

# Java User Group Philippines



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**Java User Group Philippines** is a group for all Java advocates and enthusiasts. Members can talk about Java, JVM, and the latest frameworks within the Java ecosystem. Everyone is welcome to join their events whether one is a developer from a different tech stack, architect, or student.

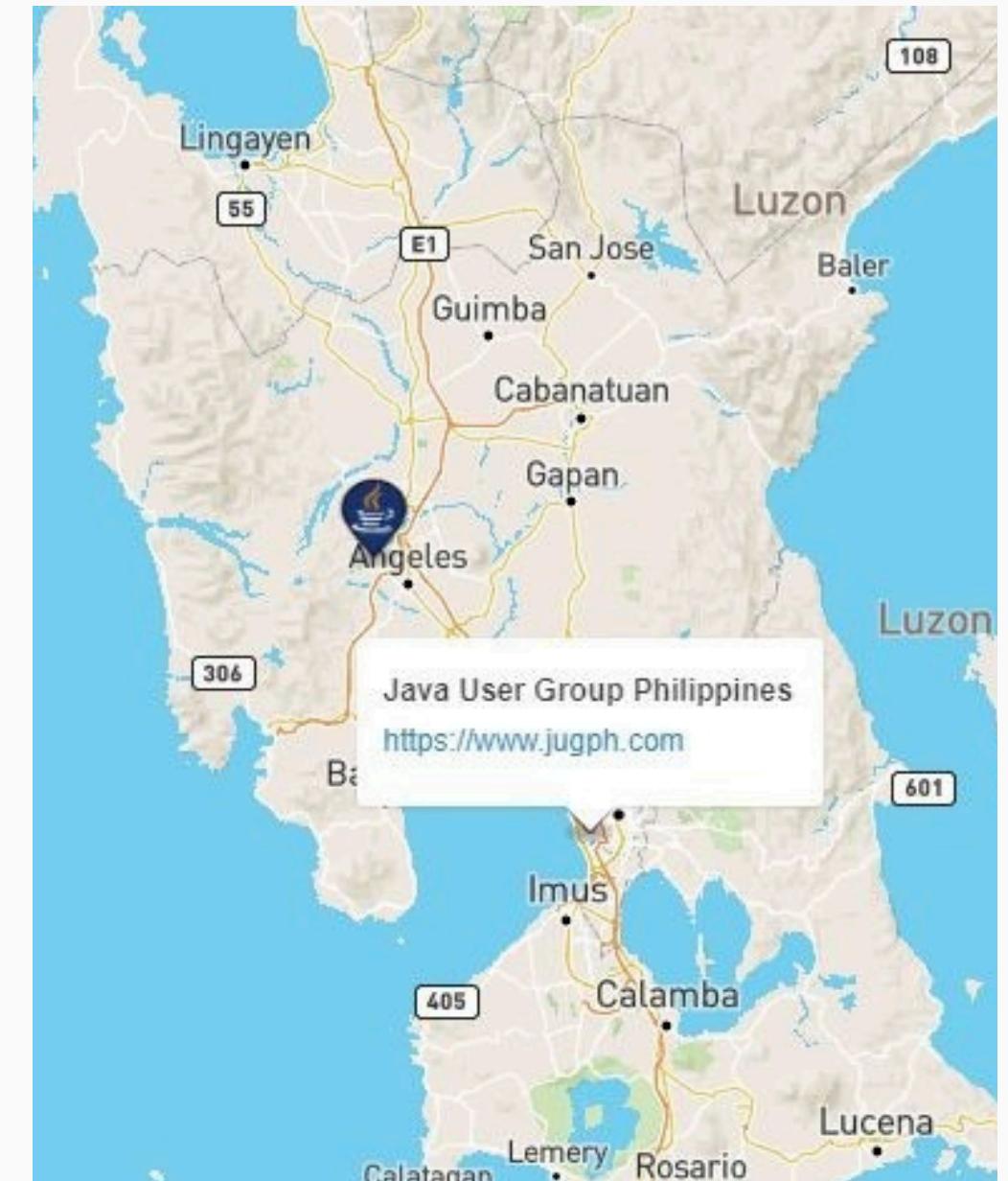
Revitalized JUG since April 2023.

