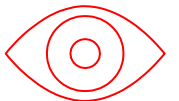


sapaca Face Recognition

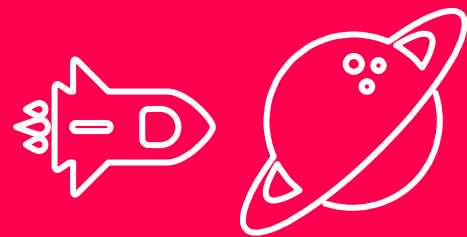
Pascal Treptow, Sascha Kühne, Carolina Mehret



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Agenda

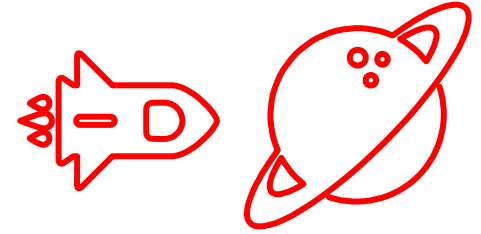
- Vision
- Teamrollen
- Funktionen (Use Cases)
- SCRUM
- RUP
- Architektur
- Tests
- Demo
- Ausblick



VISION

sapaca - Face Recognition

Vision



- Applikation die **Face Detection** und **Face Recognition** realisiert
- Applikation soll über eine Webseite erreichbar sein
- Speichern und Auswerten von Daten

ROLLEN

sapaca - Face Recognition

Rollen



Pascal Treptow

- Software Architekt
- Designer
- Test Manager
- Implementierer



Sascha Kühne

- Software Architekt
- Test Manager
- Implementierer
- Konfigurationsmanager



Carolina Mehret

- Projektmanager
- System Analyst
- Implementierer

FUNKTIONEN

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SRS - Funktionen

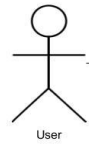
- Upload Image
- Detect Face (Image)
- Label detected Face
- Lösche Image
- Administration und Konfiguration der Datenbank

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SRS - Funktionen Ausblick

- Face Detection für Video Source
- Recognize Face
- Google Anbindung
- Auswertung von Daten

