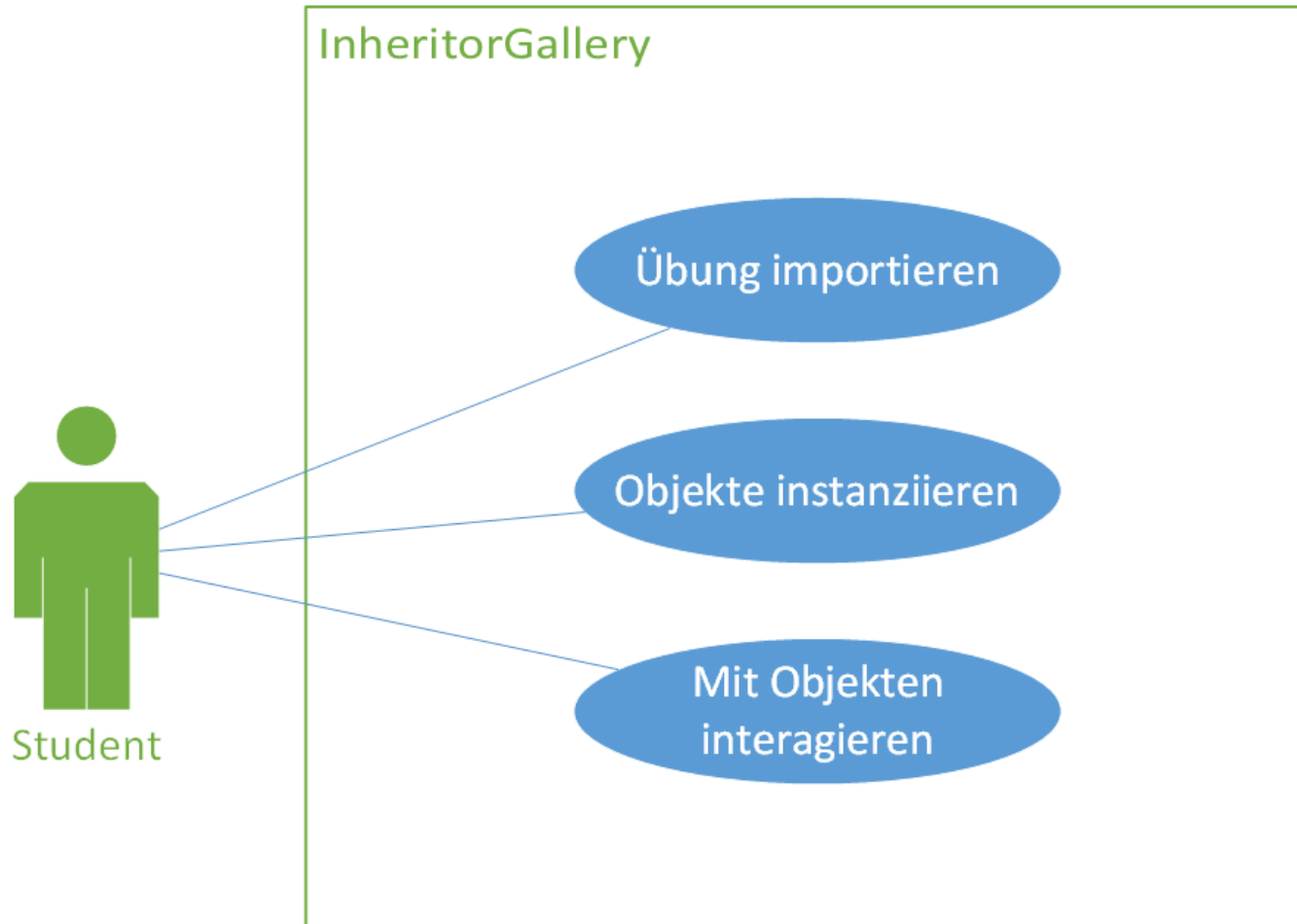


# **Inheritor Gallery**

## **Zwischenpräsentation IP5**

**Dimitri Muralt**  
**Christoph Wenk**

# Use Cases & Requirements

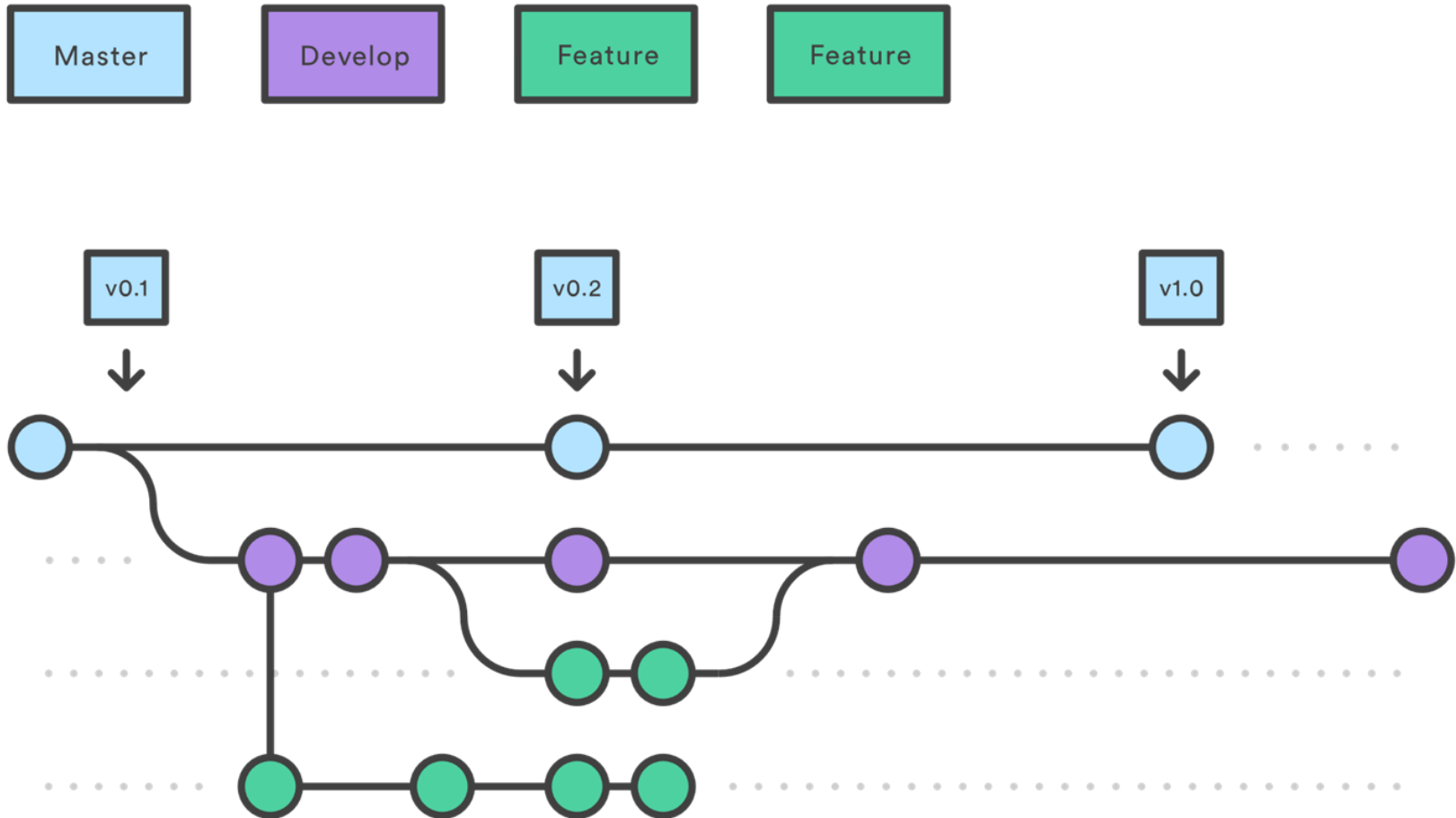


# Setup

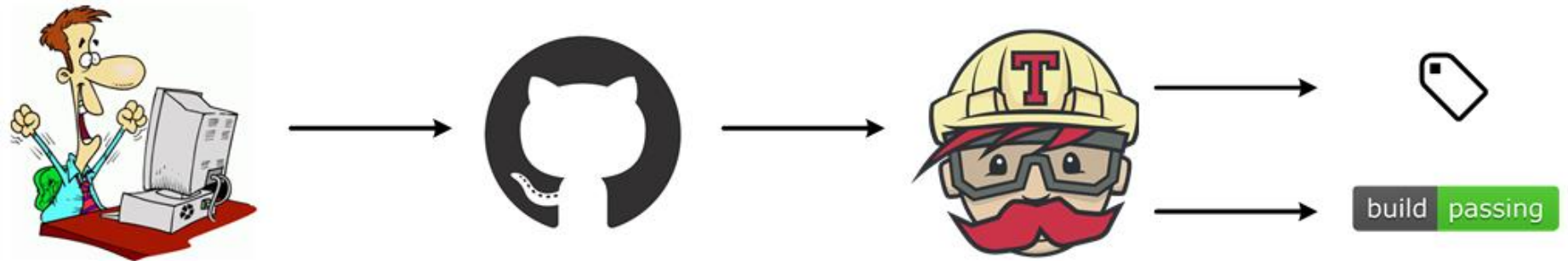
The image shows a Kanban board with three columns: "To do", "In progress", and "Done". Each column contains task cards with the following details:

- To do (7 items):**
  - UC-3 Methode ausgeführt bei Polymorphie (#23 opened by dimitrimuralt, story, 4.0 Beta)
  - UC-2 Zeige Werte der verfügbaren Attribute (#22 opened by dimitrimuralt, story, 3.0 MVP)