**2300+** Facebook Members

**670+** Meetup.com Members

Recognized by Oracle as the only **ACTIVE** JUG\* in the Philippines.

Member of the Java Community Process, a collaboration between the Java community and Oracle to develop and evolve the Java Platform.



\*Java User Groups (JUGs) are volunteer organizations that strive to distribute the Java-related knowledge globally.



# Java User Group PH Leaders



Jansen Ang



Tristan Mahinay

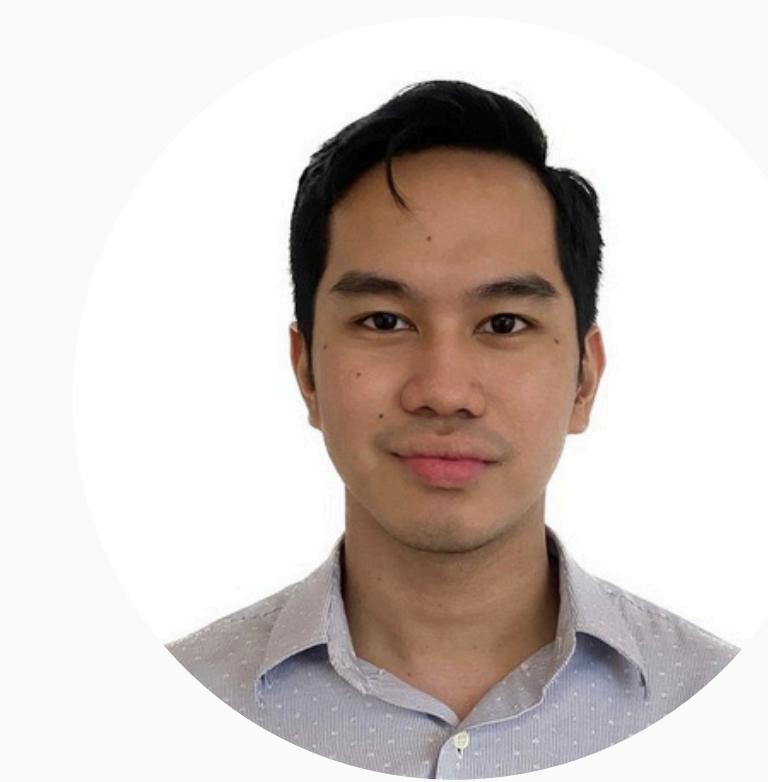


Kerby Martino

# Java User Group Volunteers



Trisha Joy Moldes



Eric Marc Martin



Gladwin Del Rosario

# Previous Meetups!



# Previous Meetups!



# 1st Modern Java Bootcamp



# JCP Java in Education Initiative

The JCP in Education initiative leverages the Java Community Process (JCP) program to promote Java technology in educational environments globally. Led by Java User Groups (JUGs) and supported by the JCP program, it aims to inspire junior developers and students to learn Java.

## Key Activities:

- **Collaboration with Academics:** JUGs connect with student associations and academic staff to offer sessions led by industry professionals.
- **Curriculum Integration:** Promotes the inclusion of Java in academic curricula through guest lectures, hack days, and professional internship opportunities.
- **Secondary School Outreach:** Establishes relationships with computer courses and after-school programs, hosting events like "Meet a Programmer" days to engage students.