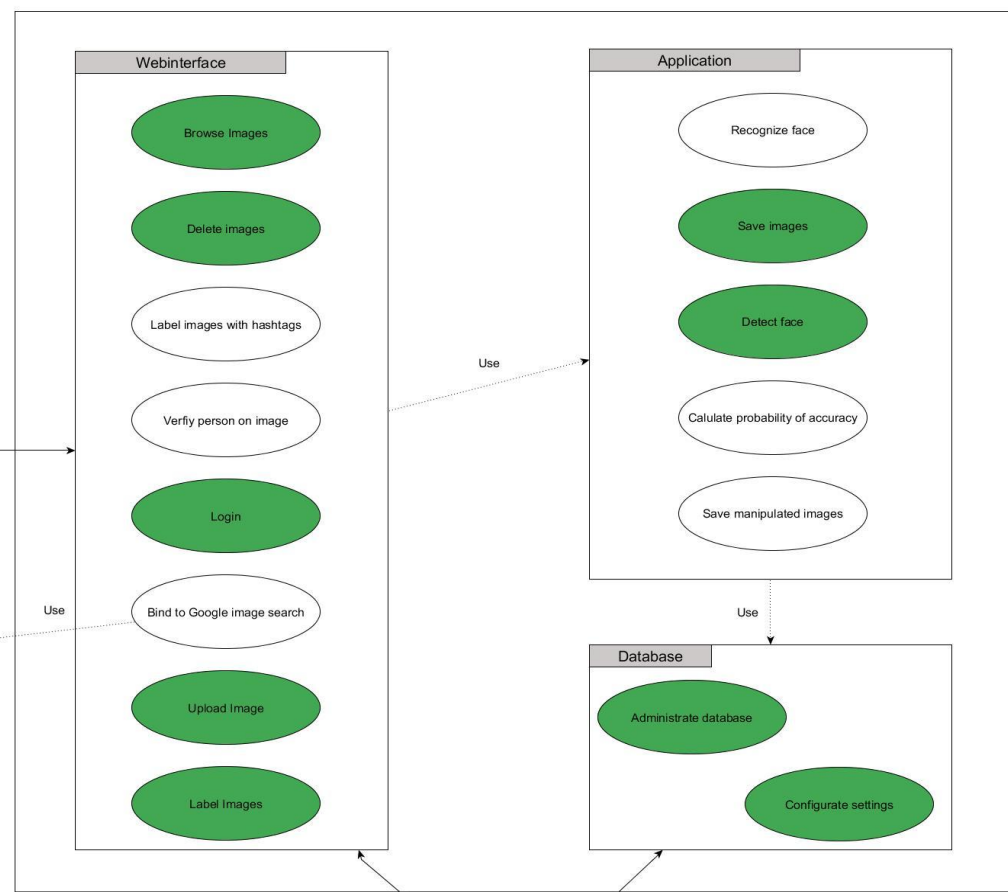
USE CASES



User



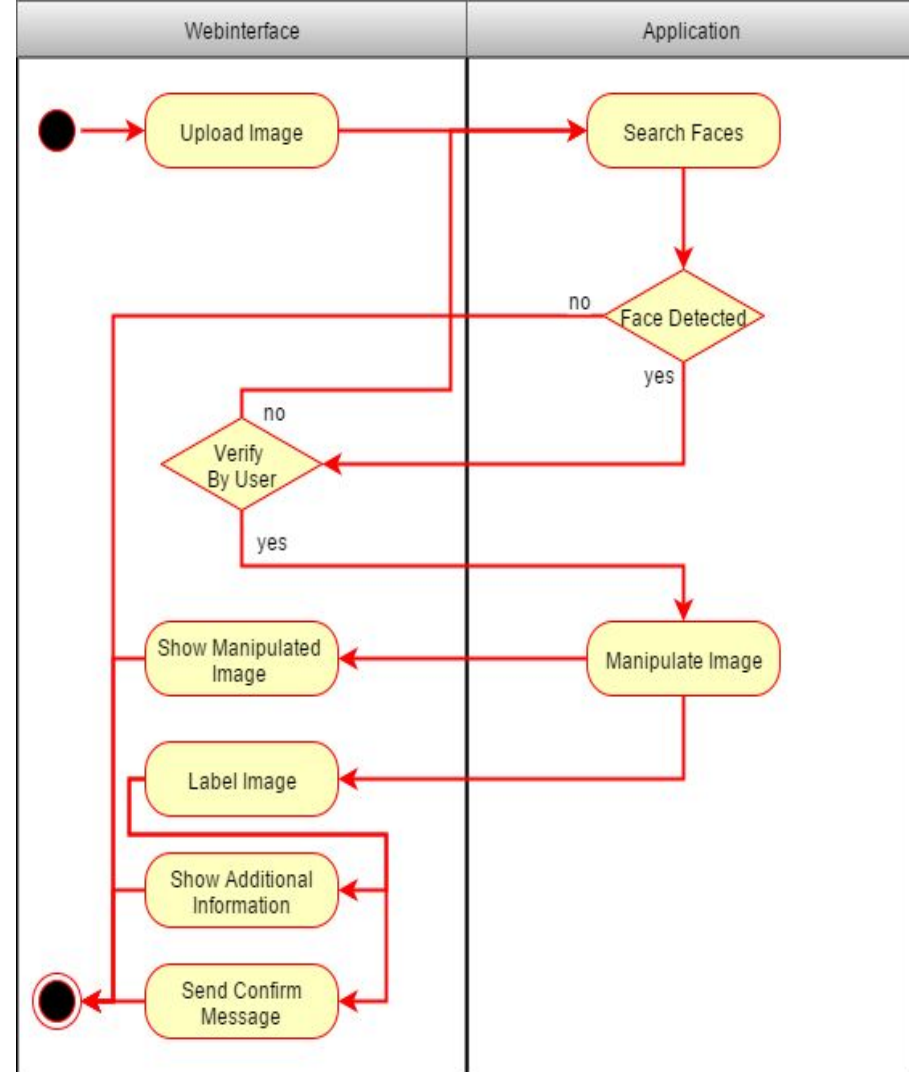
Google



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Detect Face

- Applikation erkennt Gesichter von einem hochgeladenem Bild




SCRUM

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Scrum

- Vorgehensmodell des Projektmanagement
- Sprint
 - Stories
 - Storypunkte
- Dailys
- Code Review

**sapaca vision**
SAVI board ▾ Backlog Active sprints Reports Issues

PROJECT SHORTCUTS

Add a link to useful information for your whole team to see.

