JEDAI Institut Joan d'Àustria

Taller de Code Kata

Criteris d'acceptació

ID	TITLE	PRIORITY
#US-001	FizzBuzz Evaluator	M

As a	TDD newie
I want	to evaluate a number in FuzzBuzz Evaluator
so that	I can get quickly the associated result

TYPE	NOTES	SIZE

Independent | Negotiable | Valuable | Estimable | Small | Testable www.scrumdepot.com

Acceptance Criteria

Scenario: *Numbers that are not multiple of 3 and/or 5*

Given my FizzBuzz Evaluator
When I evaluate the number <number>
Then the result will be <number>
Examples: 1, 2, 4, 8, 11, 13, 16, 17, 19

Acceptance Criteria

Scenario: *Numbers that are multiple of 3*

Given my FizzBuzz Evaluator
When I evaluate the number <number>
Then the result will be *Fizz*

Examples: 3, 6, 9, 12

Acceptance Criteria

Scenario: *Numbers that are multiple of 5*

Given my FizzBuzz Evaluator
When I evaluate the number <number>
Then the result will be *Buzz*

Examples: 5, 10, 20, 25

Acceptance Criteria

Scenario: *Numbers that are multiple of 3 and 5*

Given my FizzBuzz Evaluator
When I evaluate the number <number>
Then the result will be *FizzBuzz*

Examples: 15, 30, 45, 60

ID	TITLE	PRIORITY
#US-001	FizzBuzzBazz Evaluator	M

As a	young student
I want	to evaluate a number in FuzzBuzzBazz Evaluator
so that	I can get quickly the associated result

TYPE	NOTES	SIZE
	EPIC: Common Number Utilities	

Independent | Negotiable | Valuable | Estimable | Small | Testable www.scrumdepot.com

Acceptance Criteria

Scenario: *Numbers that are not multiple of 3, 5 and/or 7*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be <number>
Examples: 1, 2, 4, 8, 11, 13, 16, 17, 19

Acceptance Criteria

Scenario: *Numbers that are multiple of 3*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *Fizz*

Examples: 3, 6, 9, 12

Acceptance Criteria

Scenario: *Numbers that are multiple of 5*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *Buzz*

Examples: 5, 10, 20, 25

Acceptance Criteria

Scenario: *Numbers that are multiple of 7*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *Bazz*

Examples: 7, 14, 28, 49

Acceptance Criteria

Scenario: *Numbers that are not multiple of 3 and 5*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *FizzBuzz*

Examples: 15, 30, 45, 60

Acceptance Criteria

Scenario: *Numbers that are multiple of 3 and 7*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *FizzBazz*

Examples: 21, 42, 63, 84

Acceptance Criteria

Scenario: *Numbers that are multiple of 5 and 7*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be *BuzzBazz*

Examples: 35, 70, 140, 175

Acceptance Criteria

Scenario: *Numbers that are multiple of 3, 5 and 7*

Given my FizzBuzzBazz Evaluator
When I evaluate the number <number>
Then the result will be FizzBuzz*Bazz*

Examples: 105, 210, 420, 630

ID	TITLE	PRIORITY
#US-002	**Convert from decimal to roman**	**M**

As a	Math enthusiast
I want	to convert a number from decimal to roman notation
so that	I can get quickly the associated result

TYPE	NOTES	SIZE
	EPIC: Common Number Utilities	

Acceptance Criteria

Scenario: *Convert base numbers from decimal to roman*

Given my decimal to roman conversor
When I convert the decimal number *<decimal>* to roman
Then the roman number will be *<roman>*

Examples:

1	I
4	IV
5	V
9	IX
10	X
40	XL
50	L
90	XC
100	C
400	CD
500	D
900	CM
1000	M

Acceptance Criteria

Scenario: *Convert complex numbers from decimal to roman*

Given my decimal to roman conversor
When I convert the decimal number *<decimal>* to roman
Then the roman number will be *<roman>*

Examples:

2	II	289	CCLXXXIX
3	III	78	LXXVIII
6	VI	256	CCLVI
7	VII	395	CCCXCV
20	XX	228	CCXXVIII
21	XXI	1997	MCMXCVII
1903	MCMIII	472	CDLXXII
33	XXXIII	898	DCCCXCVIII
147	CXLVII	2010	MMX
33	XXXIII	769	DCCLXIX
147	CXLVII	3548	MMMDXLVIII
365	CCCLXV	2971	MMCMLXXI
94	XCIV		

ID	TITLE	PRIORITY
#US-003	**Convert from roman to decimal**	M

As a	Math enthusiast
I want	to convert a number from roman to decimal notation
so that	I can get quickly the associated result

TYPE	NOTES	SIZE
	EPIC: Common Number Utilities	

Acceptance Criteria

Scenario: *Convert base numbers from roman to decimal*

Given my roman to decimal conversor
When I convert the roman number *<roman>* to decimal
Then the decimal number will be *<decimal>*

Examples:

I	1
IV	4
V	5
IX	9
X	10
XL	40
L	50
XC	90
C	100
CD	400
D	500
CM	900
M	1000

Acceptance Criteria

Scenario: *Convert complex numbers from roman to decimal*

Given my roman to decoma conversor
When I convert the roman number *<roman>* to decimal
Then the decimal number will be *<decimal>*

Examples:

II	2	CCLXXXIX	289
III	3	LXXVIII	78
VI	6	CCLVI	256
VII	7	CCCXCV	395
XX	20	CCXXVIII	228
XXI	21	MCMXCVII	1997
MCMIII	1903	CDLXXII	472
XXXIII	33	DCCCXCVIII	898
CXLVII	147	MMX	2010
XXXIII	33	DCCLXIX	769
CXLVII	147	MMMDXLVIII	3548
CCCLXV	365	MMCMLXXI	2971
XCIV	94		

ID	TITLE	PRIORITY
#US-004	**Prime Factors Generator**	M

As a	Math enthusiast
I want	to get a list with prime factors of a given number
so that	I can get quickly the associated result

TYPE	NOTES	SIZE
	EPIC: Common Number Utilities	

Acceptance Criteria

Scenario: *Prime factors of prime numbers*

Given a Prime Factors Generator
When I evaluate the prime factors of *<number>*
Then the prime factors list is *<result>*
Examples:

2	[2]
3	[3]
5	[5]
7	[7]
11	[11]
13	[13]
17	[17]
19	[19]
23	[23]
29	[29]
31	[31]

Acceptance Criteria

Scenario: *Prime factors of not prime numbers*

Given a Prime Factors Generator
When I evaluate the prime factors of *<number>*
Then the prime factors list is *<result>*

Examples:

4	[2,2]
6	[2,3]
8	[2,2,2]
9	[3,3]
12	[2,2,3]
24	[2,2,2,3]
72	[2,2,2,3,3]
75	[3,5,5]
204	[2,2,3,17]
450	[2,3,3,5,5]
1092	[2,2,3,7,13]

ID	TITLE	PRIORITY
#US-005	**Math Expression Evaluator**	M

As a	Math enthusiast
I want	to evaluate simple math expressions stored in string
so that	I can get quickly the associated result

TYPE	NOTES	SIZE
	EPIC: Common Number Utilities	

Independent | Negotiable | Valuable | Estimable | Small | Testable www.scrumdepot.com

Acceptance Criteria

Scenario: *Evaluate basic math expressions*

Given a math expression evaluator
When I evaluate the math expression *<expression>*
Then the math result will be *<result>*

Examples:

3 + 5	8
2 - 3	-1
4 * 2	8
4 / 2	2
3 % 2	1
1+15	16
12-3	9
5-3	2
3*2	6
3/2	1.5
4%2	0
3 + 5 + 10	18
3 + 5 - 5	3
3 * 5 * 2	30

Acceptance Criteria

Scenario: *Evaluate math expressions with operators precedence*

Given a math expression evaluator
When I evaluate the math expression *<expression>*
Then the math result will be *<result>*

Examples:

3 + 5 * 2	13
4 + 5 * 3	19
2 + 3 * 5 - 1	16
3 * 3 + 5 + 4 - 3 * 2 – 1	11
3 * 3 + 5 + 4 + 3 / 2 - 3 * 2 - 1	12.5

Acceptance Criteria

Scenario: *Evaluate math expressions with parenthesis*

Given a math expression evaluator
When I evaluate the math expression *<expression>*
Then the math result will be *<result>*

Examples:

(3 + (-3))	0
(3 + -3)	0
(3 + 5)	8
((3 + 5))	8
(3*2+5)	11
(10+2*6)	22
(100 * 2) + 12	212
100 * (2 + 12)	1400
100 * (2 + 12) / 14	100
((20 - 10) * (30 - 20) + 10) * 2	220
(((20 - 10)) * (30 - 20) + 10) * 2	220
((20 - 10) * (30 - 20) / 10 + 10) * 2	40

Acceptance Criteria

Scenario: *Evaluate invalid math expressions*

Given a math expression evaluator
When I evaluate the illegal math expression *<expression>*
Then a math invalid expression error will be thrown
Examples:
hola
2 x 1
2 * a
2 * 3 + a
(2 + 3
2 + 3)
2 + 3 +
* 3 - 5
2 + 3)
((2 + 3)
2 + 3))
((20 - 10) * 30 - 20) + 10) * 2
(((20 - 10) * (30 - 20) + 10) * 2
((20 - 10) * (30 - 20 / 10 + 10) * 2

ID	TITLE	PRIORITY
#US-006	**Conway's Game of Life**	

As a	Agile Developer
I want	to implements Conway's Game of Life
so that	I can practice ATDD and TDD

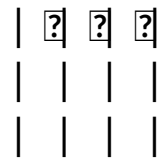
TYPE	NOTES	SIZE
	See acceptance criterias to determine rules	

Independent | Negotiable | Valuable | Estimable | Small | Testable www.scrumdepot.com

Acceptance Criteria

Scenario: *Center dead cell with 0 live neighbors dies*

Given the following board



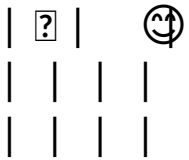
When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 1 live neighbor dies*

Given the following board



When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 2 live neighbors dies*

Given the following board

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 3 live neighbors lives*

Given the following board

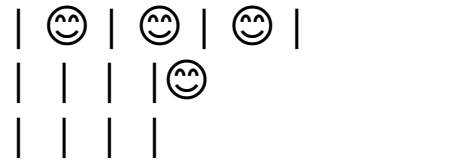
When I evolve the universe

Then the center cell should be ***live***

Acceptance Criteria

Scenario: *Center dead cell with 4 live neighbors dies*

Given the following board



When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 5 live neighbor dies*

Given the following board

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 6 live neighbors dies*

Given the following board

When I evolve the universe

Then the center cell should be dead

Acceptance Criteria

Scenario: *Center dead cell with 7 live neighbors dies*

Given the following board

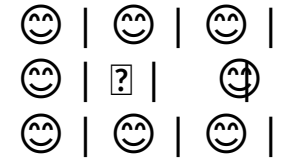
When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center dead cell with 8 live neighbors dies*

Given the following board



When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 0 live neighbors dies*

Given the following board

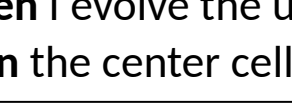
When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 1 live neighbor dies*

Given the following board



When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 2 live neighbors lives*