Learn more at <https://www.jcp.org/java-in-education>

# Sponsor on Raffle Prizes



Windows macOS Linux

## IntelliJ IDEA Ultimate

The Leading Java and Kotlin IDE

Download

.exe (Windows)

Free 30-day trial

Comparison between Community and Ultimate edition:

<https://www.jetbrains.com/products/compare/?product=idea&product=idea-ce>

# JetBrains IDEs



IntelliJ IDEA



Datalore



DataGrip



RubyMine



dotCover



Kotlin



PyCharm



WebStorm



PhpStorm



AppCode



GoLand



ReSharper C++



ReSharper



Rider



CLion



dotPeek



dotTrace



dotMemory

# Food Sponsor



The Java platform for the modern cloud enterprise

2024

# ORACLE JAVA USAGE, PRICING & MIGRATION SURVEY

— SURVEY AND REPORT —

The Java Community's Response to the Ongoing Pricing  
Changes and Preference for Open Source



# Latest News from Java

[Dev.java: The Destination for Java Developers](#)



## Learn Java

### Running Your First Java Application

#### [Getting Started with Java](#)

Downloading and setting up the JDK, writing your first Java class, and creating your first Java application.

#### [Launching Single-File Source-Code Programs](#)

Launching Single-File Source-Code Java programs with the Java launcher.

#### [Jshell - The Java Shell Tool](#)

jshell interactively evaluate declarations, statements, and expressions of the Java programming language in a read-eval-print loop (REPL).

#### [Coding a Java application in an IDE](#)

Oracle Java Platform extension enables you to develop your Maven and Gradle Java project in Visual Studio Code.

## Staying Aware of New Features

### [Java Platform Evolution](#)

Java has come a long ways since Java 8. Let's go over some of this evolution.

### [Using the Preview Features Available in the JDK](#)

How to compile and execute the preview features available in the JDK.

# Call for Speakers and Volunteers

**SCAN ME to join as a  
speaker**



**SCAN ME to join as a  
volunteer**



# Join the Community



[bit.ly/join-foojay-slack](https://bit.ly/join-foojay-slack)



<https://discord.gg/KNxMw3Q9NW>



[facebook.com/groups/jugph](https://facebook.com/groups/jugph)



[meetup.com/java-user-group-ph](https://meetup.com/java-user-group-ph)



[twitter.com/jugphilippines](https://twitter.com/jugphilippines)



[linkedin.com/company/jugph](https://linkedin.com/company/jugph)

SCAN ME for our LINK TREE!



# **Batch Processing using Spring Batch**



# Spring Batch

- An enterprise-grade batch technology under the Spring Framework
- Inspired by the lack of focus on batch technologies, Spring Batch was made for batch processing
- Spring Batch is not a scheduler framework
- Typical batch processing:
  - Read from a source
  - Transform the data
  - Write the transformed data to another source



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# Spring Batch Layered Architecture

