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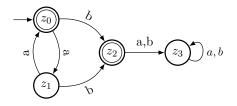
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Pfad Ergebnis Allerlei/Teufel

Automat/AutomatDFA

Deterministic Finite Automaton

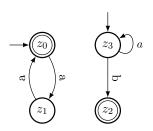


$$D = \begin{pmatrix} \text{Zustände} & \text{Eingabe} & \text{Übergangsfkt.} & \text{Start(s)} & \text{Endzust.} \\ Z & \Sigma & \Sigma & \delta & S & E \\ Menge & Alphabet, & Z \times \Sigma \to Z & S & E \\ \end{pmatrix}$$

$$T(D) = \left\{ x \in \Sigma^* \mid \hat{\delta}(S,x) \cap E \neq \varnothing \right\}$$

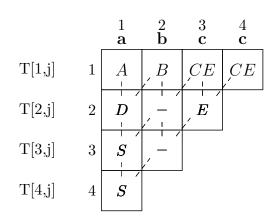
Automat/AutomatNFA

$N_{\rm ondeterministic} \ F_{\rm inite} \ A_{\rm utomaton}$

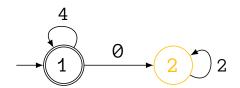


$$\begin{split} N = \begin{pmatrix} \text{Zustånde} & \text{Eingabe} \\ Z \\ Menge \end{pmatrix}, & \sum_{Alphabet}^{\Sigma}, \sum_{Z \times \Sigma \to Z^*}^{\delta}, \sum_{\subseteq Z}^{S}, \sum_{\subseteq Z}^{E} \end{pmatrix} \\ T(N) = \left\{ x \in \Sigma^* \mid \hat{\delta}(S, x) \cap E \neq \varnothing \right\} \end{split}$$

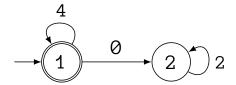
Automat/CYKAlgorithmus



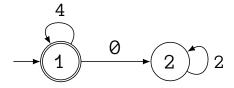
Automat/Demo-1



Automat/Demo-2

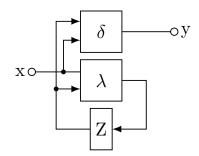


Automat/Demo



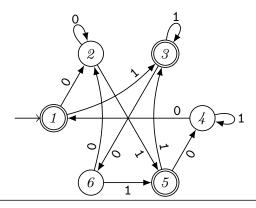
Isch bin a Hädder!

Automat/MealyAutomat

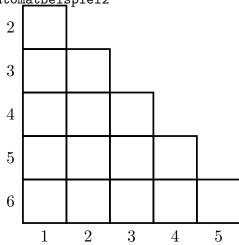


Ausgabe von Zustand & Eingabe abhängig

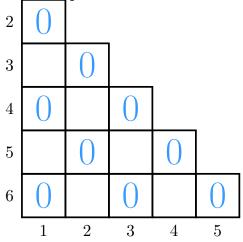
Automat/MinimalautomatBeispiel/MinimalautomatBeispiel1



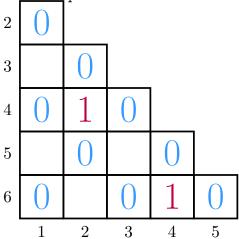
 ${\tt Automat/Minimal automatBeispiel/Minimal autom} \underline{{\tt atBeispiel2}}$



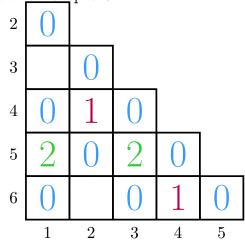
Automat/MinimalautomatBeispiel/MinimalautomatBeispiel3



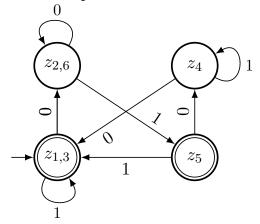
 ${\tt Automat/Minimal automatBeispiel/Minimal autom} \underline{{\tt atBeispiel4}}$



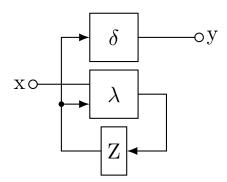
 ${\tt Automat/Minimal automatBeispiel/Minimal autom} \underline{{\tt atBeispiel5}}$



