

"Always code as if the guy
who ends up maintaining your
code will be a violent
psychopath who knows where
you live."

JOHN WOODS.



@riverglide



@andypalmer



@antonymarcano



@jmrtn



@pro_cessor





Ψ

INFORMATIK

Keine Naturwissenschaft

EINSTELLUNGSÄHNLICHKEIT
KORRELIERT POSITIV MIT DER
INTERPERSONELLEN ANZIEHUNG

GLEICH UND GLEICH
EINSTELLUNGSÄHNLICHKEIT
KORRELIERT POSITIV MIT DER
INTERPERSONELLEN ANZIEHUNG
GESELLT SICH GERN

DIE GRAVITATIONSBEDINGTE
VERTIKALE DISLOKATION
MALIFORMER AGRARPRODUKTE
AUS DER POSITION IHRER
BIO-GENESE ERFOLGT IN
DER REGEL PROXITRUNKIAL

DER APFEL FÄLLT NICHT
DIE GRAVITATIONSBEDINGTE
VERTIKALE DISLOKATION
MALIFORMER AGRARPRODUKTE
AUS DER POSITION IHRER
BIO-GENESE ERFOLGT IN
DER REGEL PROXITRUNKIAL
WEIT VOM STAMM

*Wir schreiben für die
MASCHINE
anstatt für uns.*

S

Open –
Closed
Principle

Liskov
Substitution
Principle

Interface
Segregation
Principle

Dependency
Inversion
Principle

S

O

Liskov
Substitution
Principle

Interface
Segregation
Principle

Dependency
Inversion
Principle

S

O

L

Interface
Segregation
Principle

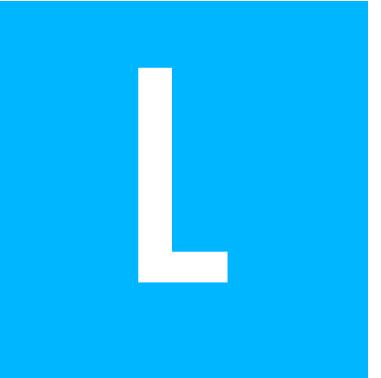
Dependency
Inversion
Principle



S



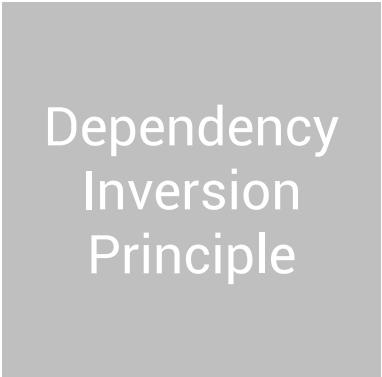
O



L



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Dependency
Inversion
Principle

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Release-
Reuse
Equivalency
Principle

Common
Reuse
Principle

Common
Closure
Principle

Acyclic
Dependency
Principle

Stable
Abstractions
Principle

Stable
Dependencies
Principle

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RR

Common
Reuse
Principle

Common
Closure
Principle

Acyclic
Dependency
Principle

Stable
Abstractions
Principle

Stable
Dependencies
Principle

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RR

CR

Common
Closure
Principle

Acyclic
Dependency
Principle

Stable
Abstractions
Principle

Stable
Dependencies
Principle

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RR

CR

CC

Acyclic
Dependency
Principle

Stable
Abstractions
Principle

Stable
Dependencies
Principle

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Stable
Abstractions
Principle

Stable
Dependencies
Principle

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Stable
Dependencies
Principle

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SA

SD

Tell, don't ask

DRY

KISS

YAGNI

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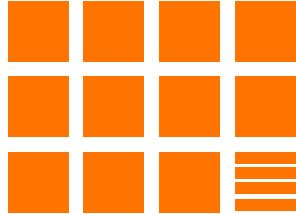
SD

Tell, don't ask

DRY

KISS

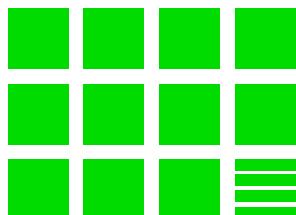
YAGNI



Machine

SEPARATION

Domain



??

EMPATHIE

Von Person zu Person

**EMPATHY IS THE CAPACITY TO
THINK AND FEEL ONESELF INTO
THE INNER LIFE OF ANOTHER
PERSON**

Heinz Kohut
Psychoanalyst

HALTET EIN
Da kommt noch mehr!