## Application

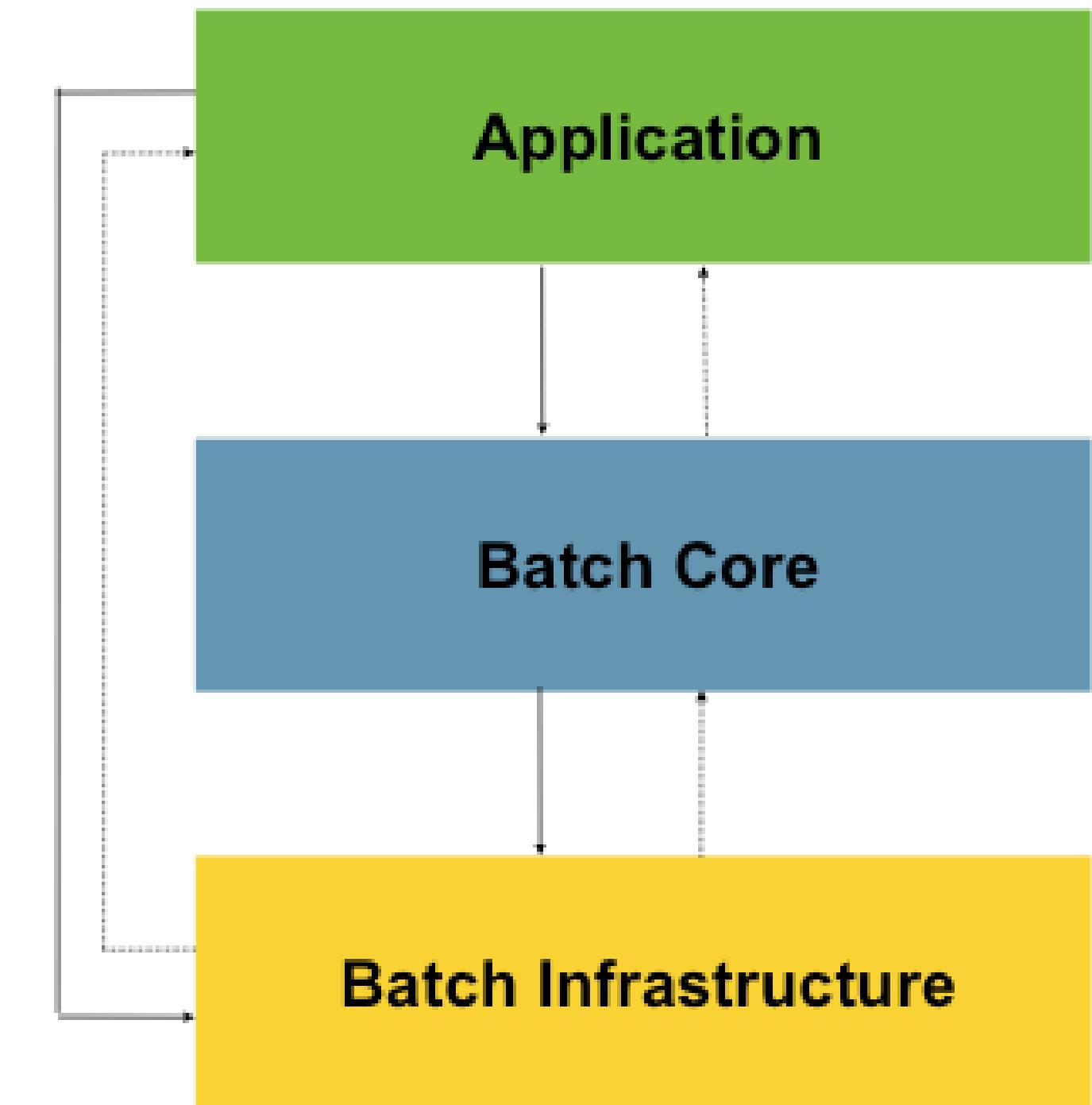
- **Business Logic (Services)**
- **Data Transfer Objects**
- **Entities**
- **Request/Response Models**

## Batch Core

- **Job:** The abstracted batch process
- **Step:** A sequential process of a Job
- **Job Repository:** Persist the batch metadata