  - UC-2 Zeige verfügbare Attribute (#21 opened by dimitrimuralt, story, 3.0 MVP)
  - UC-2 Zeige verfügbare Methoden (#20 opened by dimitrimuralt, story, 3.0 MVP)
- In progress (1 item):**
  - UC-2 Zeige Instanz | Basic GUI (#18 opened by dimitrimuralt, story, 2.0 Interim Presentation)
- Done (8 items):**
  - Visualization Instances HiFi (2 of 2, #13 opened by dimitrimuralt, design, 2.0 Interim Presentation)
  - Interim Presentation Setup (1 of 1, #15 opened by dimitrimuralt, 2.0 Interim Presentation)
  - JShell integration (#4 opened by dimitrimuralt, research, 1.0 Draft)
  - Besprechung erste Skizzen (#14 opened by dimitrimuralt, 1.0 Draft)
  - Project Setup

# Git-flow



# Continuous Integration



Quellen:

Travis: <https://travis-ci.org/images/logos/TravisCI-Mascot-1.png>

GitHub: [https://github.githubassets.com/images/modules/open\\_graph/github-mark.png](https://github.githubassets.com/images/modules/open_graph/github-mark.png)

Tag: <https://octicons.github.com/img/og/tag.png>

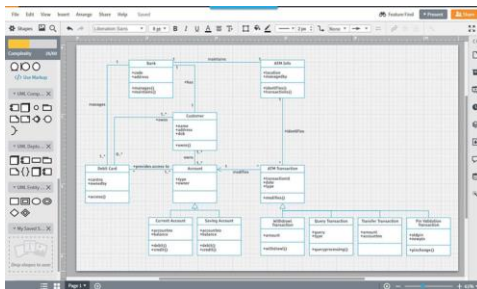
Programmer: <http://clipart-library.com/img1/1480567.gif>

Build: [https://cdn-images-1.medium.com/max/800/1\\*lh7G\\_D\\_hzoskYTHfa-zNmw.png](https://cdn-images-1.medium.com/max/800/1*lh7G_D_hzoskYTHfa-zNmw.png)

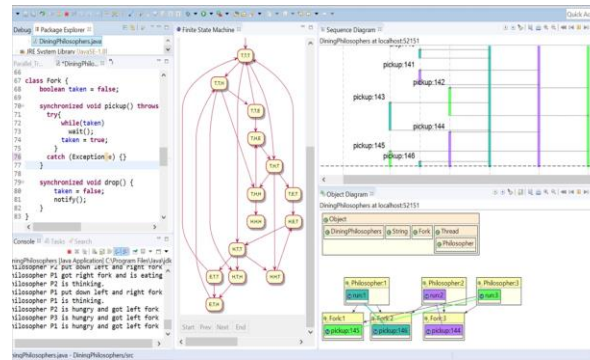
# Was gibts schon?

