VU Software Engineering 2

DEAD

Personal data:

First name, Surname:	Klaus Bareis 01501513 Fabian Schmon 01568351 Margaryta Simkina 01446530
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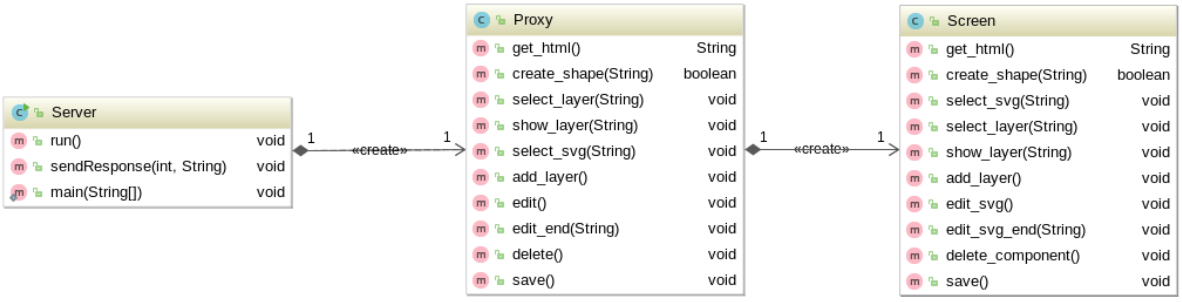
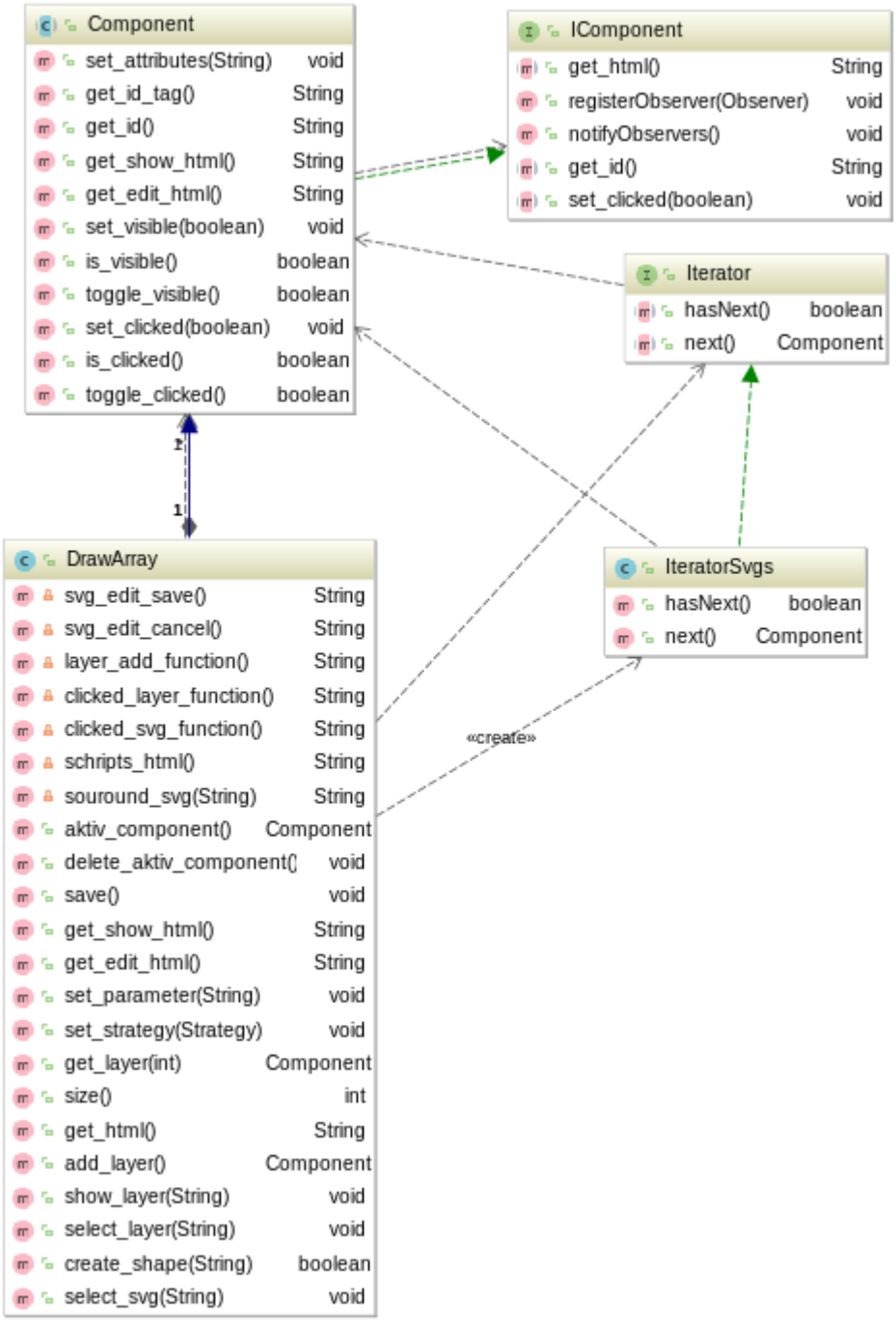
Design patterns

