Declare4Py overview

What is Declare4Py?

- A Python library that supports Declarative Process Mining tasks
- https://github.com/ivanDonadello/Declare4Py
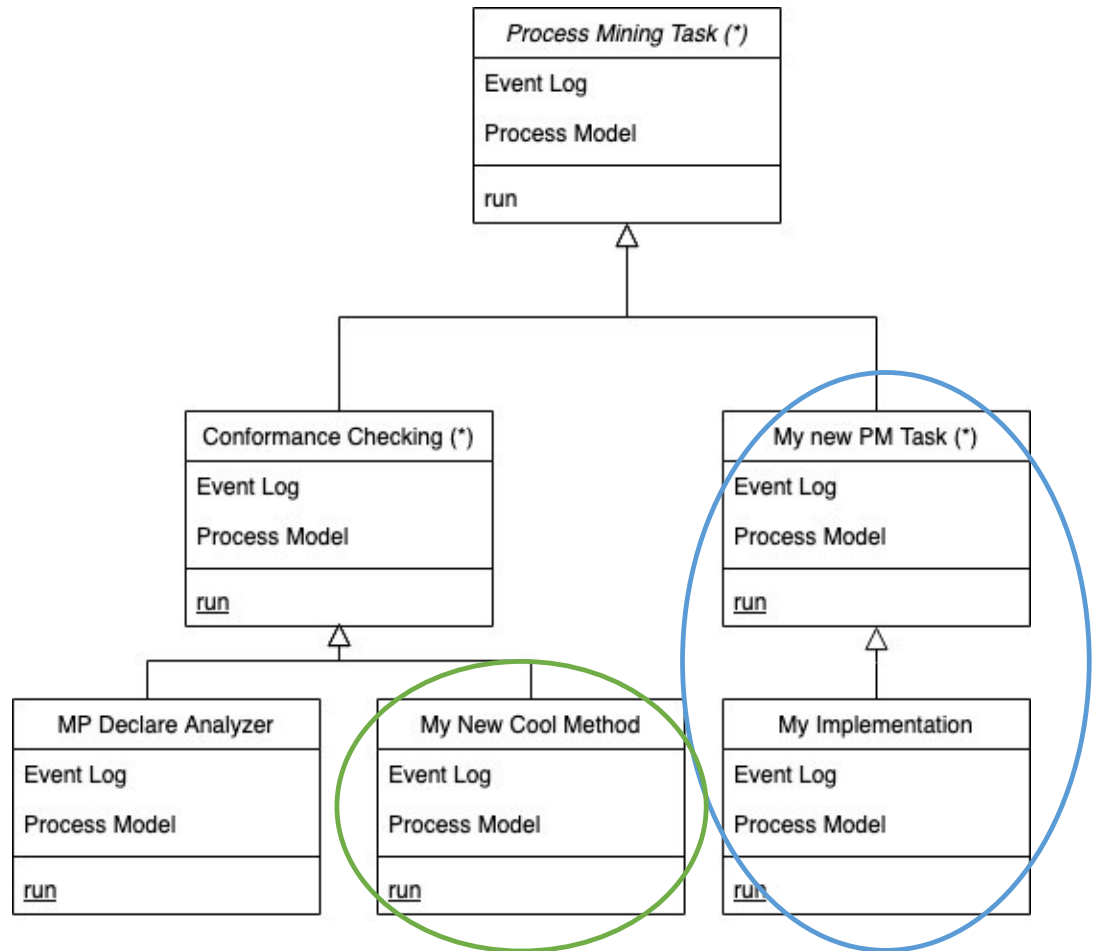
What is Declare4Py?

- Main concepts
  - Event Log
  - Process Model
  - Process Mining Tasks:
    - Conformance checking
    - Model discovery
    - ...
- Support for
  - log encoding (for ML tasks)
  - Log filtering
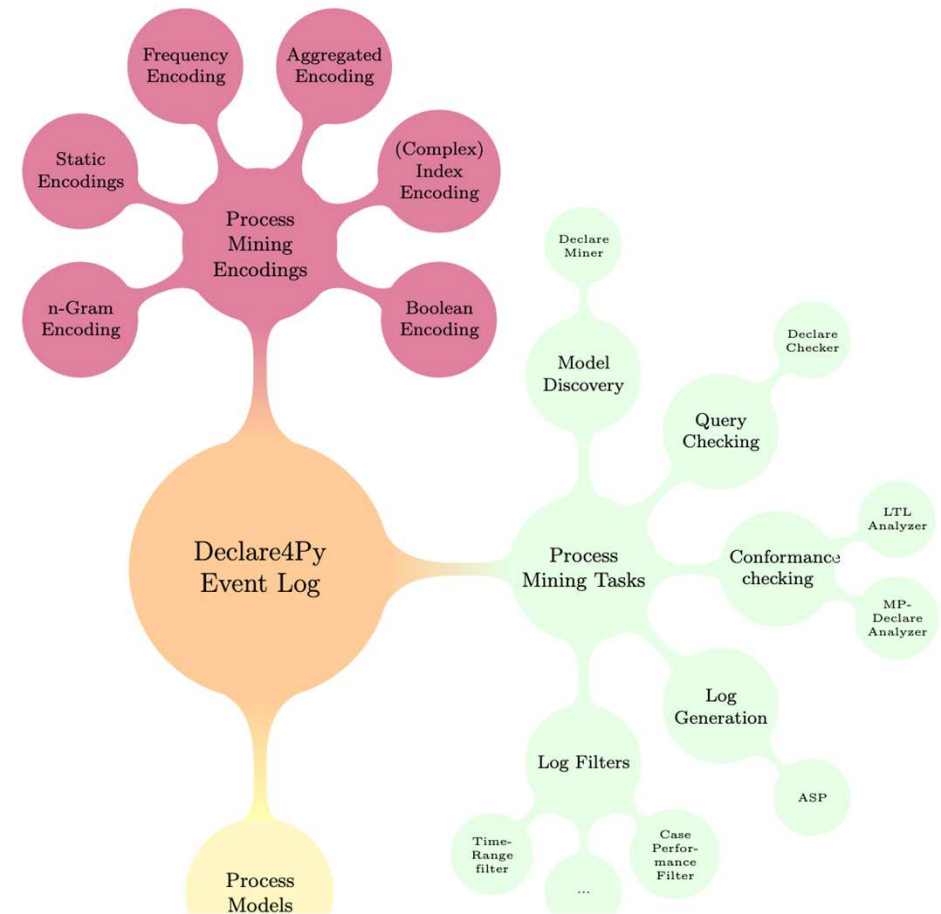
What is Declare4Py?

- Is an easy extendable library for:
  - new Process Mining tasks
  - new implementations of the already defined Process Mining tasks
- You just need to extend the existing abstract classes

Declare4Py in action

Declare4Py in Action (Support for)

- Event logs
  - Basic log operations (e.g., load and save xes, extract traces/payloads)
  - Log filtering
  - Log encoding for ML applications
- Process Models
  - Declarative (MP-Declare, LTLf)
  - Procedural (work in progress)
- Process Mining tasks
  - Conformance Checking (for MP-Declare and LTLf models)
  - Query Checking (for MP-Declare models)
  - Model Discovery (for Declare models)
  - Log Generation (for MP-Declare models)

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Declare4Py in Action

Live code session