Simple First

Paradigm-
Commitment

Abstraction
Segregation

Domain
Relationship

Listening
and
Learning

Languages

Binary
Dependency

Domain
Language

Shared
Under-
standing

Eloquence

Patterns
aren't
solutions

Weasel Word
Removal

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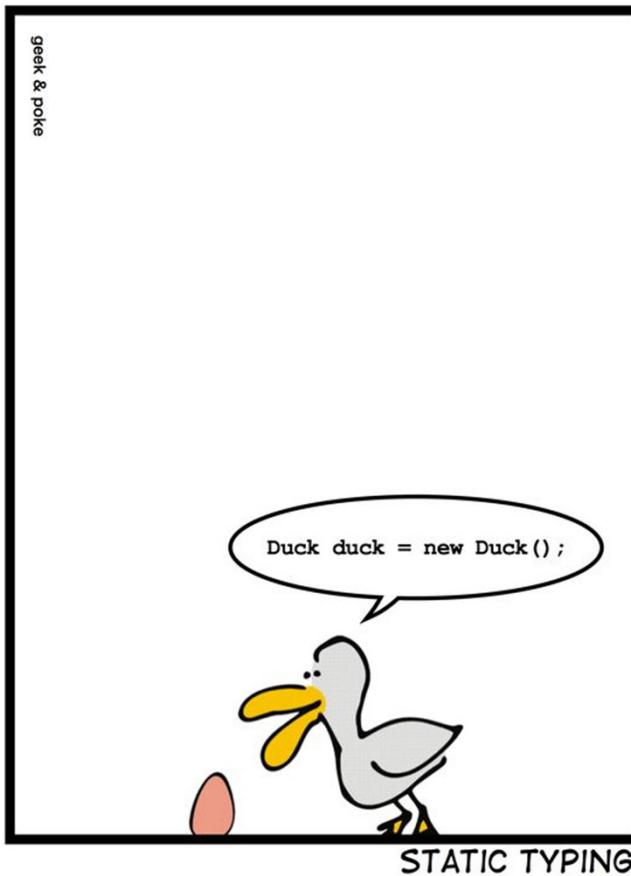
Weasel Word
Removal

Simple First!

ERST MAL EINFACH

Richtig schwer!

SIMPLY EXPLAINED



C#

Duck duck = new Duck();

Python

```
duck = Duck()
```

C# - DRY

```
var duck = new Duck();
```

*Es steht ein
ZUG.UN.GLÜCK
bevor*

Tell.

DON'T ASK

Or: The Law of Demeter

```
if(Customer.Email.Address.Value.IsValid)
{
    Send(Customer.Email.Address, message);
}
```

```
if(Customer.IsValidEmail())
{
    Send(Customer.Email.Address, message);
}
```

Customer .Send(message)

Message.SendTo(Customer)

**DON'T LET A STRANGER TOUCH
YOUR PRIVATES**



SIZE & REUSE



Keine
ÜBERRASCHUNGEN
Was erwartest du?

A problem has been detected and Windows has been shut down to prevent damage to your computer.

The end-user manually generated the crashdump.

If this is the first time you've seen this Stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any Windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use Safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup Options, and then select Safe Mode.

Technical information:

*** STOP: 0x000000E2 (0x00000000, 0x00000000, 0x00000000, 0x00000000)

Beginning dump of physical memory
Physical memory dump complete.

Contact your system administrator or technical support group for further assistance.

