclusion

# Conclusion

- Great integration of Python-features in Spring
- Polyglot: Use the best features of all languages whenever you need them
- <https://github.com/EXXETA/springio-2023>





# THANK YOU!

## Q&A

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