 ${\tt Automat/Minimal automatBeispiel/Minimal automatBeispiel 6}$

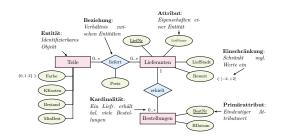


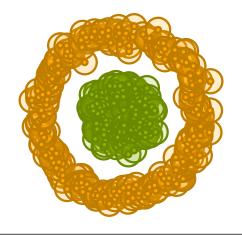
Automat/MooreAutomat



Ausgabe nur vom Zustand abhängig

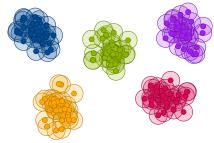
Datenbanken/ERMExample





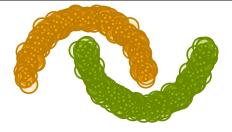
Eigene/Proseminar/Cluster/en-circles

 pdf



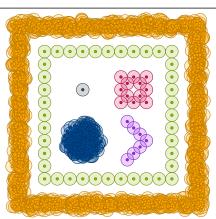
Eigene/Proseminar/Cluster/en-clusters

pdf

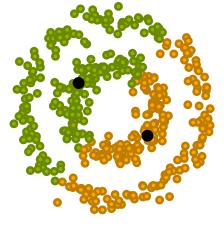


Eigene/Proseminar/Cluster/en-moons

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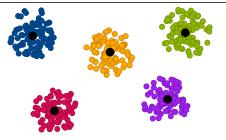


Eigene/Proseminar/Cluster/en-special



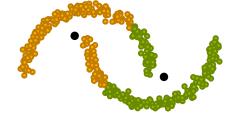
Eigene/Proseminar/Cluster/km-circles

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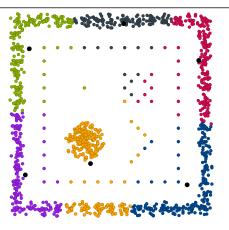
Eigene/Proseminar/Cluster/km-clusters

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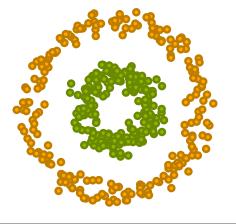


Eigene/Proseminar/Cluster/km-moons

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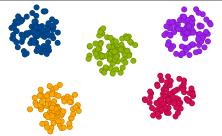


Eigene/Proseminar/Cluster/km-special



Eigene/Proseminar/Cluster/kn-circles

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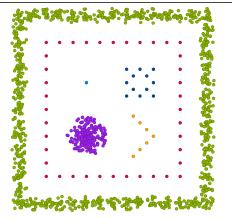
Eigene/Proseminar/Cluster/kn-clusters

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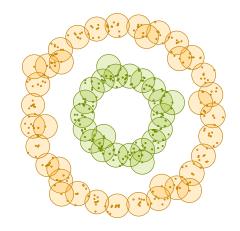


Eigene/Proseminar/Cluster/kn-moons

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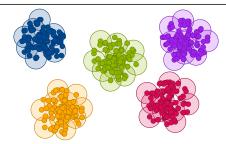


Eigene/Proseminar/Cluster/kn-special



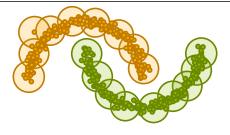
Eigene/Proseminar/Cluster/rolf-circles

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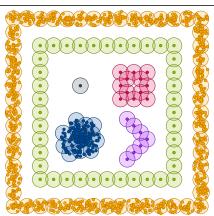
Eigene/Proseminar/Cluster/rolf-clusters

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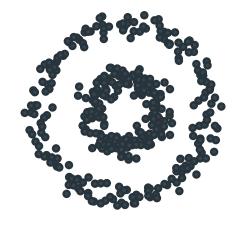


Eigene/Proseminar/Cluster/rolf-moons

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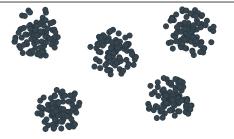


Eigene/Proseminar/Cluster/rolf-special



Eigene/Proseminar/Cluster/thumb-circles

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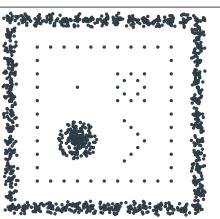
Eigene/Proseminar/Cluster/thumb-clusters

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Eigene/Proseminar/Cluster/thumb-moons

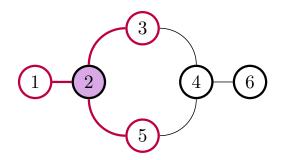
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Eigene/Proseminar/Cluster/thumb-special