NULLOBJEKTE

SPÜRE DEINEN CODE

*Man sieht nur mit dem Herzen
gut*

```
public void Execute(MainViewModel mainViewModel)
{
    mainViewModel.Done = () => Break(mainViewModel);
    mainViewModel.StartCounter();
}

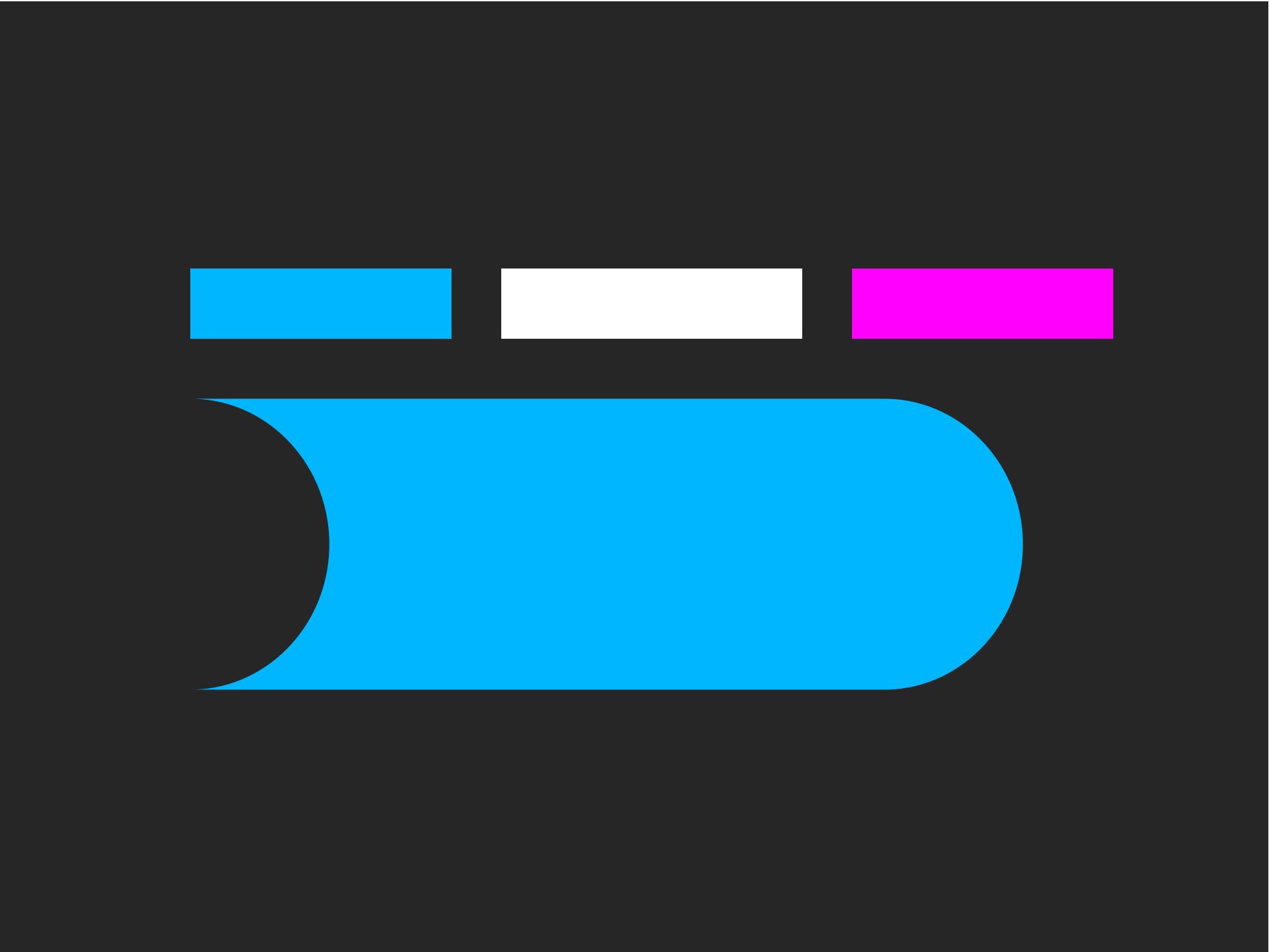
public void Break(MainViewModel model)
{
    model.Color = 0x00DBFF.Rgb().Brush();
    model.TimeLeft = 5.Minutes();
    model.Done = () => Work(model);
    model.StartCounter();
}

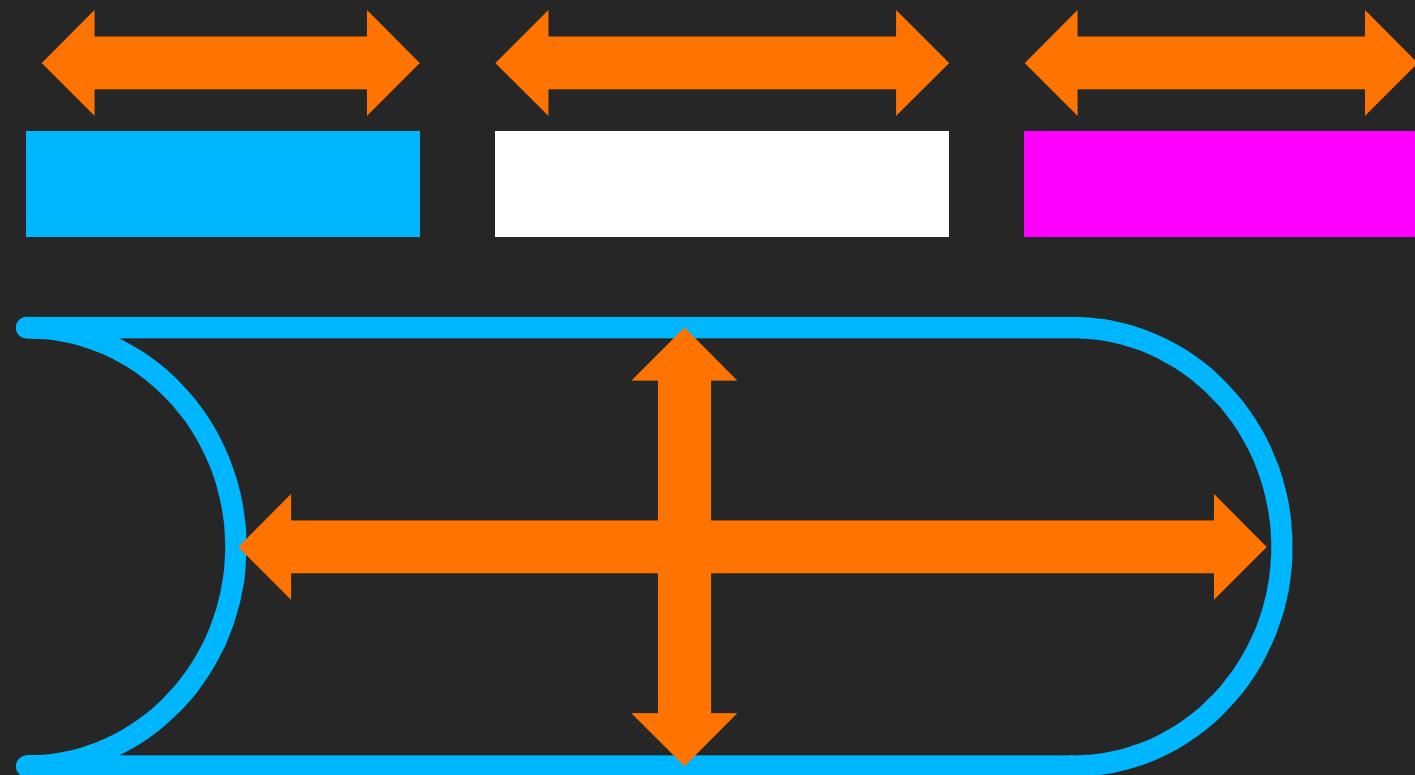
public void Work(MainViewModel model)
{
    model.Color = 0x00DB00.Rgb().Brush();
    model.TimeLeft = 25.Minutes();
    model.Done = () => Break(model);
    model.StartCounter();
}
```