~~discussing where the required design patterns occur in your solution. Discuss at least one occurrence for each required design pattern in the code in detail. Support the decision to use a specific pattern with compelling arguments. Create UML diagrams to illustrate how the patterns have been applied.~~

• Proxy Pattern
The proxy pattern was meant to control the client's access to the screen. In normal operation, the contents should be transferred as html, when saving as svg. Saving was moved to the server. For this reason, the pattern is only partially implemented.

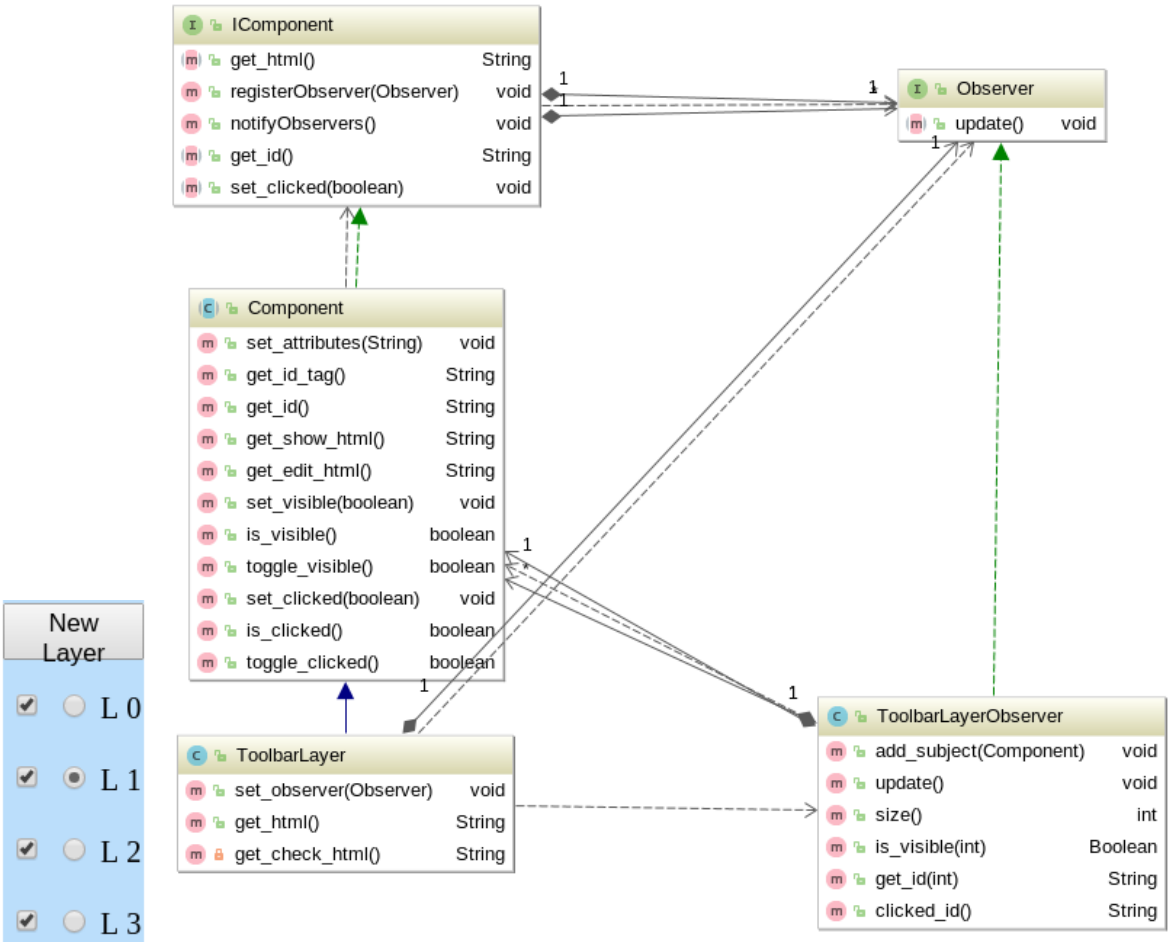


• Iterator Pattern



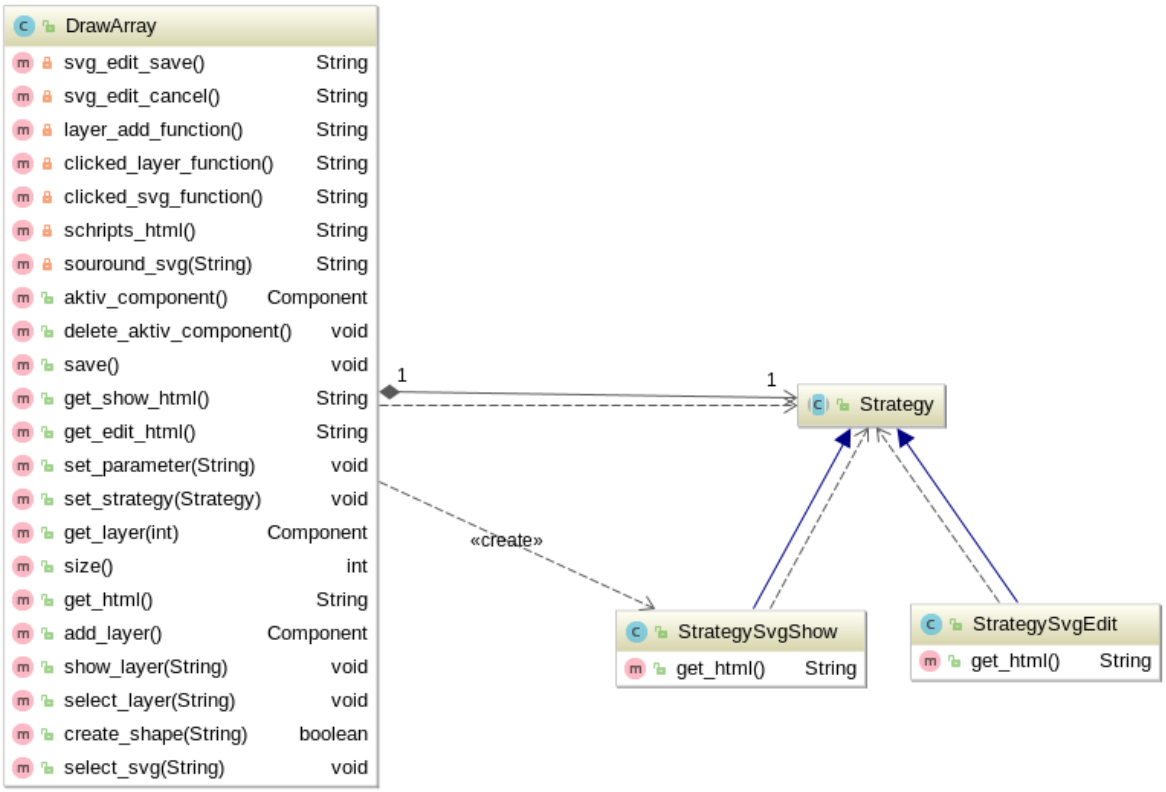
• Observer Pattern

One use of the observer in our application is that of ToolbarLayerObserver. In the toolbar there is a button to create new layer in/on the screen. A click on this button informs the screen that he should create a new layer. Also, enable and disable, and switching between layers via this signal/slot concept is monitored.