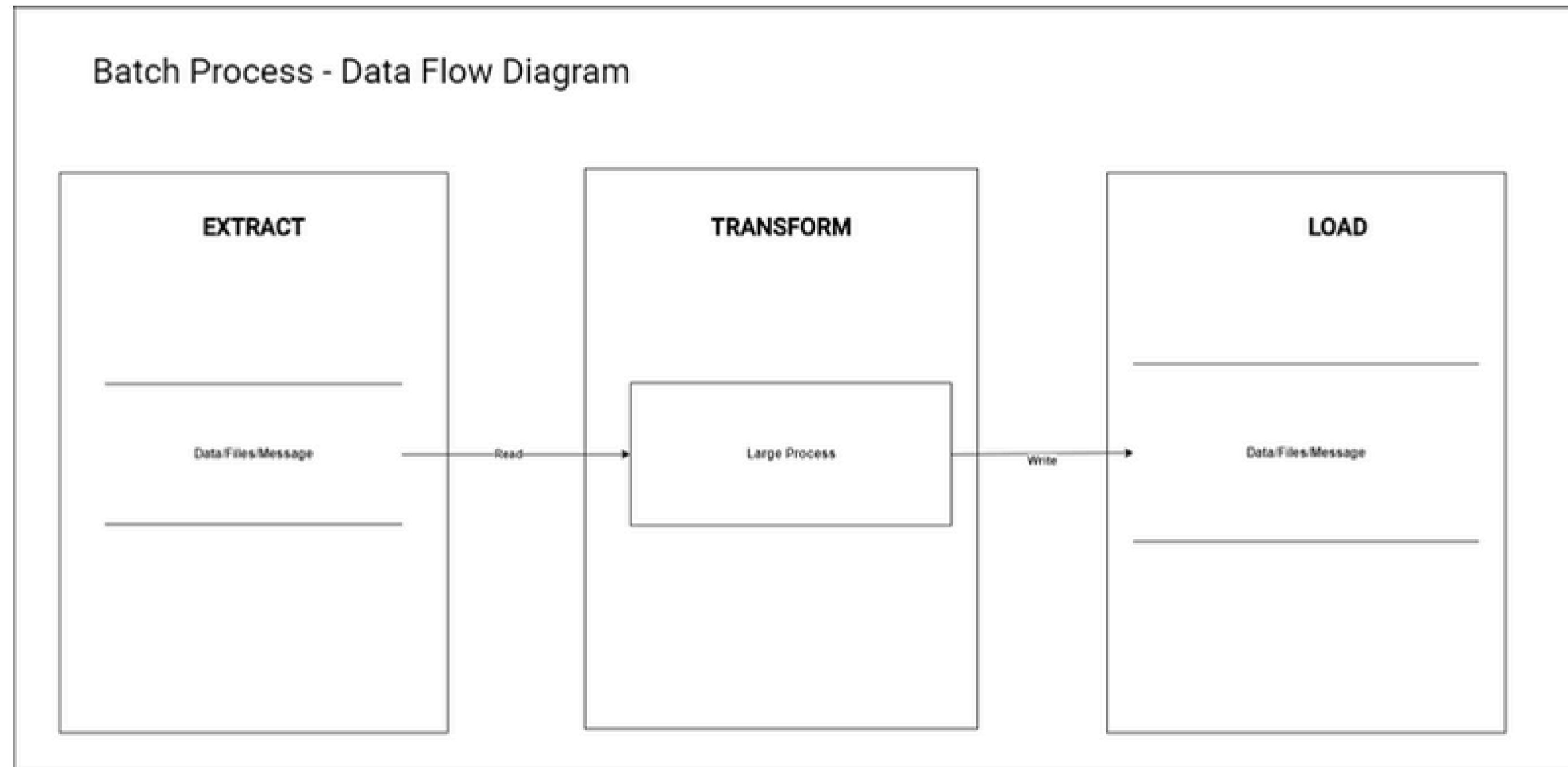
## Batch Infrastructure

- **Item Readers:** data reader
- **Item Processors:** data transformer
- **Item Writers:** data writer
- **Retry Mechanism (Retry Template):** Makes a job process fault-tolerant
- **Tasklet:** init or destroy steps



Source: [Spring Batch Documentation](#)

# Typical Batch Process



# Typical Single and Multi-Batch Process

## **Multi-Threaded Step**

- Use of threads in a single process inside the batch application
- A chunk-oriented process that splits the data into several threads

## **Partitioning**

- Use of multiple workers to achieve multi-process. It uses the master-slave architecture.
- A chunk-oriented process that splits the data into several threads
- Executed in a multi-process e.g. *Multiple Docker Containers*