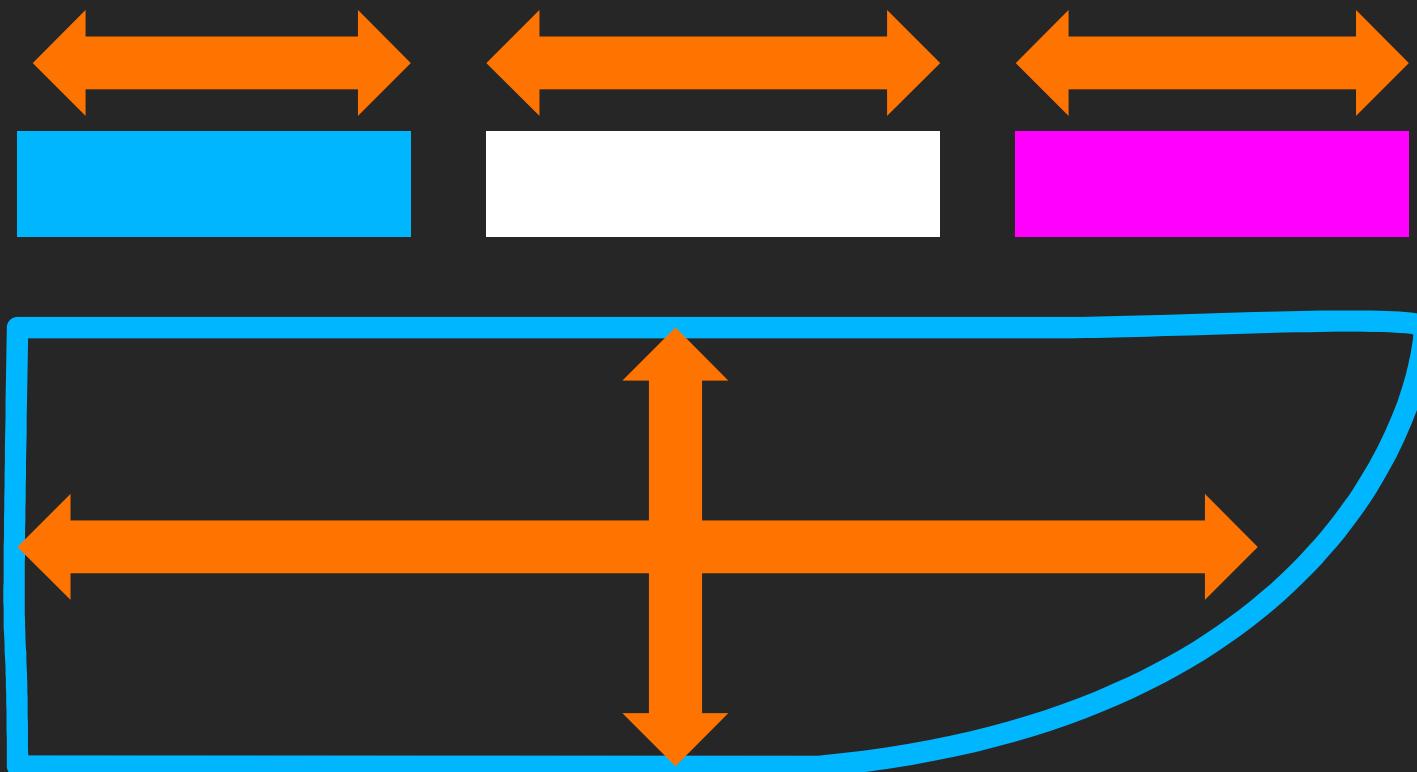
```
public void Execute(MainViewModel mainViewModel)
{
    mainViewModel.Done = () => Break(mainViewModel);
    mainViewModel.StartCounter();
}

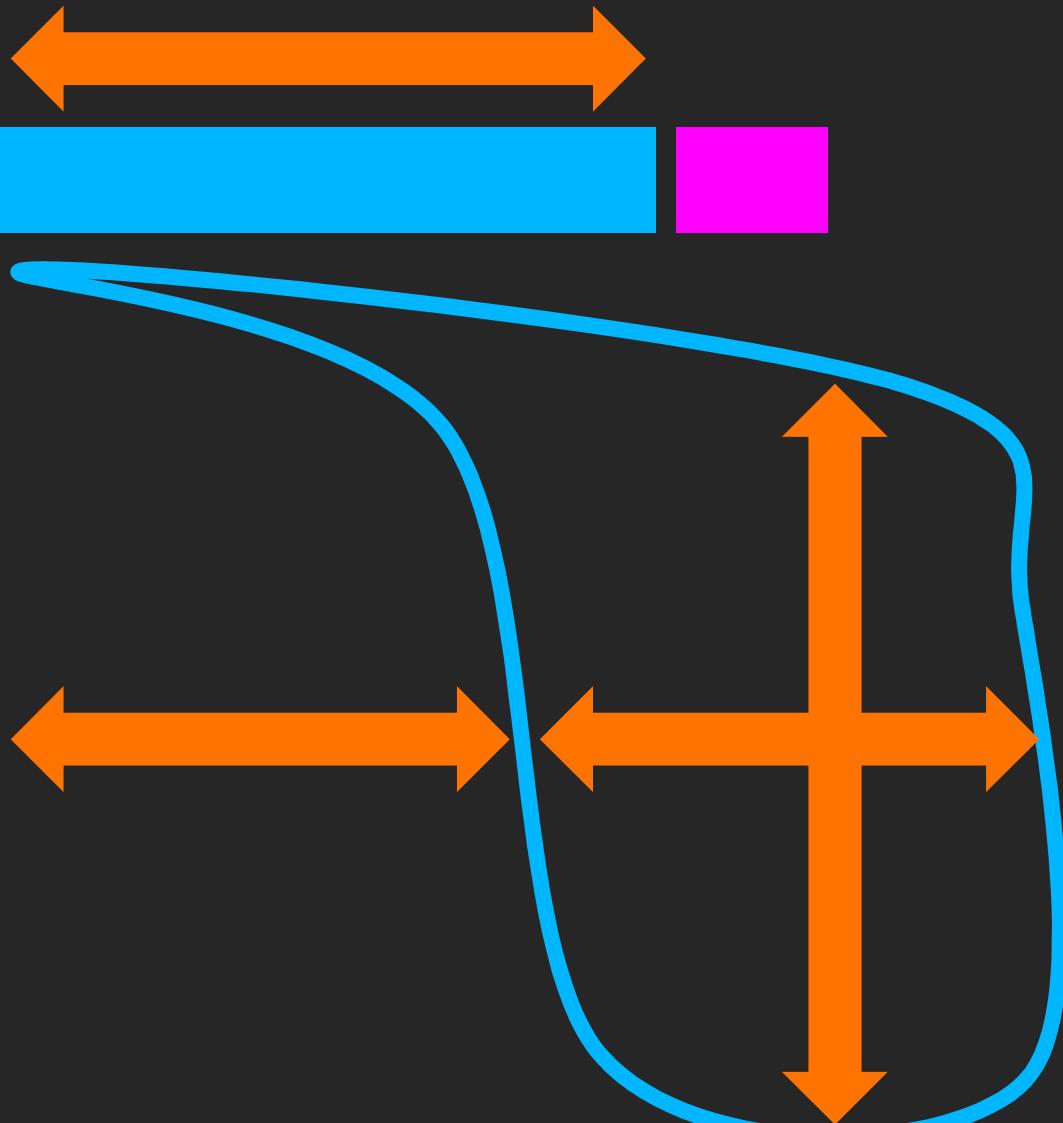
public void Break(MainViewModel model)
{
    model.Color = 0x00DB77.Rgb().Brush();
    model.TimeLeft = 5.Minutes();
    model.Done = () => Work(model);
    model.StartCounter();
}

public void Work(MainViewModel model)
{
    model.Color = 0x00DB00.Rgb().Brush();
    model.TimeLeft = 25.Minutes();
    model.Done = () => Break(model);
    model.StartCounter();
}
```









```
def filter(markup):
    return add_twitter_names(markup)

def add_twitter_names(markup):
    pattern = "@(\w+)"
    url = "https://twitter.com/"
    link = "<a href='%s\\1'>@\\1</a>" % url
    replacement = link
    return re.sub(pattern, replacement, markup)

def home(entries):
    markup = create_page(entries)
    markup = filter(markup)
    return markup

def main():
    entries = Entries()
    if len(argv) > 1:
        date = argv[1]
        entries = entries.written_on(date)
    print home(entries)
```