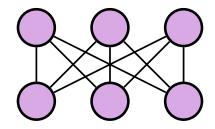
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 ${\tt Graphen/GraphNachbarschaftGrad}$



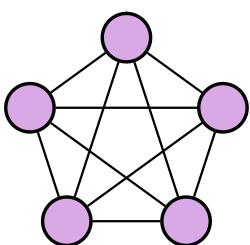
Graphen/GraphNichtPlanarK33

 $K_{3,3}$

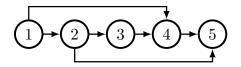


Graphen/GraphNichtPlanarK5



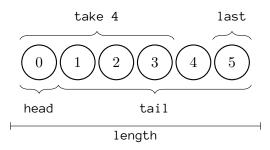


Graphen/GraphTopologie

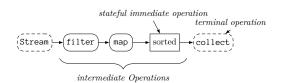


Graphen/GraphWegPfad 3 6 $\widehat{5}$ Graphen/GraphZyklus 5 Haskell/HaskellTypen **Eq** (==), (/=) Show show, ... Read Ord (>), (<), (>=), (<=), min, max Num (+), (-), (*), (signum), ... Bounded Enum succ, pred Fractional Real RealFrac round, ceiling, floor, ... Integral Floating RealFloat

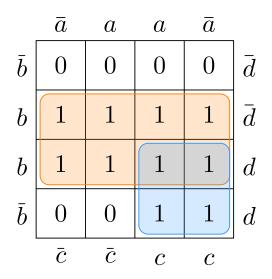
Haskell/Listenoperationen



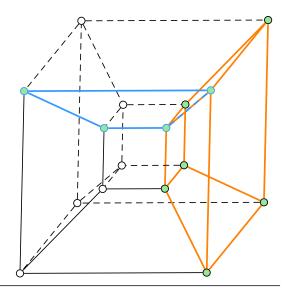
Java/StreamDemo



Logik/KVDiagramm



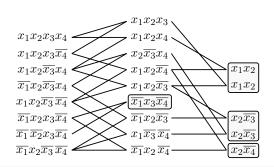
Logik/KVWuerfel



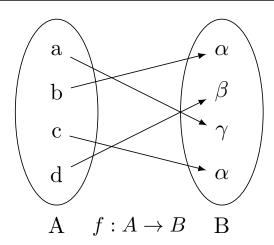
Logik/QuineMCCluskeyTabelle

	1	2	3	4	5	6	7	8
x_1x_2	+	+	+		+			
$x_2\overline{x_3}$			+	+	+			+
$x_2\overline{x_4}$		+			+	+		+
$\overline{x_1}x_3\overline{x_4}$						+	+	

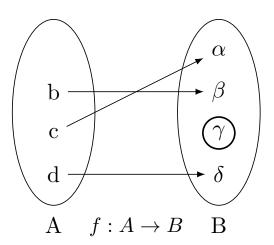
 ${\tt Logik/Quine MCCluskey Zusammen fassen}$



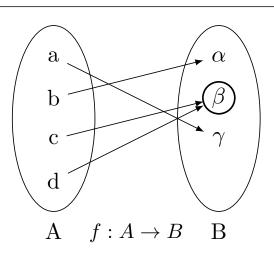
Mengen/FunktionBijektiv



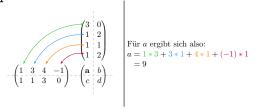
Mengen/FunktionInjektiv



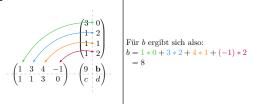
Mengen/FunktionSurjektiv

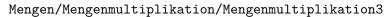


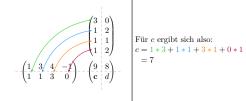
${\tt Mengen/Mengenmultiplikation/Mengenmultiplikation1}$



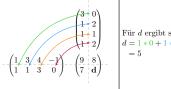
Mengen/Mengenmultiplikation/Mengenmultiplikation2