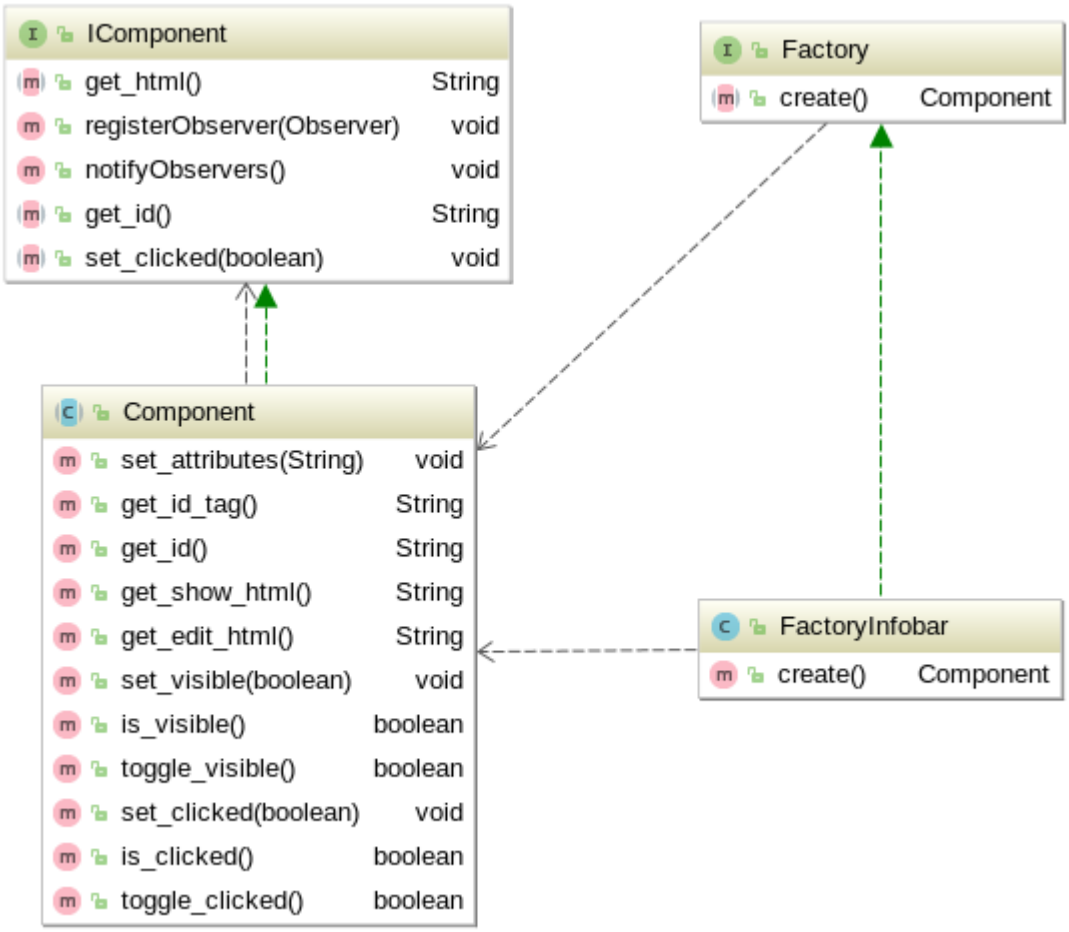



```
signal: Observer.ToolbarLayerObserver::update()
signal: Observer.ToolbarLayerObserver::update()
signal: Observer.ToolbarLayerObserver::update()
```