Die einfachste
METRIK
für die C-Familie

SIGNATURE SURVEY

Datei (<loc>): { ; }

Code

PHILOSOPHIE

Und Maximen

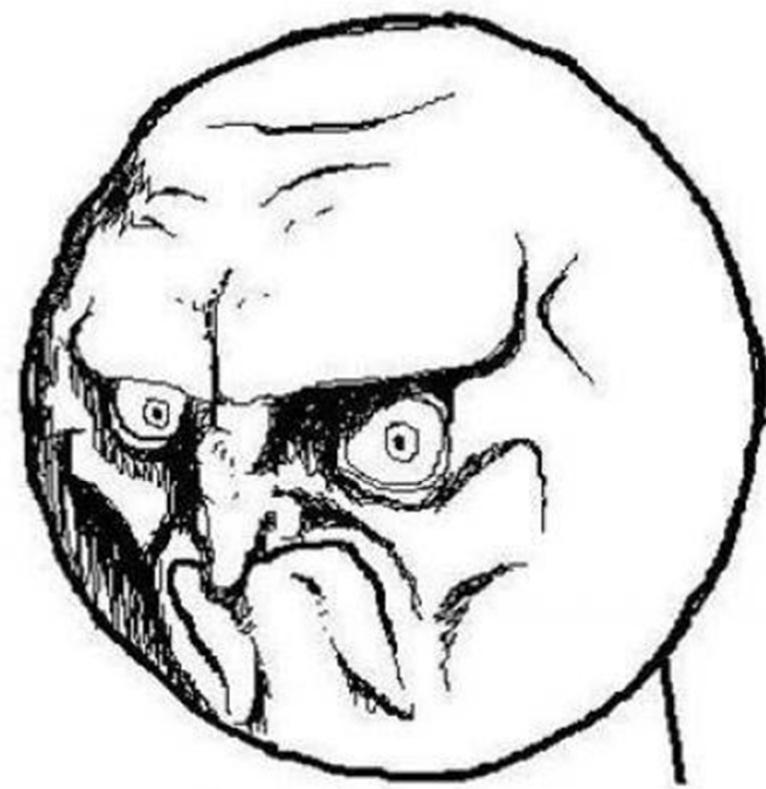
```
>>> import this
```

**IF THE IMPLEMENTATION IS HARD
TO EXPLAIN, IT'S A BAD IDEA.**

python

Richtig
ZUHÖREN
und dabei lernen!

**WIR BRAUCHEN EINEN
AUTOMOCKER.**



NO.