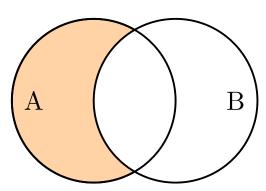


Mengen/Mengenmultiplikation/Mengenmultiplikation4

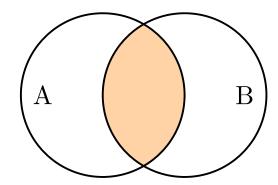




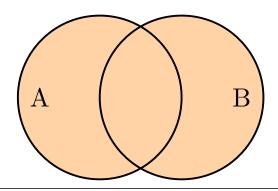
Mengen/VennDifferenz



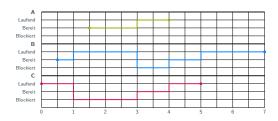
Mengen/VennSchnitt



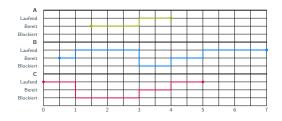
Mengen/VennVereinigung



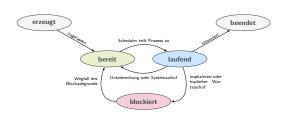
Prozesse/FCFS-WorstCase



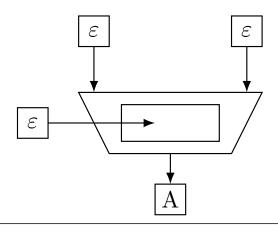
Prozesse/FCFS



Prozesse/Prozesszustaende



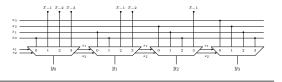
Rechner/ALU



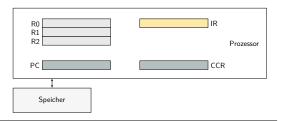
Rechner/AmpelPLA

	Zı	ıstar	nd	Fol	gez.	I	NS		WO			
δ	h_0	z_0	z_1	z'_0	z'_1	•	0	•	•	0	•	T
δ_0	0	0	0	0	1	•	0	0	0	0	0	$7 \Rightarrow h'_0 = 1$
δ_1	1	0	1	0	1	•	0	0	0	0	0	T - 1
δ_3	0	0	1	1	0	0	0	0	0	0	0	$2 \Rightarrow h'_0 = 1$
δ_4	1	1	0	1	0	0	0	0	0	0	0	T - 1
δ_6	0	1	0	1	1	0	0	0	•	0	0	$7 \Rightarrow h'_0 = 1$
δ_7	1	1	1	1	1	0	0	0	•	0	0	T - 1
δ_9	0	1	1	0	0	0	0	0	0	0	0	$2 \Rightarrow h'_0 = 1$
δ_{10}	1	0	0	0	0	0	0	0	0	0	0	T - 1