Given the following board

When I evolve the universe

Then the center cell should be ***live***

Acceptance Criteria

Scenario: *Center live cell with 3 live neighbors lives*

Given the following board

😊	😊	😊
▯		😊 ▯

When I evolve the universe

Then the center cell should be ***live***

Acceptance Criteria

Scenario: *Center live cell with 4 live neighbors dies*

Given the following board

😊	😊	😊
	😊	😊

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 5 live neighbors dies*

Given the following board

😊	😊	😊
😊	😊	😊

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 6 live neighbors dies*

Given the following board

😊	😊	😊
😊	😊	😊
😊	▯	▯

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 7 live neighbors dies*

Given the following board

😊	😊	😊
😊	😊	😊
😊	😊	□

When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

Scenario: *Center live cell with 8 live neighbors dies*

Given the following board

😊	😊	😊
😊	😊	😊
😊	😊	😊

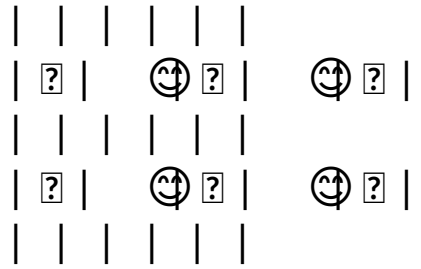
When I evolve the universe

Then the center cell should be ***dead***

Acceptance Criteria

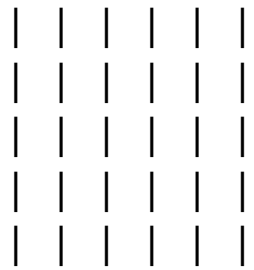
Scenario: *Sparse grid with nobody staying alive*