## Visualisierung Java

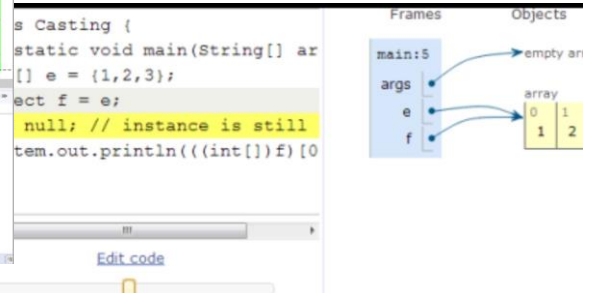
### UML-Tools



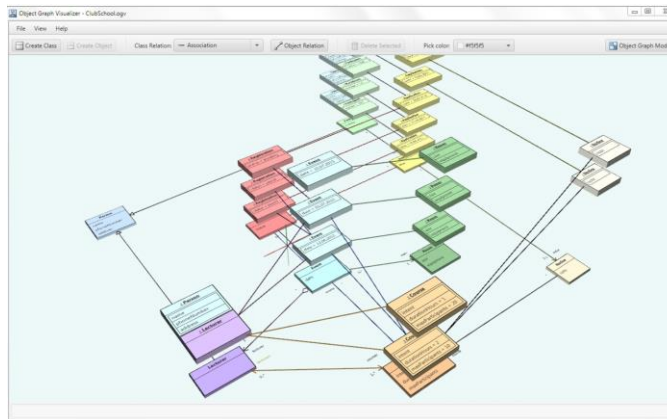
<https://www.lucidchart.com>



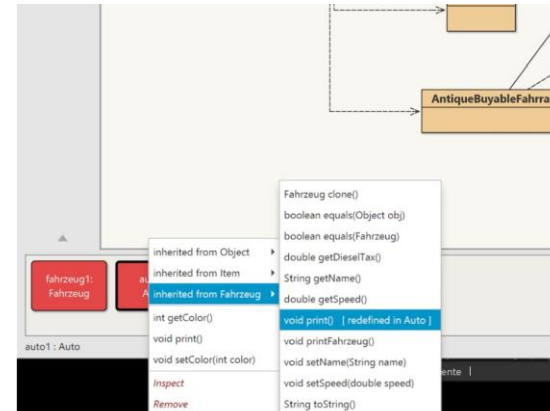
<https://daveagn.wordpress.com/2013/07/05/visualizing-java/>  
<https://cse.buffalo.edu/jive/>



## Visualisierung Java für Anfänger



<https://github.com/Nurtak/ObjectGraphVisualization>



<https://bluej.org>

# Fokus

Besondere Schwierigkeiten für Studierende:

- Objekt behält Eigenschaft (Infos sind nicht verloren), wenn Oberklasse zugewiesen
- Methoden nicht mehr aufrufbar, wenn Oberklasse zugewiesen
- Bei überschriebenen Methoden wird die Methode genommen, die zum Objekt passt.

Konzepte Vererbung

- Subklasse ist eine Spezialisierung, Umfang Funktionalität grösser
- Referenz bestimmt die Sicht (Metapher Pfeil, Brille, Fernrohr)

extends

instance of

specialising

Generalising

Referenz

override

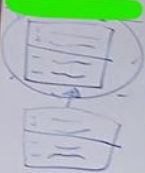
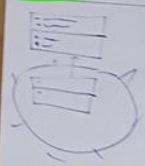
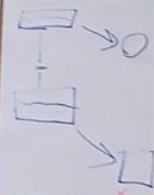
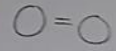
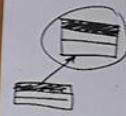
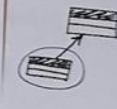
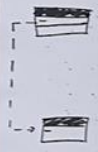
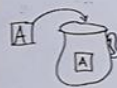
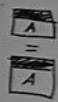
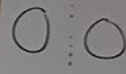
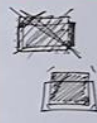
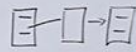
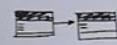
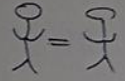
Unterklass

Overklasse

Object

clone

equals

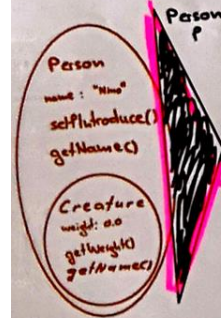
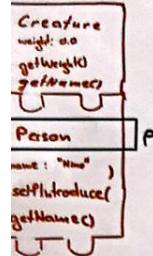




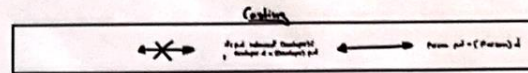
# Entwurf

opDown

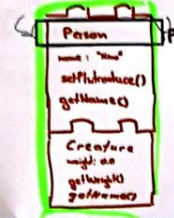
Person p =  
new Person("Nino")



