



Advanced Software Engineering (**LAB**)

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What will I do?

- "Hello, World!" with Apache Camel
- Team game: Integrate services with Apache Camel EIPs



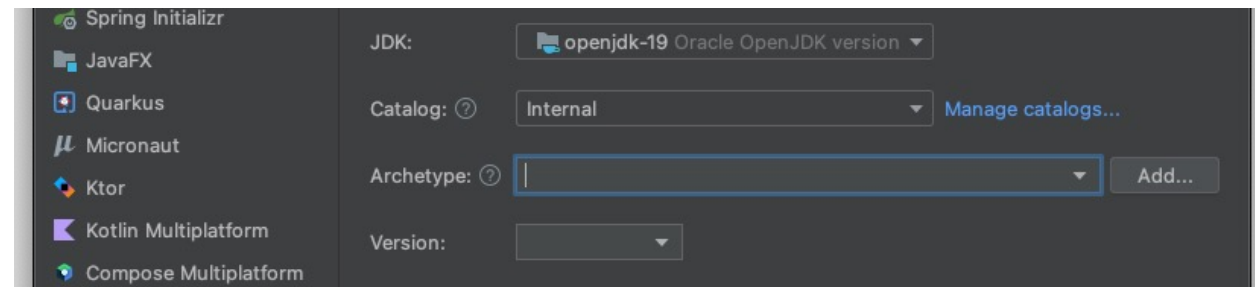
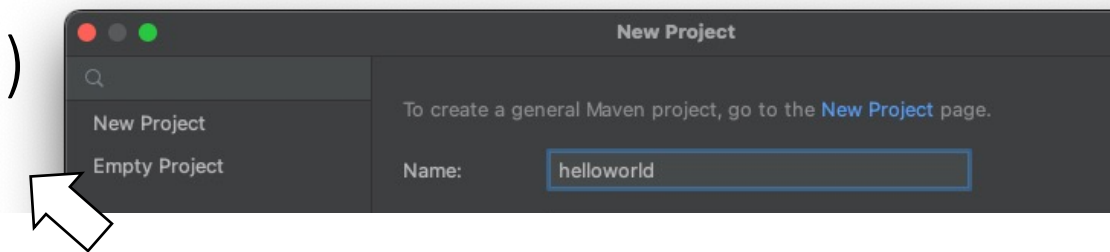
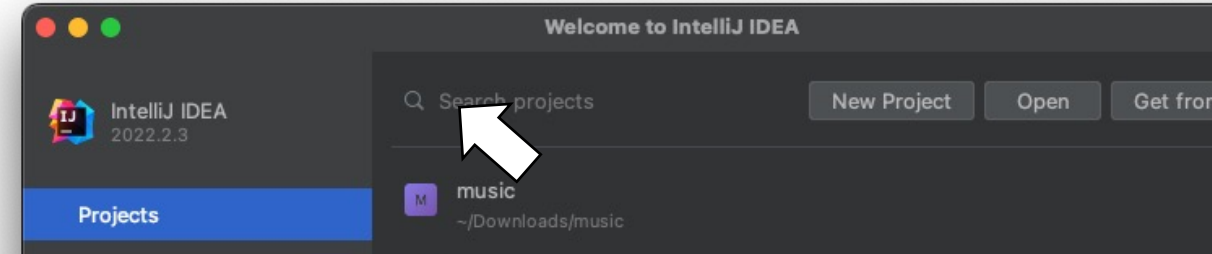
Apache Camel

- Apache Camel is a versatile open-source integration framework based on known Enterprise Integration Patterns.
- Camel empowers you to define routing and mediation rules in a variety of domain-specific languages (DSL, such as Java, XML, Groovy, Kotlin, and YAML).
- This means you get smart completion of routing rules in your IDE, whether in a Java or XML editor.



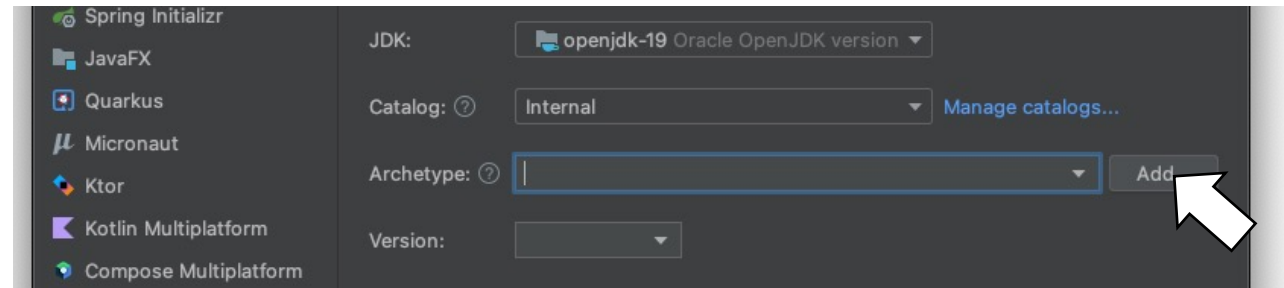
Start your project up (1)