Given the following board



When I evolve the universe

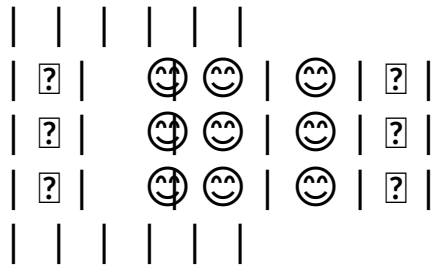
Then I should see the following board



Acceptance Criteria

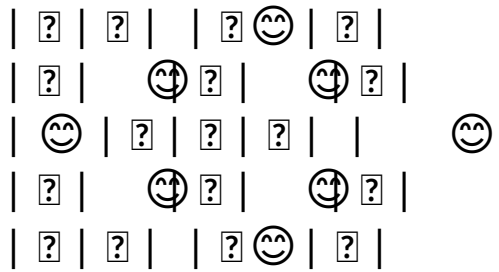
Scenario: *Over-crowded grid*

Given the following board



When I evolve the universe

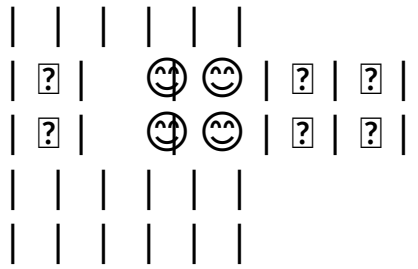
Then I should see the following board



Acceptance Criteria

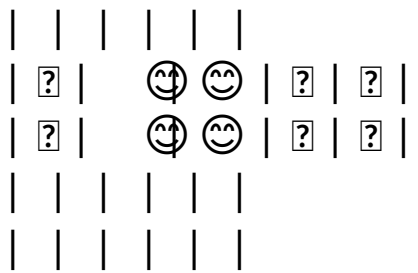
Scenario: *Static Structure > Block*

Given the following board



When I evolve the universe

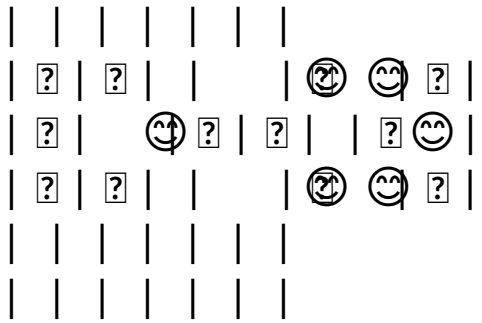
Then I should see the following board



Acceptance Criteria

