Component Diagram
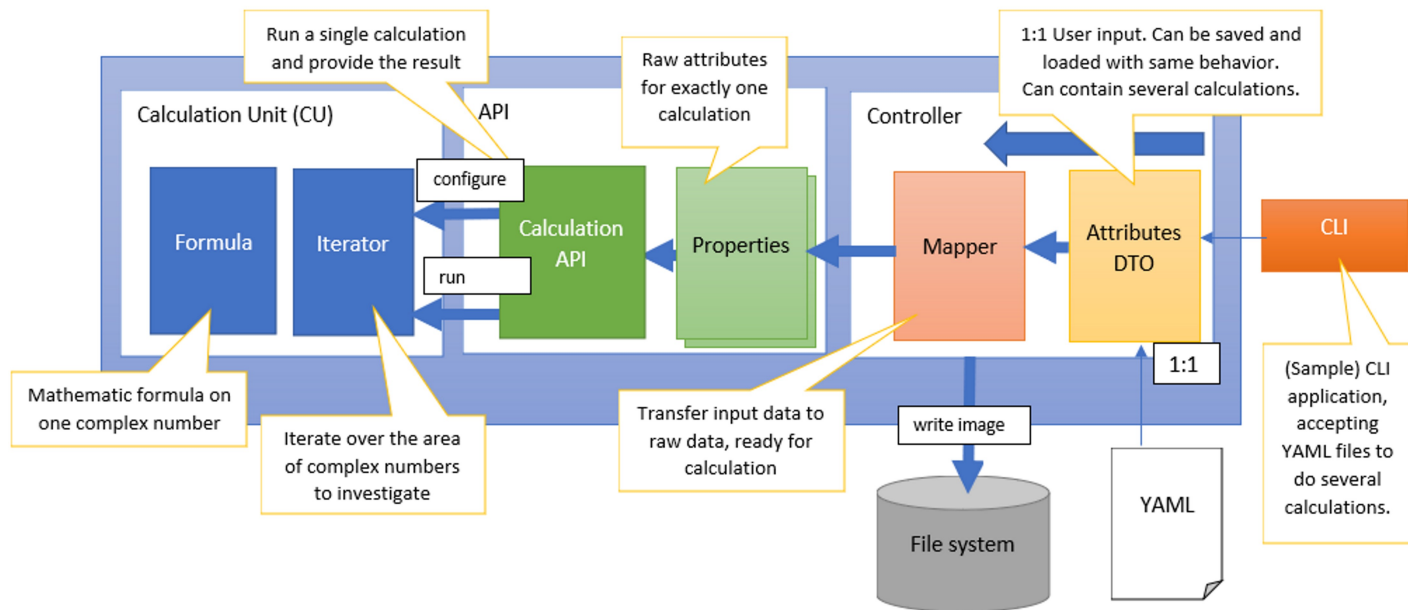
Calculation Unit
- Combines alle elements, used to do the mathematic calculation

Formula
- Calculation for one complex number

Iterator
- Iterates over the image area

API
- Calculation can be accessed by the elements in the API

CalculationAPI
- Configures the Calculation Unit
- Starts the calculations
- Returns the image to the caller

Properties
- The raw model of the parameters, used to calculate, to define the dimensions of the image and more
- Does always contain all attributes, needed.
- Describes always exactly one calculation.
- In case of a batch, a list of Properties is needed.

Controller
- Combines all elements, used to start the calculation
- If run in a batch, it calls the Calculation API several times.

PropertiesDTO
- A 1:1 model of the input data
- Not necassarily type safe, due to the need of interpreting the input.
- Can contain several calculations to be done.
- Must than be translated in a list of Properties

Mapper
- Translates the input from PropertiesDTO to Properties

CLI
- CLI (Demo) aaplication to run a Mandelbrot set calculation