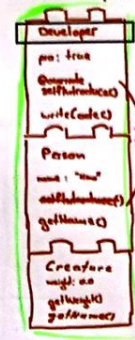
01downTop



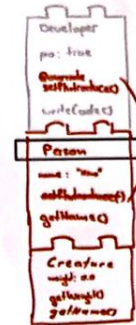
Person p =  
new Person("Nino")



Developer d =  
new Developer("Nino", true)

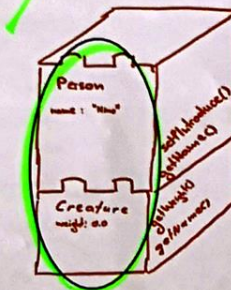


Person pd =  
new Person("Nino", true)



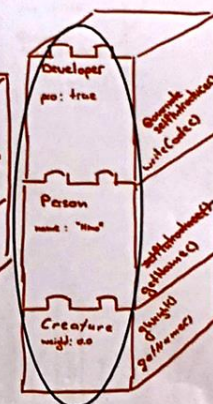
08lego

Person p =  
new Person("Nino")



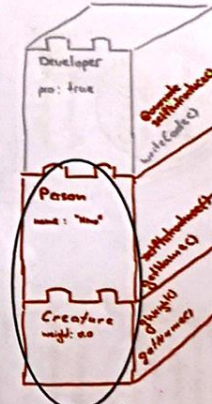
Person p  
ent!

Developer d =  
new Developer("Nino", true)



Developer d

Person pd =  
new Developer("Nino", true)



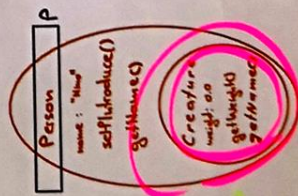
Person pd

grün  
oder  
nicht

links

03kreis

Person p =  
new Person("Nino")





# Entwurf



# Usability Test

Führe die nachfolgenden Zeilen aus und sehe dir die visualisierten Instanzen an. Welche Methode können auf den Referenzen aufgerufen werden?

```
Instrumentalist jimmy =  
new Instrumentalist(  
"Jimmy Hendrix", "Rock");
```

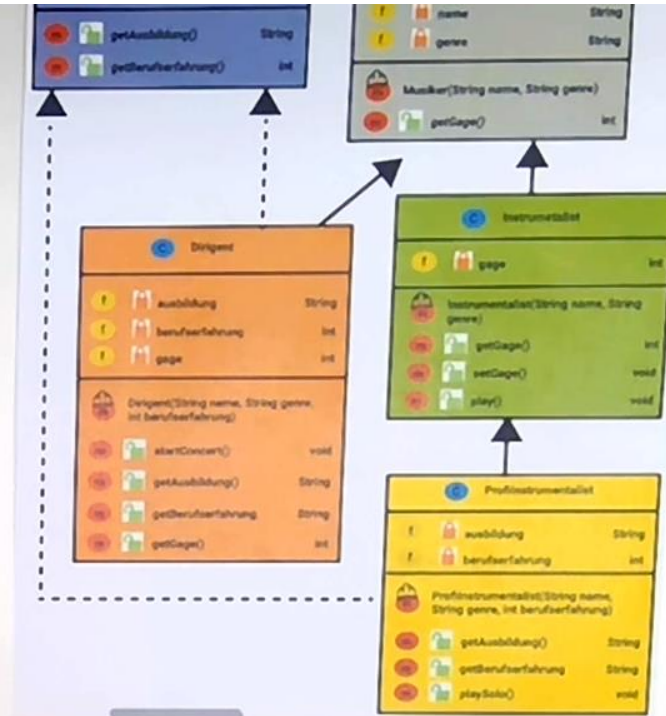
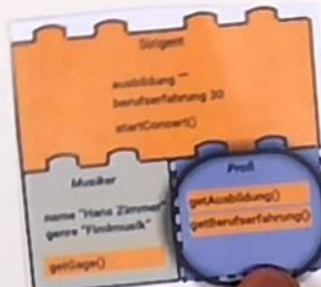
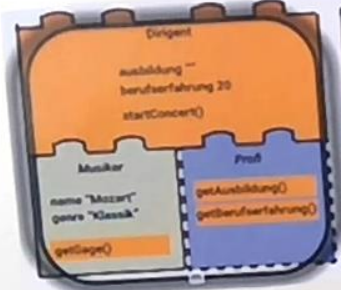
```
jimmy.setGage(999);
```

```
Musiker m =  
new Instrumentalist(  
"Peter", "Folk");
```

```
Dirigent d = new  
Dirigent("Mozart",  
"Klassik", 20);
```

```
Profi profi = new  
Dirigent("Hans Zimmer",  
"Filmmusik", 30);
```

```
Musiker m = new  
ProfiInstrumentalist("Ringo  
Starr", "Pop", 10);
```