+ Add link

Backlog

Board ▾



QUICK FILTERS:

Only My Issues

Recently Updated

VERSIONS
EPICS

▼ Sprint 1 9 issues

0 0 38

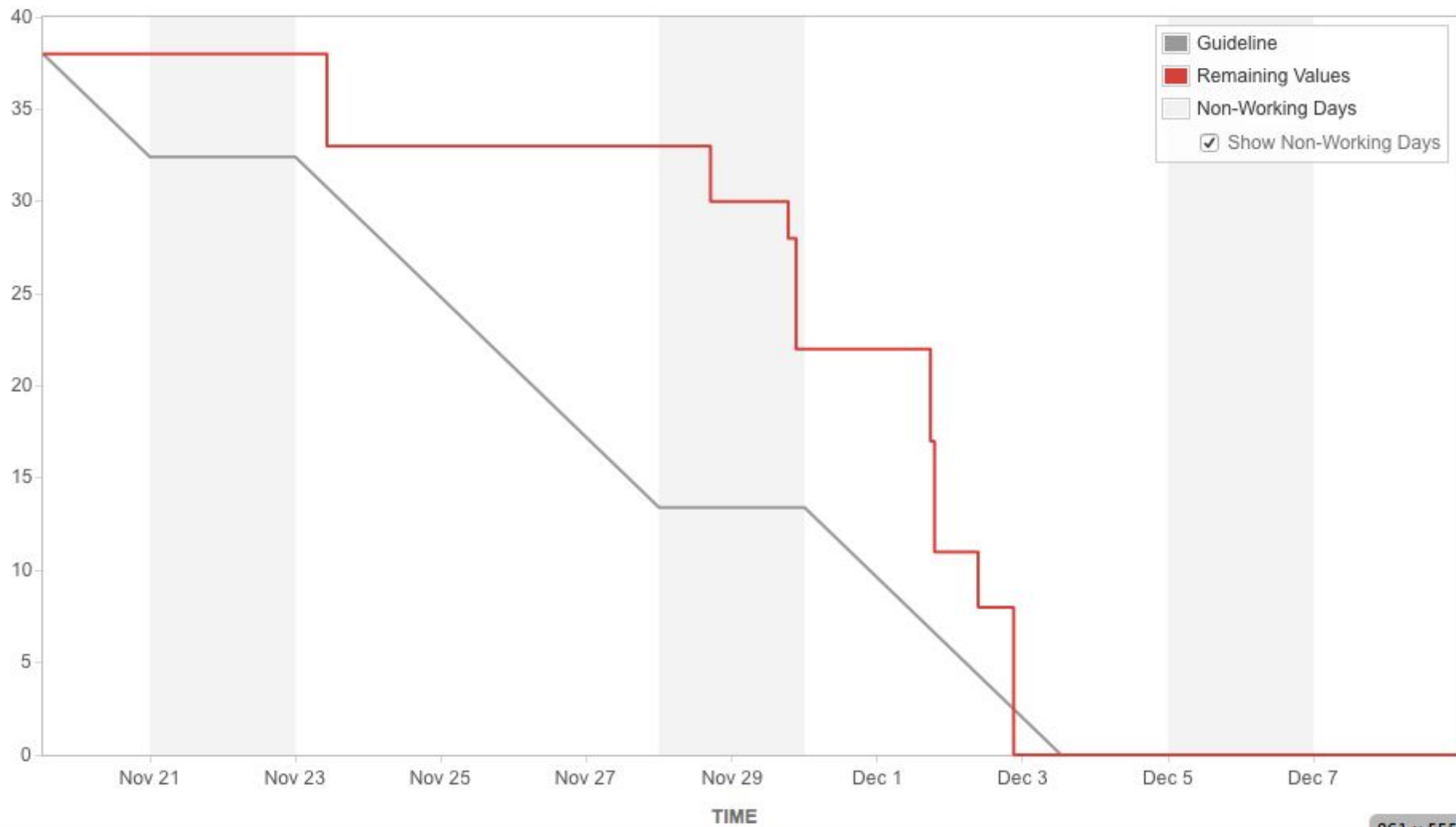
19/Nov/15 12:42 PM • 03/Dec/15 12:42 PM



		SAVI-2 Configure MySQL Database		5
		SAVI-10 IpImage to ByteArray method		2
		SAVI-3 Verify Detected Faces (GUI)		3
		SAVI-4 Verify Detected Faces (Logic)		8
		SAVI-6 Link Spring Data to MySQL Database		6
		SAVI-7 Update Method Crop Faces		5
		SAVI-8 Update SRS Document		2
		SAVI-5 Update UC Diagram		1
		SAVI-9 Gherkin		6