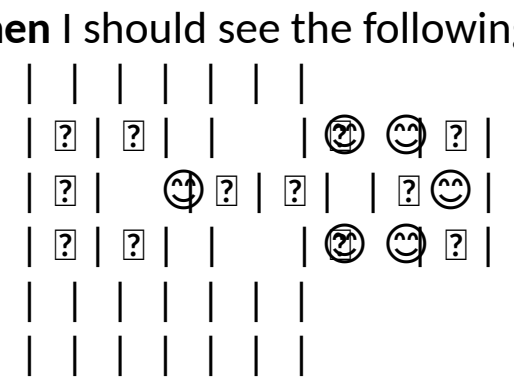
Scenario: *Static Structure > Beehive*

Given the following board



When I evolve the universe

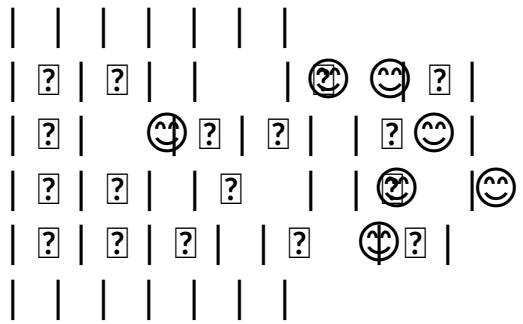
Then I should see the following board



Acceptance Criteria

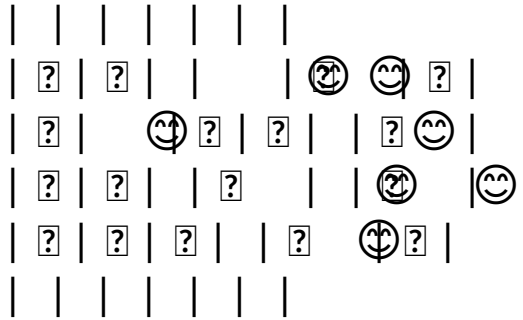
Scenario: *Static Structure > Loaf*

Given the following board



When I evolve the universe

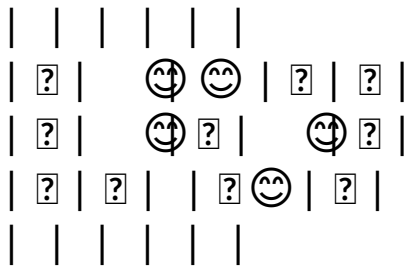
Then I should see the following board



Acceptance Criteria

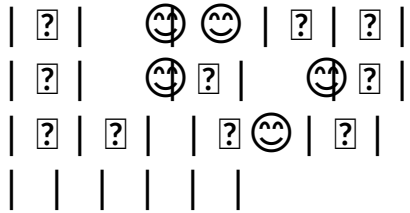
Scenario: *Static Structure > Boat*

Given the following board



When I evolve the universe

