# Context Diagram

Mandelbrot

store

call

use

Configuration

CLI Demo

File system

API

Calculation core

# Component Diagram

1:1 User input. Can be saved and loaded with same behavior.  
Can contain several calculations.

Run a single calculation and provide the result

Raw attributes for exactly one calculation

API

Controller

Calculation Unit (CU)

Properties

File system

write image

Runner

Mapper

PropertiesDTO

configure

Iterator

Formula

run

Mathematic formula on one complex number

Transfer input data to raw data, ready for calculation

1:1

Iterate over the area of complex numbers to investigate

CLI

YAML

(Sample) CLI application, accepting YAML files to do several calculations.

# Transitions

Variant for SOFT\_INOUT, SOFT\_IN and SOFT\_OUT

Controller

API

Soft

Mapper

Create intermediate steps

TransitionFactory

<<use>>

TransitionMapper

Start + end

<<create>>

PropertiesDTO

Runner

Properties

<<read>>

<<create>>

<<use>>

1 .. \*