# Entwurf HiFi

<https://www.figma.com/file/bmuP25sd6U1Mk7zopuCf3ApD/InheritorGallery?node-id=0%3A1>

Führe die nachfolgenden Zeilen aus und sehe dir die visualisierten Instanzen an.

Welche Methode können auf den Referenzen aufgerufen werden?

```
Instrumentalist jimmy =
new Instrumentalist(
"Jimmy Hendrix", "Rock");
```

```
jimmy.setGage(999);
```

```
Musiker m =
new Instrumentalist(
"Peter", "Folk");
```

```
Dirigent d = new
Dirigient("Mozart",
"Klassik", 20);
```

console

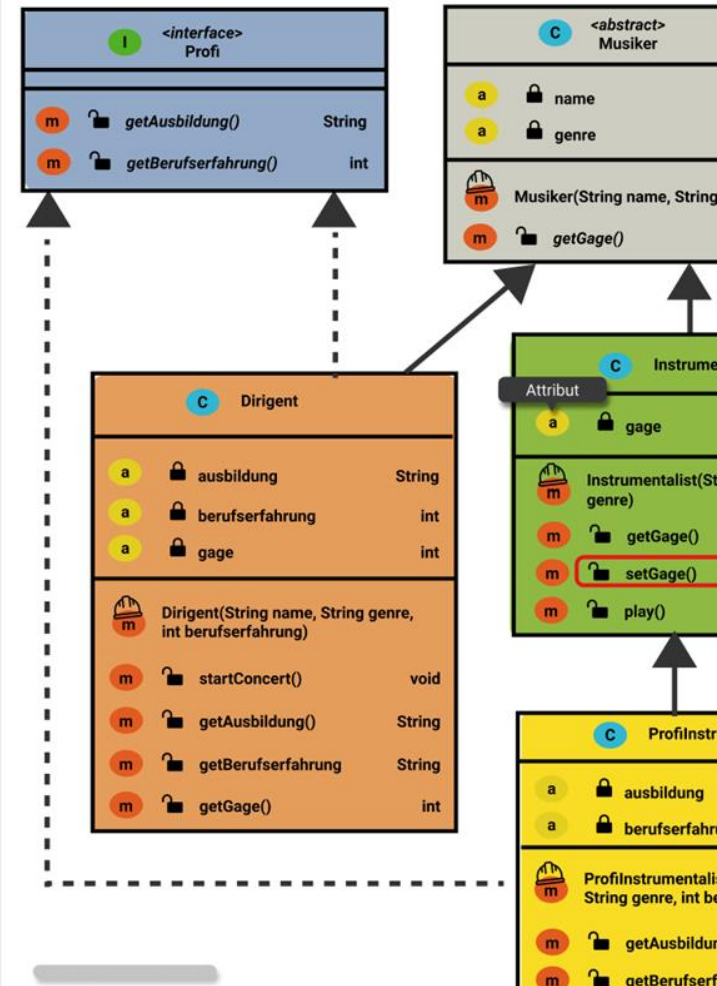
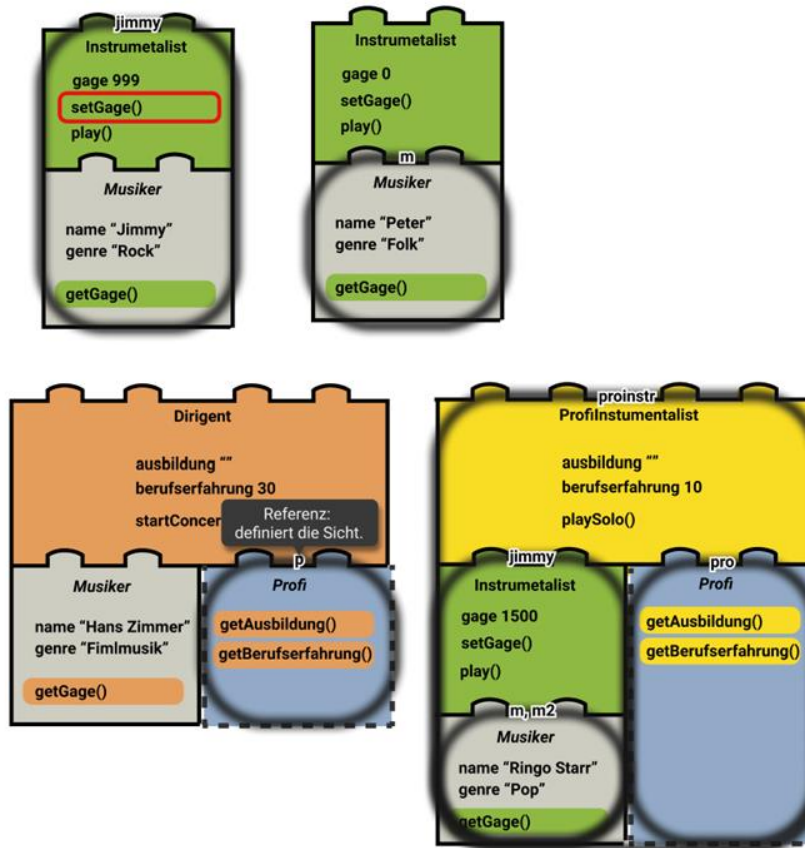
```
> Person p = new Person("Nino")
```

```
> Developer d = new
Developer("Nino")
```

```
> Person p_d = new
Developer("Nino", true)
```

```
> Creatue c_d = new
Developer("Nino", true)
```

```
> |
```



