



My first experiences with Tcl

a presentation by Dominik Stauff
at the European OpenACS & Tcl Conference
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Starting with EOS...

Datei Bearbeiten Programm Information

Programm bearbeiten || ■ Geschwindigkeit: Hilfe zeigen... Variablen zeigen

```
T:TEXTFELD
T.füllfarbe:=rot
T.schriftfarbe:=weiß
T.zeileHinzufügen('EOS')
T.schriftgröße:=20
T.verschiebenNach(-30,25)
```

EOS

... then continuing with Scratch

The screenshot displays the Scratch web interface. At the top, there is a blue header with the Scratch logo, navigation links for 'File', 'Edit', and 'Tutorials', and buttons for 'Join Scratch' and 'Sign in'. Below the header, the interface is divided into several sections:

- Left Panel:** A vertical sidebar with colored icons for different categories: Motion (blue), Looks (purple), Sound (pink), Events (yellow), Control (orange), Sensing (teal), Operators (green), Variables (orange), and My Blocks (red).
- Code Area:** A workspace with a grid background where a script is being built. It starts with a yellow 'when green flag clicked' block, followed by a blue 'move 10 steps' block.
- Stage:** A large white area where the cat sprite is currently positioned in the center.
- Right Panel:** A control panel for the selected sprite, 'Figur1'. It shows the sprite's name, its x and y coordinates (both 0), its size (100), and its direction (90 degrees). There are also buttons for 'Show' and 'Backdrops'.

Learning Tcl

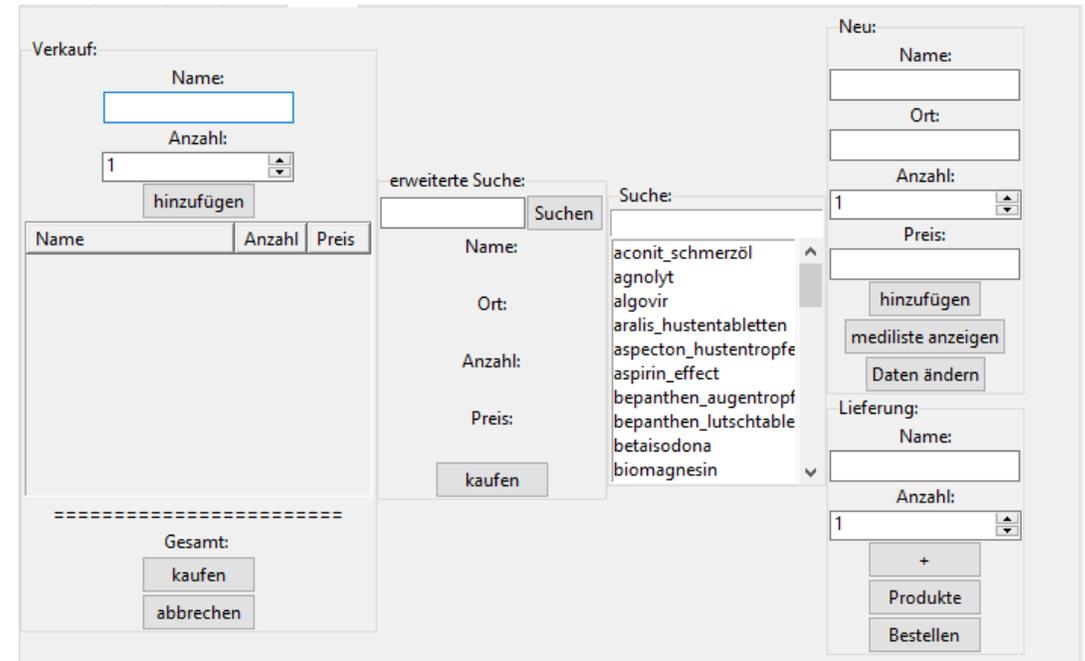
- Variables and Procedures with arguments
- Control structures (for, foreach & while)
- Lists and Strings
- Tk (Buttons, labels, text...)
- Object Orientation and Widgets

My First Bigger Projects:

- Editor



- A pharmacy inventory



Turing machine

0	0	0	0	0	1	1	1	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---



State:
A

Rules

State	Read	New state	Write	Move
A	0	A	0	R
A	1	B	2	R
B	0	C	0	L
B	1	B	2	R
C	0	B	0	R
C	2	C	1	L

Turing machine

0	0	0	0	0	1	1	1	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---

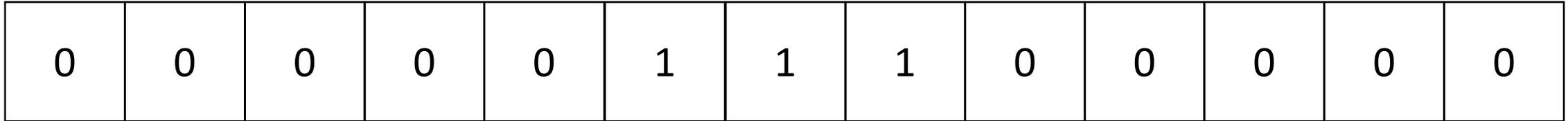


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Turing machine



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B	1	B	2	R
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C	2	C	1	L

Live Demo Turing machine:

turinggraf_presentation

File

0000011100000

State	read	new state	write	move
A	0	A	0	R
A	1	B	2	R
B	0	C	0	L
B	1	B	2	R
C	0	B	0	R
C	2	C	1	L

start stop step save load

200

A

add

...Multiply

11111x111

start stop step save load

200

A

State	read	new state	write	move
A	1	B	-	R
A	x	K	-	R
B	1	B	1	R
B	x	C	x	R
C	1	C	1	R
C	=	D	=	L
C	-	D	=	L
D	1	E	A	R

add



111x1AA=1111

start stop step save load

300

E

State	read	new state	write	move
A	1	B	-	R
A	x	K	-	R
B	1	B	1	R
B	x	C	x	R
C	1	C	1	R
C	=	D	=	L
C	-	D	=	L
D	1	E	A	R

add

...Fibonacci

11111

start stop step save load

300

A

State	read	new state	write	move
A	1	B	-	R
B	1	C	-	R
B	-	S	1	R
C	1	D	-	R
C	-	S	1	R
D	1	D	1	R
D	-	E	:	R
E	-	F	1	R

add



1:::AA=111

start stop step save load

300

L

State	read	new state	write	move
A	1	B	-	R
B	1	C	-	R
B	-	S	1	R
C	1	D	-	R
C	-	S	1	R
D	1	D	1	R
D	-	E	:	R
E	-	F	1	R

add