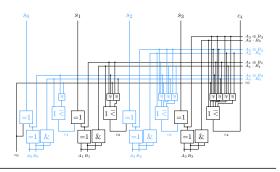
Rechner/BarrelShifter



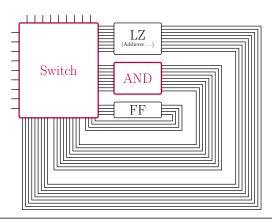
Rechner/Beispielprozessor



Rechner/CLA

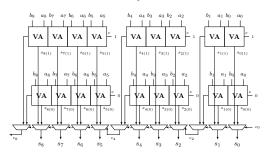


Rechner/CPLD

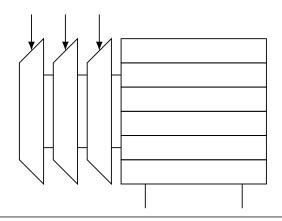


Rechner/CSA

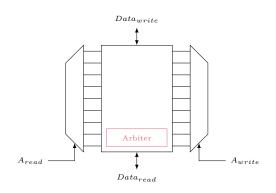
CSA - 9-bit Carray-Select-Addierer



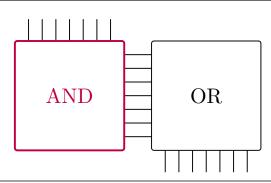
Rechner/DreiTorRegister



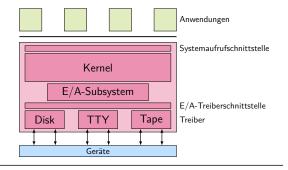
Rechner/Eintorspeicher



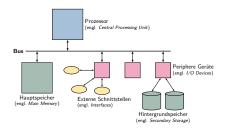
Rechner/GALPAL



Rechner/Geraeteverwaltung



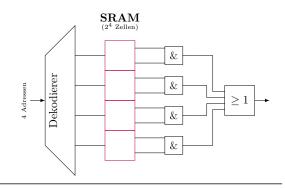
Rechner/HardwareSkizze



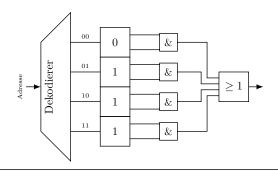
Rechner/ISA



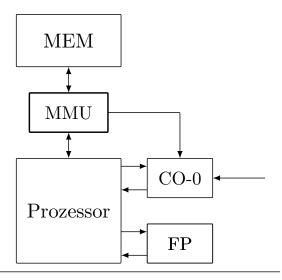
Rechner/LUT



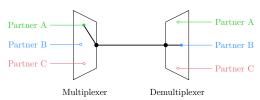
Rechner/LUTOder



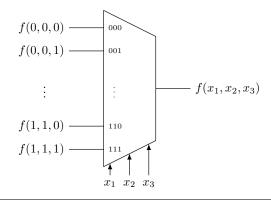
Rechner/MIPS



Rechner/MuxDemuxKommunikation



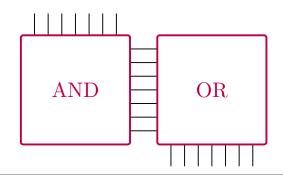
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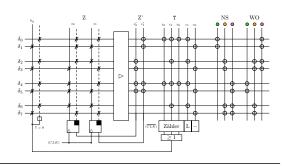
Rechner/NAdressmaschiene