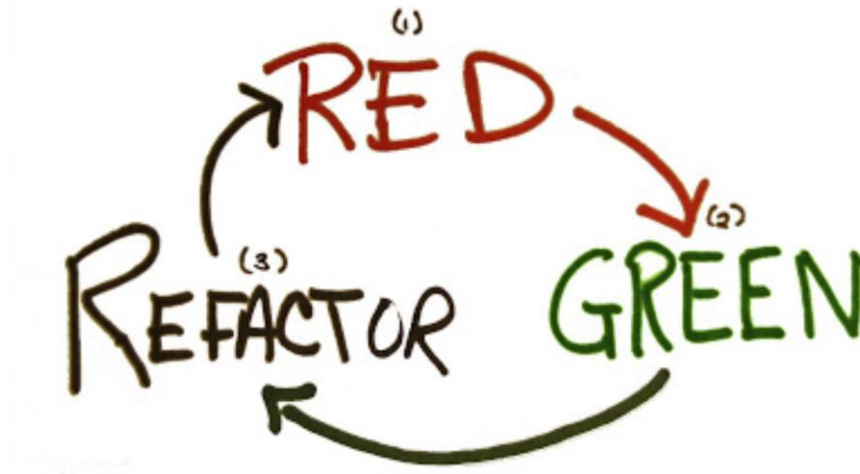
# JShell

- Viele Tutorials zu JShell Standalone
- Praktisch keine Tutorials und Infos zu JShell integrated
- Teilweise unerklärliches Verhalten
- Keine Syntaxprüfung durch die IDE
- JShell und Applikation laufen nicht in der gleichen JVM

# Lessons Learned

- Zusammenarbeit mit Frau Scheuner sehr gut
- Usability Testing Probanden finden schwierig, Zielgruppe spezifischer als angenommen
- Github Aufbau gut
- Aufsetzen von CI als External Collaborator einer Organization ist sehr umständlich
- Auch kleine Dinge wie ein vergessenes ; können dich einen Tag kosten

# Nächste Schritte





# Nächste Schritte

## 3.0 MVP

 Due by June 25, 2019    0% complete

☐  5 Open     0 Closed

☐  **UC-2 Zeige Werte der verfügbaren Attribute** story  
#22 opened 21 hours ago by dimitrimuralt

☐  **UC-2 Zeige verfügbare Attribute** story  
#21 opened 21 hours ago by dimitrimuralt

☐  **UC-2 Zeige verfügbare Methoden** story  
#20 opened 21 hours ago by dimitrimuralt

☐  **UC-2 Zeige Instanz** story  
#19 opened 21 hours ago by dimitrimuralt

≡ ☐  **UC-1 UML Parser** story  
#16 opened on 28 Apr by dimitrimuralt