Backlog 1 issue

Create Sprint

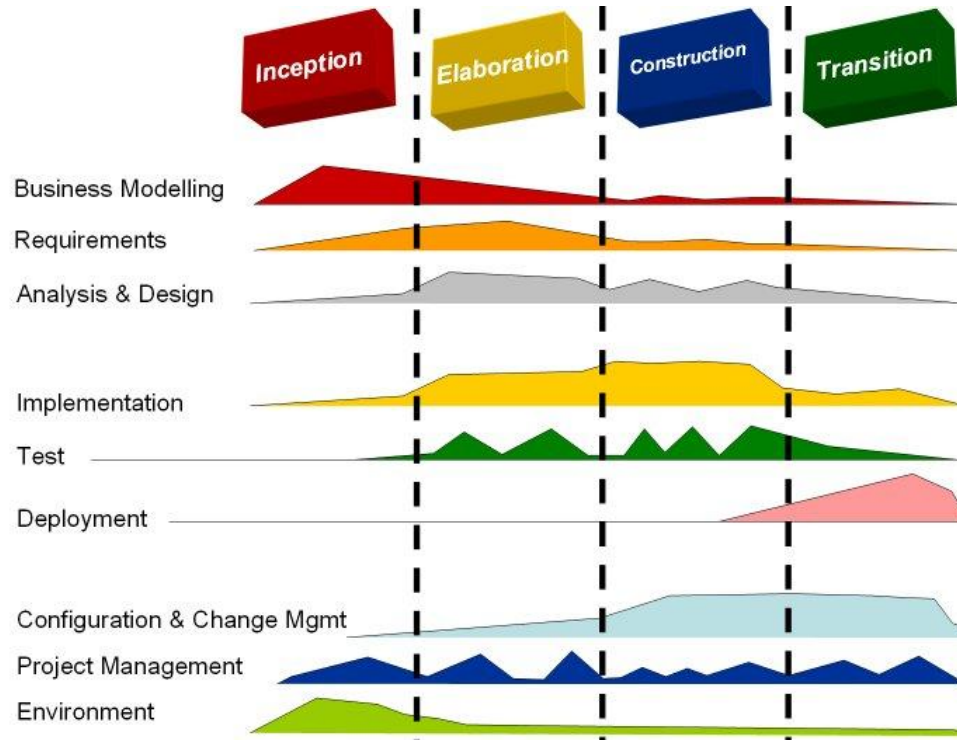


RUP

Rational Unified Process

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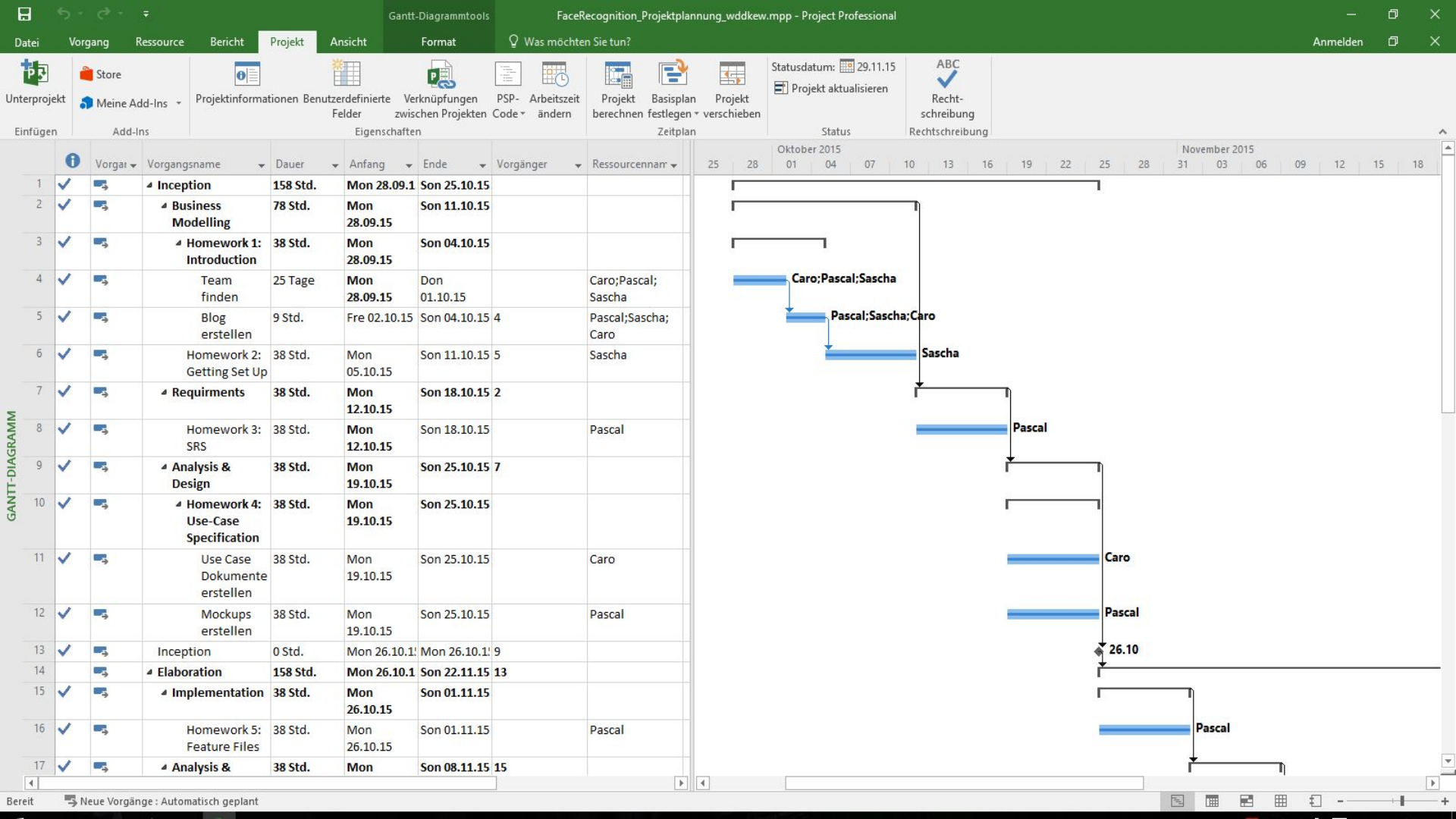
RUP - Rational Unified Process



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Gantt-Chart

- Übersicht über die Aktivitäten
- Visualisierung des zeitlichen Ablaufs
- Abhängigkeiten zwischen Aktivitäten