**DIESE KLASSE IST SCHWER ZU
TESTEN.**

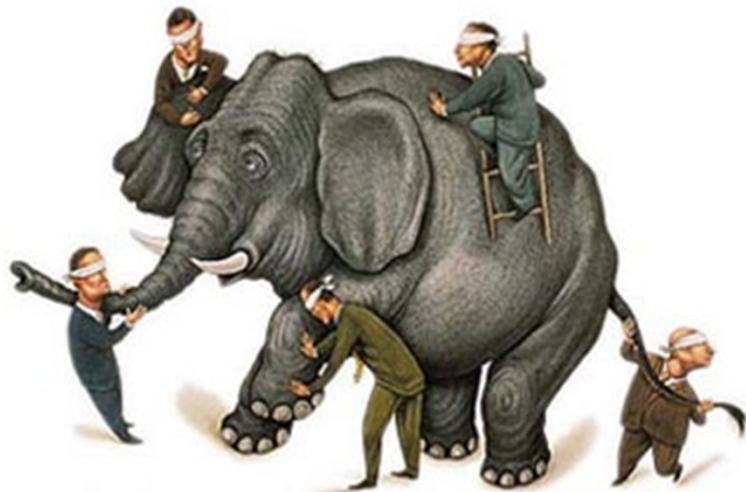


NO.

Shared Understanding

DAS GLEICHE SAGEN

vom selben Elephanten



Simple First

Paradigm-
Commitment

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Eloquence

Patterns
aren't
solutions

Weasel Word
Removal

Unabhängig von der Sprache

IM PARADIGMA BLEIBEN

Und es verstehen

OBJEKTE

FUNKTIONEN

Polyglott

SPRACHEN

*C#, F#, Prolog, Io, Haskell, Brainfuck, Python, Ruby,
Javascript, Lisp, Smalltalk, C++, C, Java, Groovy, Scala,
Clojure, Perl, R*

**VIELLEICHT IST DEINE
PROGRAMMIERSPRACHE
UNGEEIGNET, UM ES
GENAU SO ZU TUN**

<https://github.com/cessor/refactoring>

```
private static TimeSpan Transform(this IEnumerable<int> digits)
{
    int result = 0;
    var r = digits.ToList();
    for (int j = 0; j < r.Count; j++)
    {
        int i = (int)Math.Pow(60, j / 2);
        int rTimesI = r[r.Count - j - 1] * i;

        result += (j % 2 == 1)
                  ? rTimesI * 10
                  : rTimesI;
    }
    return TimeSpan.FromSeconds(result);
}
```

```
private static TimeSpan Transform(this IEnumerable<int> digits)
{
    var secondsPerUnit = new [] { 1,10,60,600,3600,36000 };

    return digits
        .Reverse()
        .Zip(secondsPerUnit, (digit, unit) => digit * unit)
        .Sum()
        .Seconds();
}
```

Gesprochene,
NATÜRLICHE
Sprache

```
var date = new DateTime(2012, 4, 14, 16, 32, 18, 500);
```

```
var start = 14.April(2012).At(8.PM());
```

```
var end = 8.Hours().Later(start);
```

Eloquenz

SPRACHFERTIGKEIT

Eine Sprache richtig sprechen

**WENN DU MIR ERKLÄREN KANNST,
WAS DA PASSIERT, WIESO STEHT
DAS DA DANN NICHT?**

```
[Test]
public void ShouldConvertAnEvenNumberOfDigitsToATimespan()
{
    // Arrange
    var bytes = new byte[] { 0, 0, 1, 5, 0, 5 };
    var expected = new TimeSpan(0, 0, 15, 5, 0);

    // Act
    var actual = Transform(bytes);

    // Assert
    actual.Should().Equal(expected);
}
```

```
When.IType(1, 5, 0, 5).And()  
.TransformTheDigits()  
.Then().TheResult().Should().Equal(  
15.Minutes().And(5.Seconds()))  
);
```

ShouldConvertASmallerListWithAnEvenCountOfDigits : Passed

When I type: 1, 5, 0, 5, and transform the digits
Then the result should be 00:15:05

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Trennen von Einzelheiten
ABSTRAKTION
in Domäne und Maschine

for int i=0;

GetCustomer

Ist etwas
EXCEPTION_{ell,}
Wenn du es erwartest?