# Demo Scenario: Extract Service

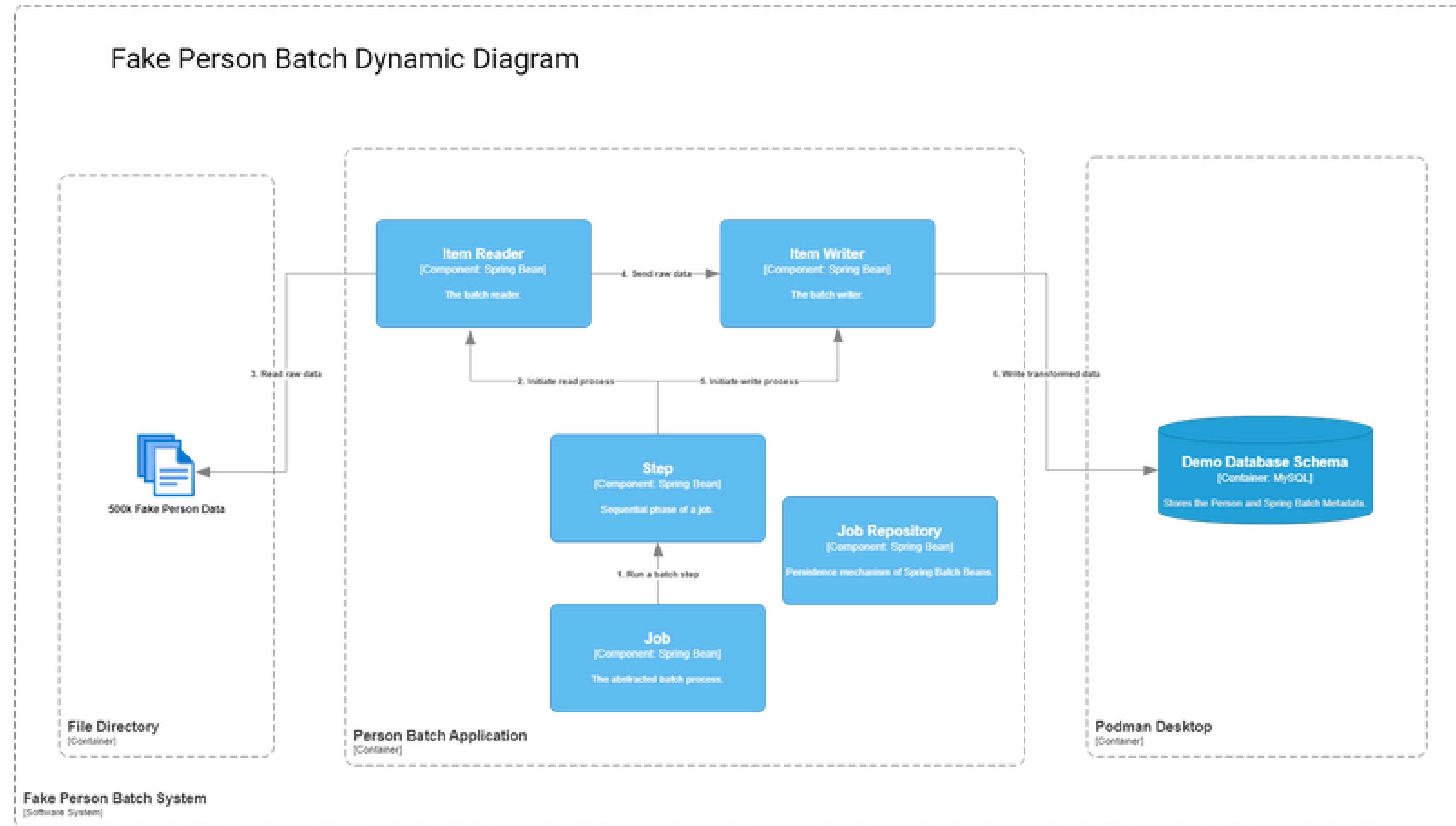
**Using Spring Batch, let's extract the data from a file and write it to a persistent storage. In this scenario, we don't need to transform the data.**

**Input: 500k fake person data from a flat file**

**Output: 500k database records**

# Architecture

Fake Person Batch Dynamic Diagram



# Live-coding and explanation



Access the code in GitHub: <https://github.com/rjtmahinay/spring-batch-fake-person-demo>



# Tristan Mahinay