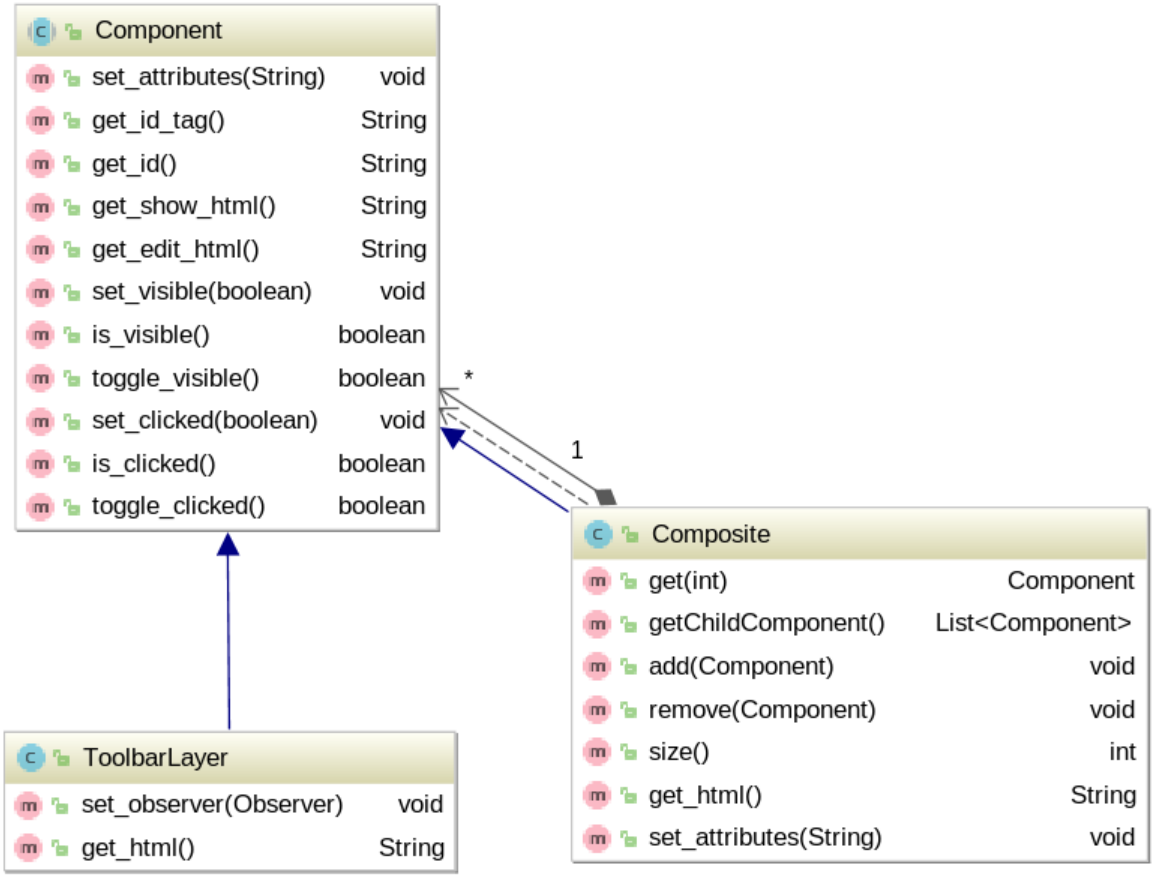
• Strategy Pattern



• Factory Method Pattern



• Composite Pattern



Coding practices

~~describing how and to what extent you have consid- ered coding practices. Discuss and show examples from your code.~~

Defensive programming

~~about how and to what extent you have considered defensive programming. Discuss and show examples from your code.~~

Code metrics

~~of your final implementation, covering the same code metric requirements as in SUPD. Include also a discussion on code bugs found, and their resolution.~~

Team contribution

Design: Bareis
Basic Implementation: Bareis

Functional Requirements (FRs)

FR1

- lines Bareis
- circles Bareis
- ellipses Bareis
- triangles Bareis
- quadrangles Bareis
- n-gons Bareis
- stars Bareis
- text Bareis

FR2

- addition Bareis
- deletion Schmon
- editing Bareis
- movement (Bareis over editing)

FR3

Bareis

FR4

Schmon

Quality Requirements (QRs)

QR1
QR2
QR3
QR4
QR5
QR6
QR7:

• Observer Pattern	ToolbarLayerObserver	Bareis
• Strategy Pattern	StrategySvgEdit	Bareis
	StrategySvgShow	Bareis
• Iterator Pattern	IteratorLayer (not used)	Bareis
	IteratorSvgs	Bareis
• Composite Pattern	for Screen	Bareis
• Proxy Pattern	Proxy for HTML	Bareis
• Abstract Factory Pattern	ColorAbstractFactory	
	ColorDraw	
	Color	
	DrawAbstractFactory	
	DefaultAbstractFactory	
• Factory Method Pattern	FactoryDrawArray	Bareis
	FactoryInfobar	Bareis
	FactoryLayer	Bareis
	FactoryMenubar	Bareis
	FactoryToolbar	Bareis
	FactoryToolbarLayer	Bareis

	FactoryToolbarOperation	Bareis
• Decorator Pattern	Format	
	DecoratorFileSVG	
	PlainFormat	
	LightDesign	
	DarkDesign	

QR8
QR9

HowTo

~~- documenting how the application is to be launched, initialized, and tested.~~