Beschwerden

COMPLAINTS

Wenn ein Problem besteht



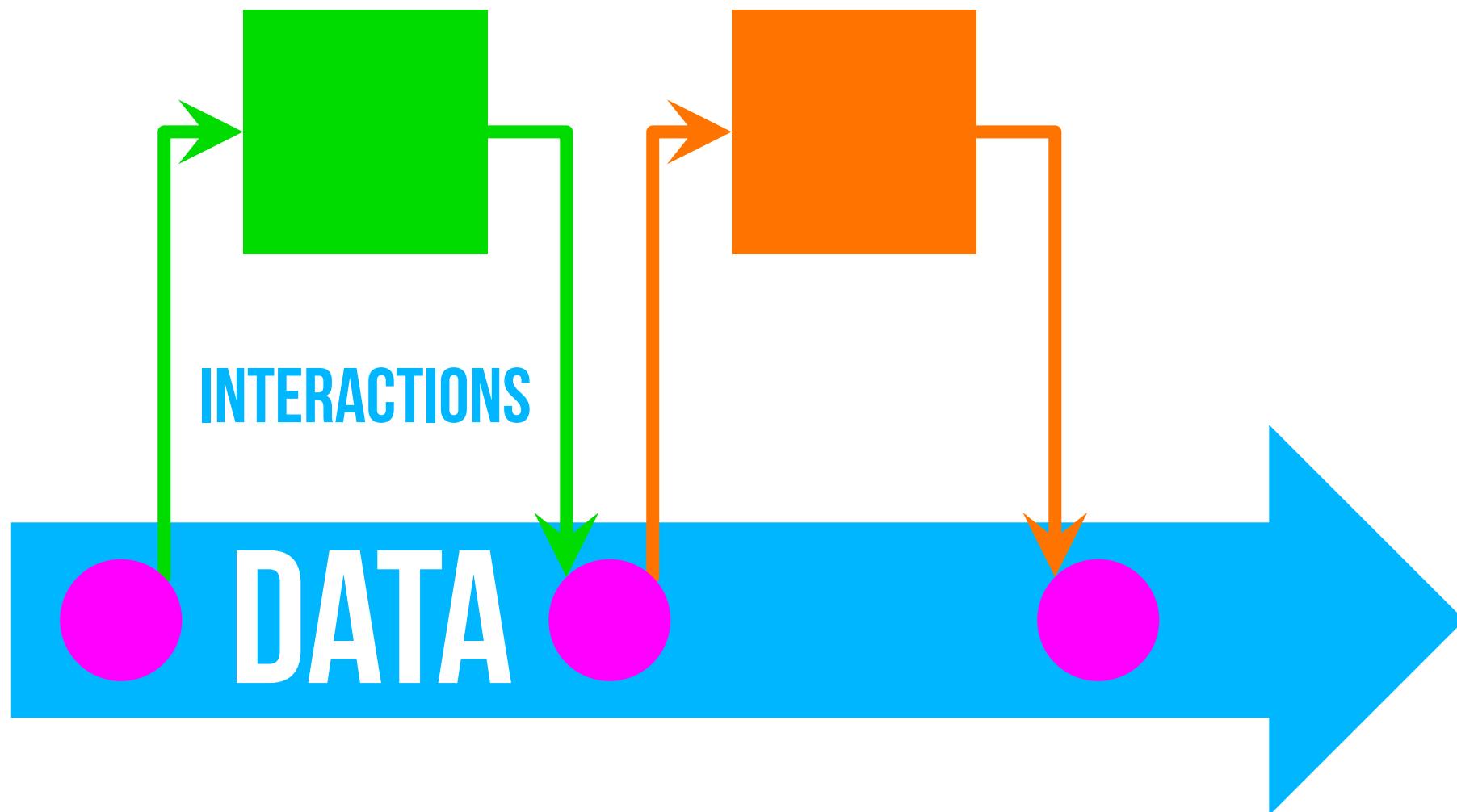
Entschuldigung
APOLOGIES
Wenn es verzeihbar ist