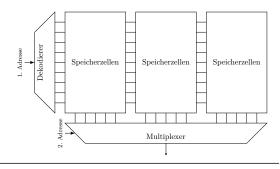
Rechner/PLA



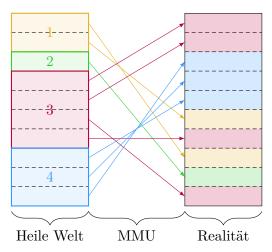
Rechner/PLAZuAmpel



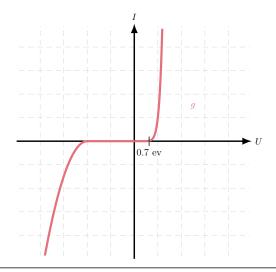
Rechner/PROM



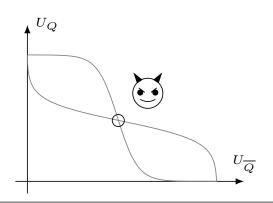
Rechner/Pages



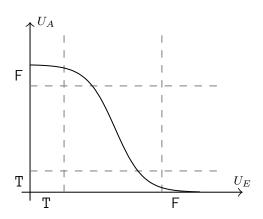
Rechner/Physik/DiodenStromstaerke



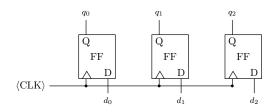
Rechner/Physik/Metastabil



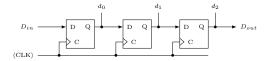
Rechner/Physik/TransistorStoertoleranz



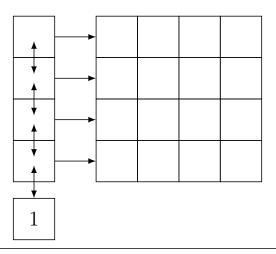
Rechner/RegisterParallel



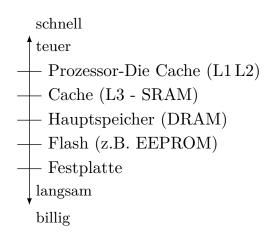
Rechner/RegisterSeriell



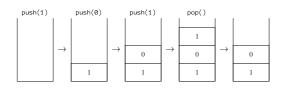
Rechner/Shiftregister



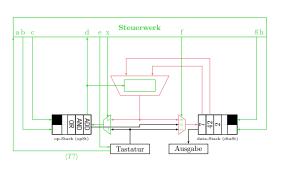
Rechner/Speicherhierarchie



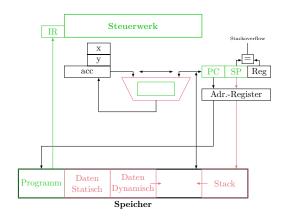
Rechner/StackExample



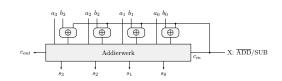
Rechner/Stackmaschiene



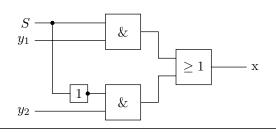
Rechner/StackmaschieneSimpler



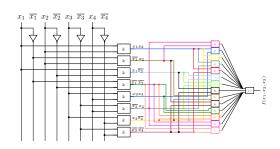
Schaltkreis/Addier-Subtrahierer



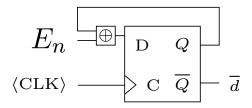
Schaltkreis/Demultiplexer



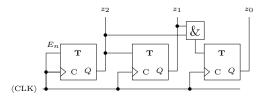
Schaltkreis/KomplexerSchaltkreis



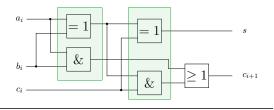
Schaltkreis/SynchronzaehlerDFF



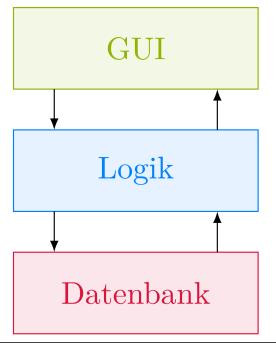
Schaltkreis/SynchronzaehlerTFF



Schaltkreis/Volladdierer



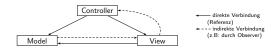
Software/DreiSchichtenArchitektur



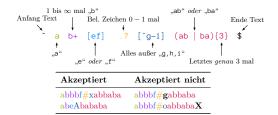
${\tt Software/Meta/ProgrammierparadigmenUeberblick}$



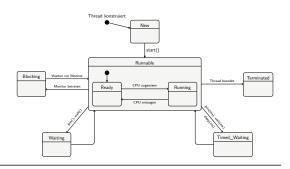
Software/ModelViewController



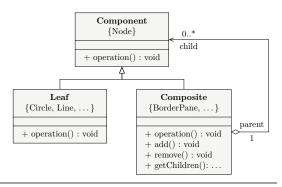
Software/RegexExample



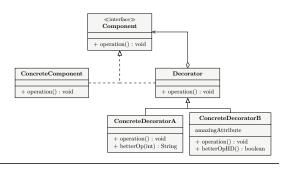
Software/ThreadStates



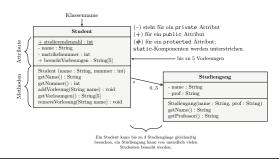
Software/UMLCompositePattern



Software/UMLDecoratorPattern



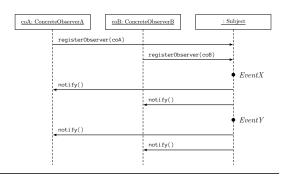
Software/UMLExample



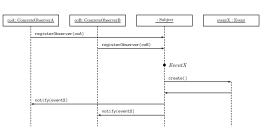
Software/UMLObserverPattern



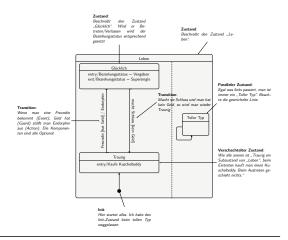
Software/UMLSEQObserverPattern



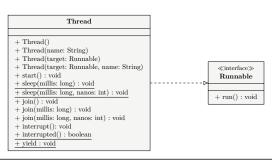
Software/UMLSEQObserverPatternAdapted



${\tt Software/UMLStateDiagramExample}$



Software/UMLThread



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 Sprachen/CYKAlgorithmus
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Sprachen/ChomskyHierarchie
                                                                                                  Jede Grammatik - Aber nicht jede Sprache (Beispiel: \pi,alle irrationalen Zahlen)
                                                                                       Typ 0
                                                                                                  Kontextsensitiv: |w_1| \le |w_2| \quad \forall w_1 \to w_2 \in P
                                                                                       \mathrm{Typ}\ 1
                                                                              Entscheidbar
                                                                                                  Kontextfrei: w_1 \in V \quad \forall w_1 \rightarrow w_2 \in P
                                                                                       Typ 2
                                                                                                  Regulär:
                                                                                       Typ 3
                                                                                                  w_2 \in \Sigma \cup \Sigma V
                                                                                                  Kann von NFA und DFA realisiert werden.
Sprachen/Grammatik
                                                                                               \begin{split} G(\{S,B,C\},\{a,b,c\},P,S) \\ \text{P: } S \rightarrow aA, \ A \rightarrow Cb, \ C \rightarrow c \\ \text{Ableitung; } acb \end{split}
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₩ Komme