- Open IntelliJ IDEA.
- Choose Maven archetype on the left
- Choose a project name (e.g. helloworld)
- Select JDK: opendjdk-19

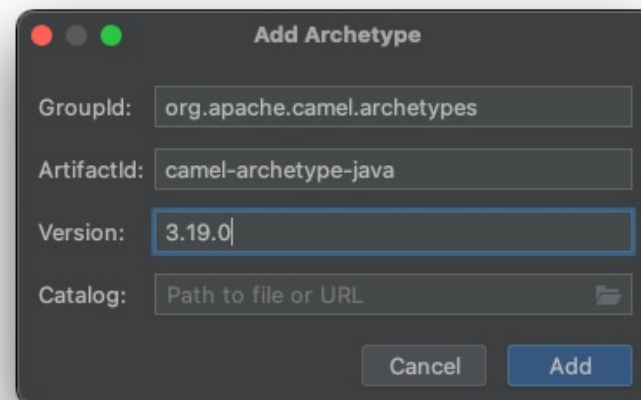


Start your project up (2)

- Click on Add... to add a new archetype for your project.

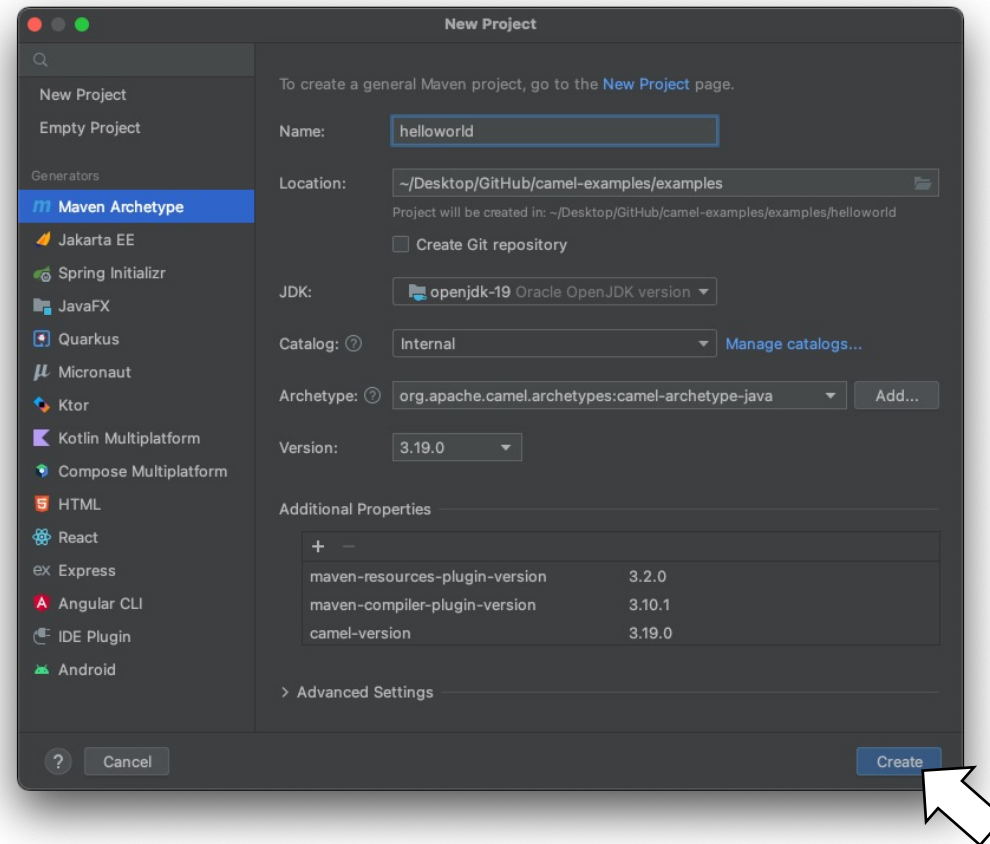


- Use the following archetype information and click on Add:

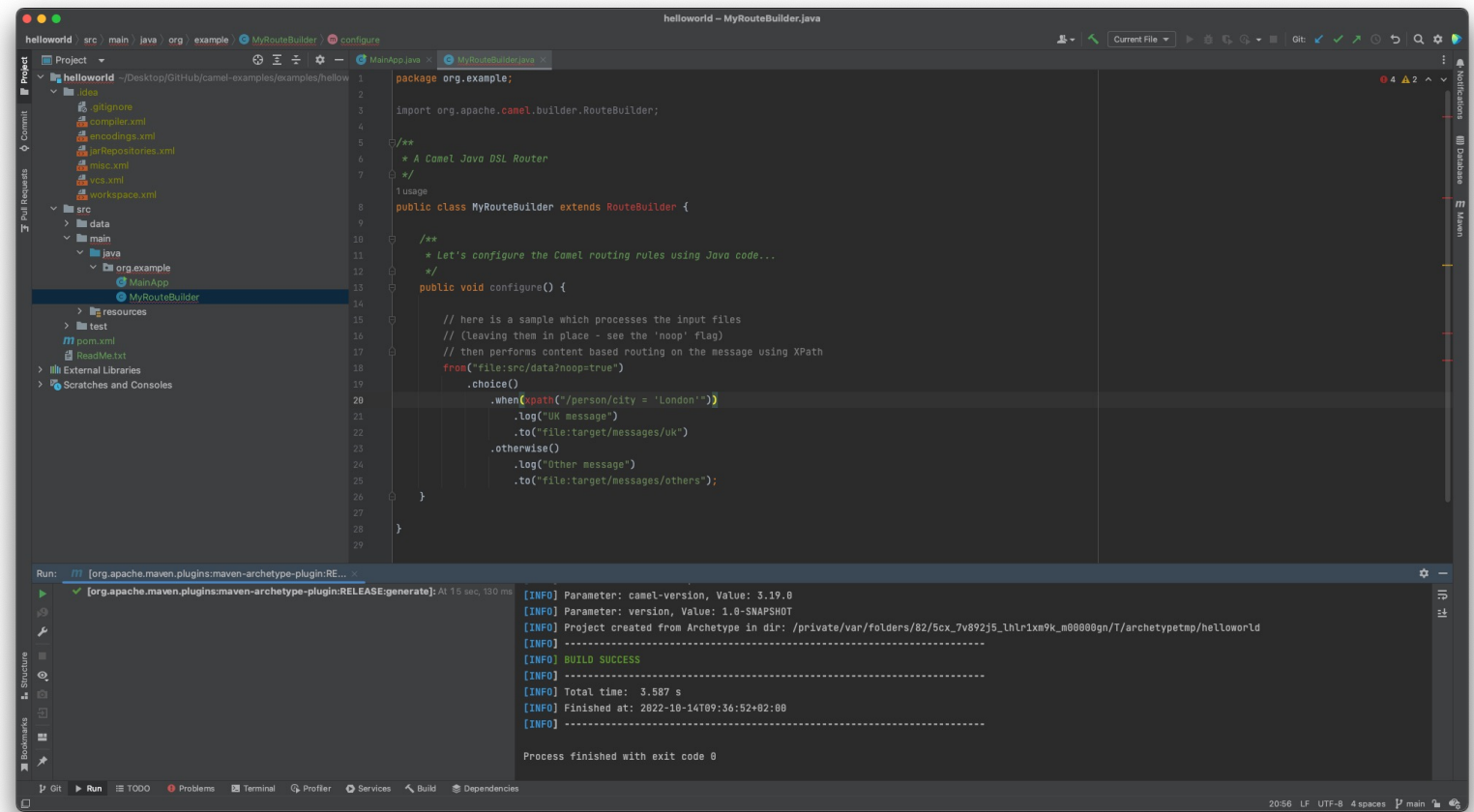


Start your project up (3)

- Click on Create



helloworld



- A new project has been created!
- Open the IDE's terminal and launch `mvn install`
- Then, launch `mvn camel:run`

Questions

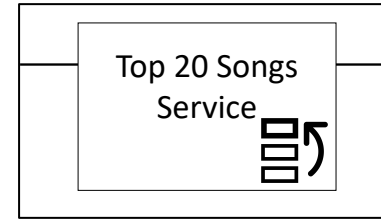
- How is the project folder organised?
- What does the Camel route do?
- What are the input and output data?

Your turn now!

The «World Songs Service» offers a csv file containing the TOP100 songs for each year.

The «Top 20 Songs Service» must list the TOP20 artists with most songs on Billboard.

You need to integrate the «World Songs Service» with the «Top 20 Songs Service» through an Apache Camel Route, exploiting suitable EIPs.



Next steps

1. Download and open the skeleton project from Moodle.
2. You will be given a deck of 14 cards. Use them to compose your Apache Camel route.
3. Code your route in the `configure()` method of the class `MyRouteBuilder`

You can use docs available at: <https://camel.apache.org/components/3.18.x/index.html>