$$x = 1 + 2$$

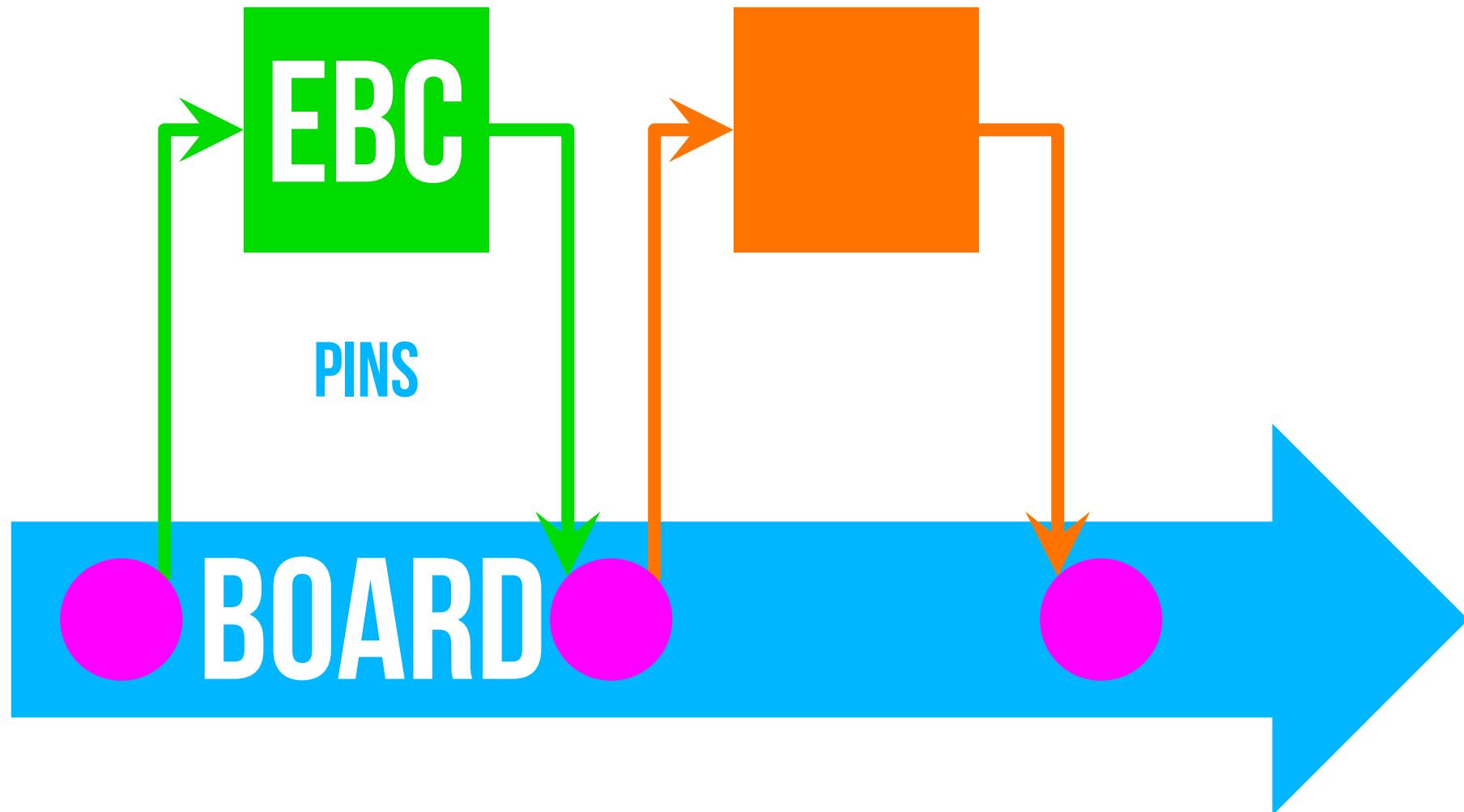
BINÄRE ABHÄNGIGKEIT

Meist reicht das.

DEPENDENT-ON COMPONENTS



EVENT BASED COMPONENTS



Imports
Parameter
Binäre Bäume

Design Patterns

ENTWURFSMUSTER

Sind keine Lösung



<https://twitter.com/#!/jmrtn>

<http://jmrtn.com/notes/2012/02/17/design-patterns.html>

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Wenn du darüber sprichst...

DOMÄNENBEZUG

...ist es wahrscheinlich wichtig

**EMAIL ADRESSEN
SIND KEINE STRINGS**

TINY TYPES

DINGE MÜSSEN
NICHT KÖNNEN
ABER SIE KÖNNEN

SEIN

Email

InvalidEmail

POLYMORPHISMEN

TYPEN

Ubiquitous Language

DOMÄNENSPRACHE

Gegen Babylonische Sprachverwirrung

SYSTEMISCHE METAPHER

KLARE NAMEN

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Never Touch a
RUNNING
System

Never Change a
RUNNING
System

*Always run a
CHANGING
*System**

BLIND MEN AND THE ELEPHANT

JOHN GODFREY SAXE

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

The *First* approached the
Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
"God bless me!—but the Elephant
Is very like a wall!"

The Second, feeling of the tusk,
Cried:"Ho!—what have we here
So very round and smooth and
sharp?

To me 't is mighty clear
This wonder of an Elephant
Is very like a spear!"

The *Third* approached the animal,
And happening to take
The squirming trunk within his
hands,
Thus boldly up and spake:
"I see," quoth he, "the Elephant
Is very like a snake!"

The *Fourth* reached out his eager
hand,

And felt about the knee.

"What most this wondrous beast
is like

Is mighty plain," quoth he;

"T is clear enough the Elephant
Is very like a tree!"

The *Fifth*, who chanced to touch
the ear,
Said: "E'en the blindest man
Can tell what this resembles
most;
Deny the fact who can,
This marvel of an Elephant
Is very like a fan!"

The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail
That fell within his scope,
"I see," quoth he, "the Elephant
Is very like a rope!"

And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly
in the right,
And all were in the wrong!

So, oft in theologic wars
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean,
And prate about an Elephant
Not one of them has seen!



Blue
Rgb,
0,183,255



Orange,
Rgb,
255,116,0



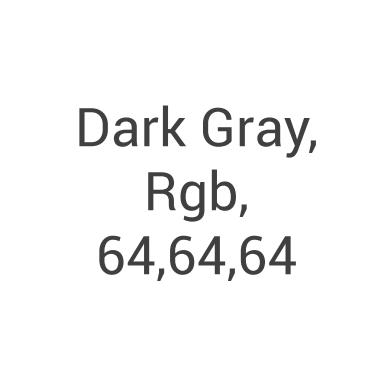
Green,
Rgb
0,219,0



Magenta,
#FF00FF



Light Gray,
Rgb,
191,191,191



Dark Gray,
Rgb,
64,64,64

The blind men and the elephant

http://en.wikisource.org/wiki/The_poems_of_John_Godfrey_Saxe/The_Blind_Men_and_the_Elephant

Elephant

<http://inquiry111westminster.wikispaces.com/Blind%20men%20and%20an%20elephant>

Inspired by and using the fonts suggested at

<http://www.labnol.org/software/tutorials/advice-select-best-fonts-for-powerpoint-presentation-slides/3355/>

Duck Duck Duck

<http://geekandpoke.typepad.com/geekandpoke/2012/03/static-typing.html>

Rapist

<http://rasmussenanders.blogspot.de/2011/03/catholic-priests-raping-nuns.html>

Bundeswehr

http://www.bmlv.gv.at/download_archiv/photos/inlandseinsatz/images/hochwasser_august_26.jpg

Complaints

<http://wayne.usschesapeake.org/wp-content/uploads/2011/06/Shout.png>

Apologies

<http://www.5lovelanguages.com/learn-the-languages/the-five-languages-of-apology/>

Signature Survey

<http://c2.com/doc/SignatureSurvey/>