TECHNOLOGIEN

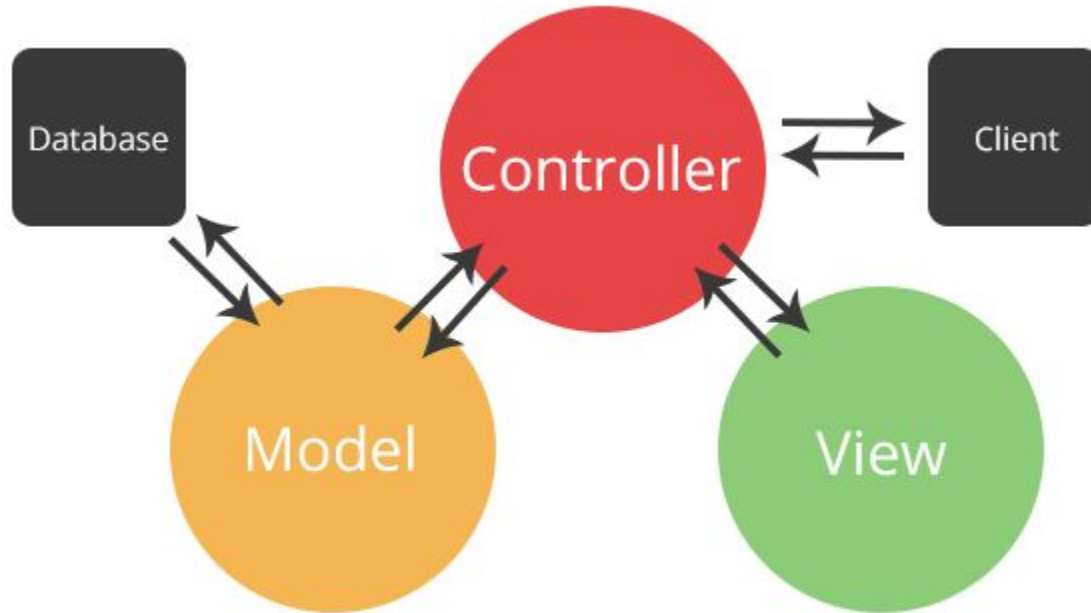
sapaca - Face Recognition Technologien

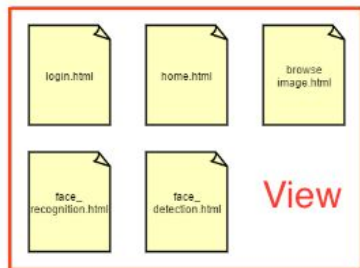
- **IDE:** Eclipse
- **Build Management:** Gradle
- **Sprachen:** Java/C++
- **Libraries:** OpenCV
- **Datenbank:** MySQL, Spring Data, Hibernate
- **Version Control:** GitHub
- **Sonstiges:** Spring Boot, Spring Web MVC, Thymeleaf

MVC

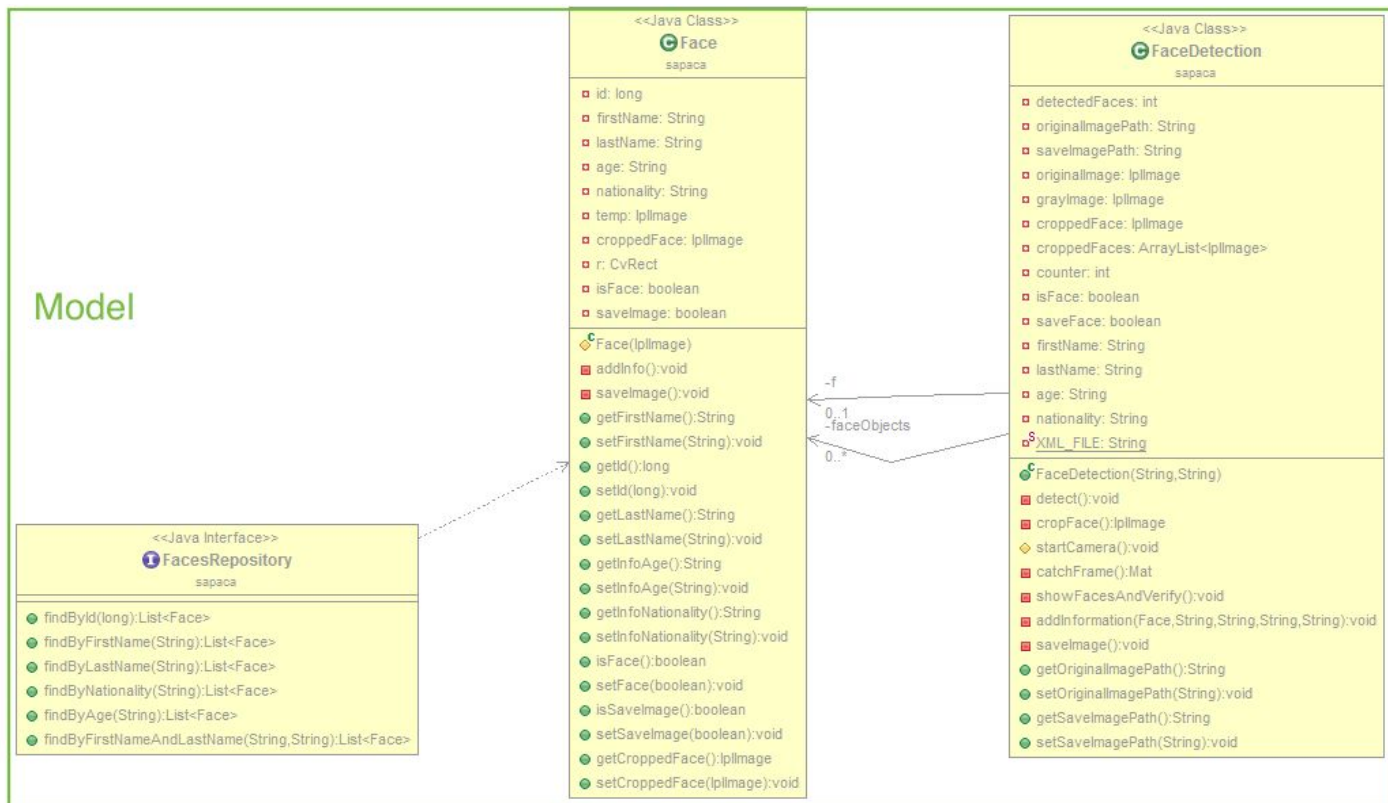
sapaca - Face Recognition

MVC





Model



Controller

TESTS

sapaca - Face Recognition Tests

- Funktionale Tests wurde mit **cucumber** realisiert
- Automatisiertes Testen der Webanwendung wurde mit **Selenium** realisiert



sapaca - Face Recognition

Feature File

- ⊖ Feature: Upload Image
- ⊖ Background: User is logged in
- ⊖ Scenario: Successful upload of an Image and FaceDetection
 - Given I am logged in
 - When I navigate to page "Face Detection"
 - And I press the "Upload Image" Button
 - And I select an Image with size "3" MB
 - And I press the "Submit" Button
 - Then I see the uploaded Image with detected Faces
- ⊖ Scenario: Not Successful upload of an Image
 - Given I am logged in
 - When I navigate to page "Face Detection"
 - And I press the "Upload Image" Button
 - And I select an Image with size "6" MB
 - And I press the "Submit" Button
 - Then I see an error message

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Feature File

```
Scenario: Not Successful upload of an Image
  Given I am logged in
  When I navigate to page "Face Detection"
  And I press the "Upload Image" Button
  And I select an Image with size "3" MB
  And I press the "Submit" Button
  Then I see the uploaded Image with detected Faces
```

```
# /Users/caro/Documents/P/Studium/DH/3.Ser
# Test_Steps.i_am_logged_in()
# Test_Steps.i_navigate_to_page(String)
# Test_Steps.i_press_the_button(String)
# Test_Steps.i_select_an_image(int)
# Test_Steps.i_press_the_button(String)
# Test_Steps.i_sse_uploaded_image()
```

```
2 Scenarios (2 passed)
12 Steps (12 passed)
0m27.160s
```

sapaca - Face Recognition Demo



sapaca - Face Recognition Prozess



Face Detection

Face Recognition

Anbindung Google

sapaca - Face Recognition Prozess



Face Detection



Face Recognition



Anbindung Google

sapaca - Face Recognition Prozess



Face Detection



Face Recognition



Anbindung Google

sapaca - Face Recognition Prozess





Danke!

Gibt es noch offene Fragen?

<https://sapacablog.wordpress.com>