Then I should see the following board



Acceptance Criteria

Scenario: *Cells come alive, then die off*

Given the following board

	⍰		😊	😊	⍰

When I evolve the universe

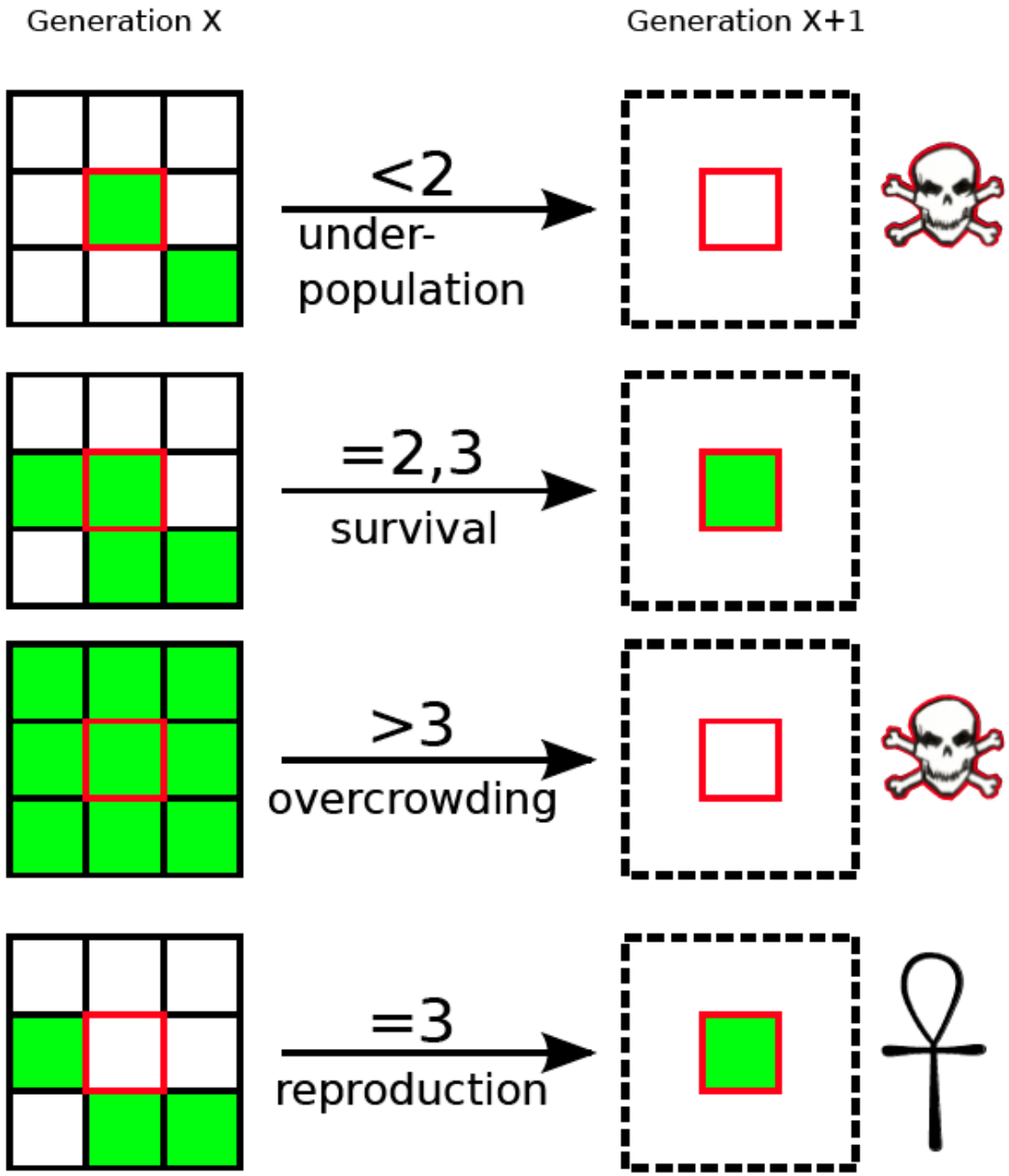
Then I should see the following board

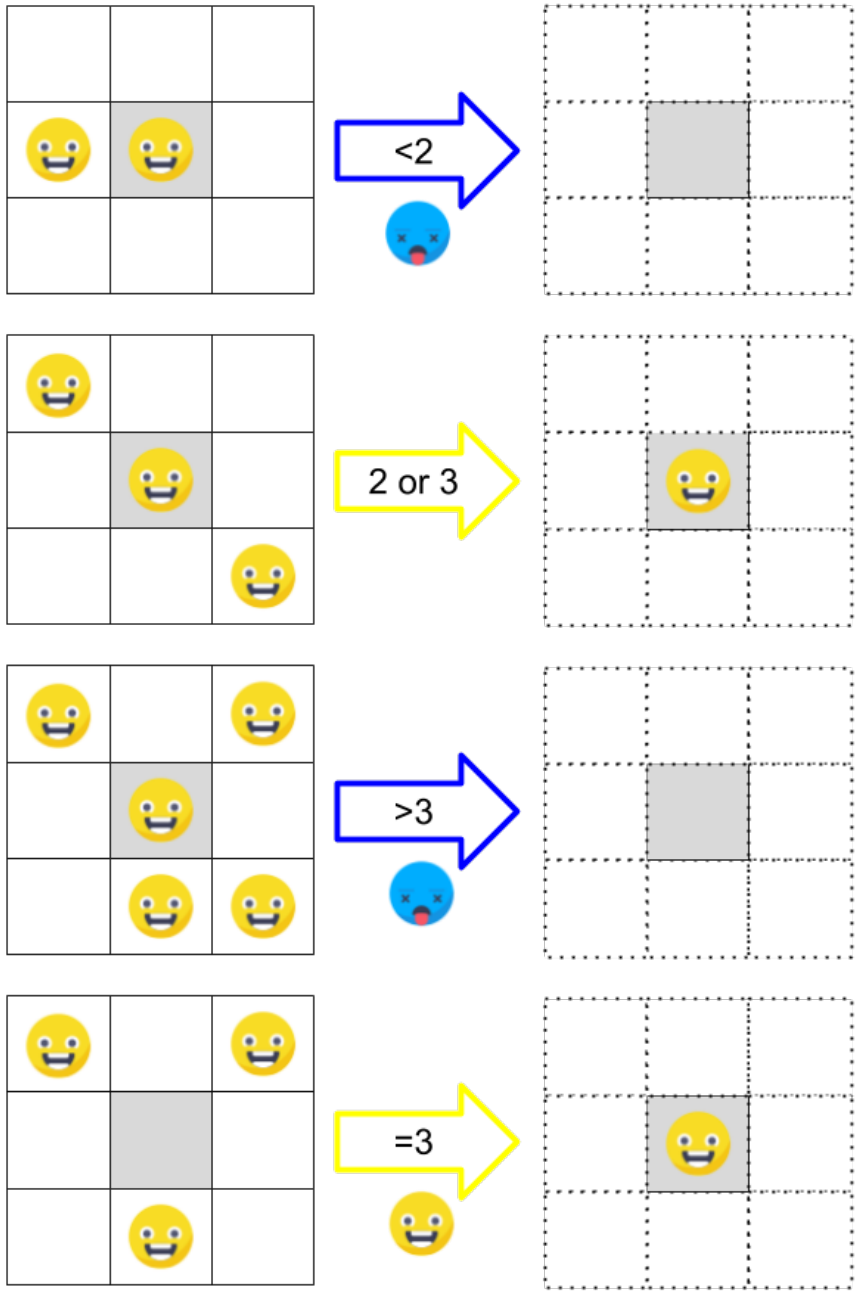
	⍰	⍰		⍰😊	⍰
	⍰	⍰		⍰😊	⍰
	⍰	⍰		⍰😊	⍰

When I evolve the universe

Then I should see the following board

	⍰		😊	😊	⍰

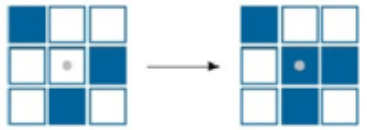




Birth

= 3

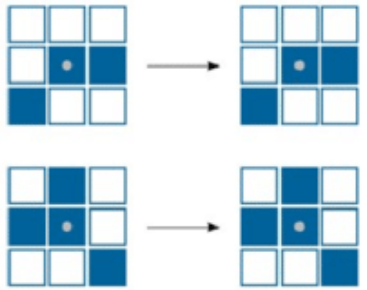
Ex:



Survival

= 2 || 3

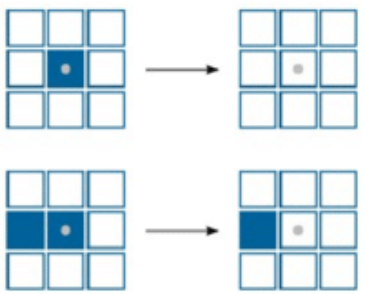
Ex:



Loneliness

< 2

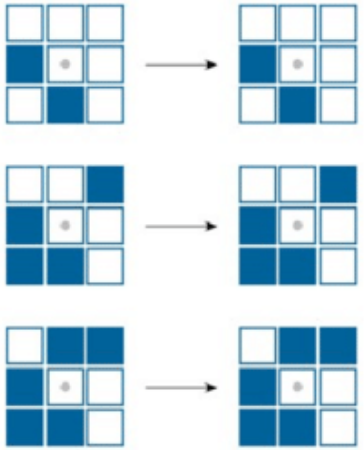
Ex:



Stays Dead

!= 3

Ex:

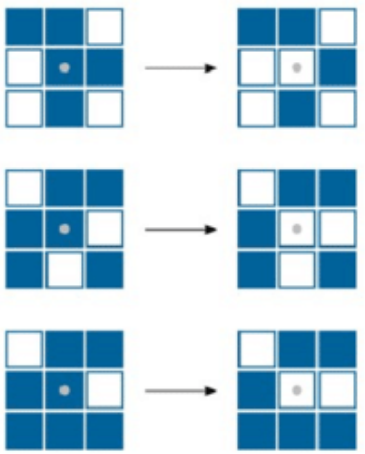


(...)

Overcrowding

> 3

Ex:



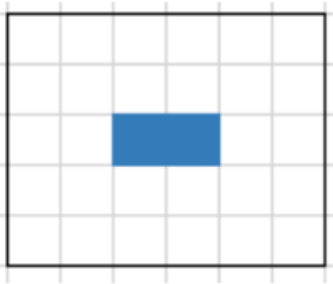
(...)

Game of Life - Quelques Scenarios

Actual state

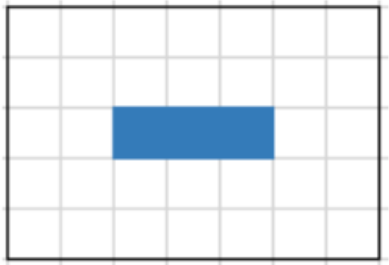
Next state

First case :

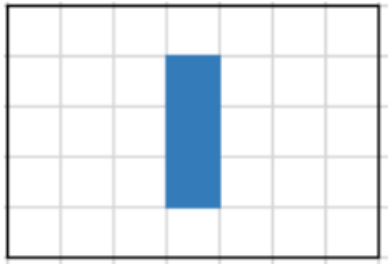


0	0	0	0	0	0
0	1	2	2	1	0
0	1	1	1	1	0
0	1	2	2	1	0
0	0	0	0	0	0

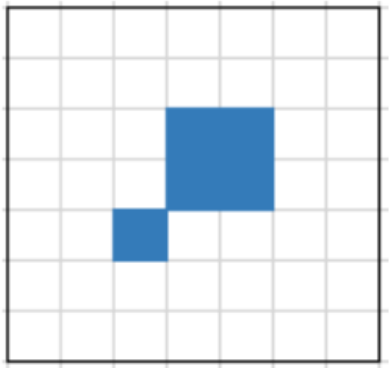
Second case :



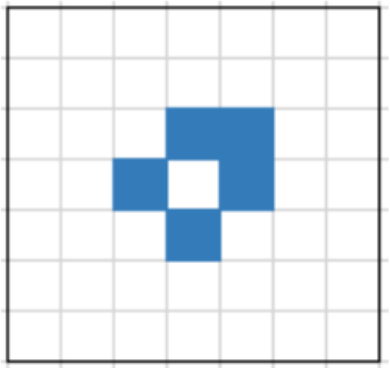
0	0	0	0	0	0	0
0	1	2	3	2	1	0
0	1	1	2	1	1	0
0	1	2	3	2	1	0
0	0	0	0	0	0	0



Third case :



0	0	0	0	0	0	0
0	0	1	2	2	1	0
0	0	2	3	3	2	0
0	1	3	4	3	2	0
0	1	1	3	2	1	0
0	1	1	1	0	0	0
0	0	0	0	0	0	0



SPRINT BACKLOG

TO DO

BLOCKED

DOING

VALIDATION

DONE

PRODUCT

The name of the product

SPRINT

The sprint number / id

GOAL

Why is it worthwhile to run the sprint? What should be achieved? For instance, address a risk, test an assumption, or complete a feature.

Daily Scrum

What did you do **yesterday** that helped the **Development Team** meet the **Sprint Goal**?

What will you do **today** to help the **Development Team** meet the **Sprint Goal**?

Do you see **any impediment** that prevents **you** or the **Development Team** from meeting the **Sprint Goal**?

TIME

TIME

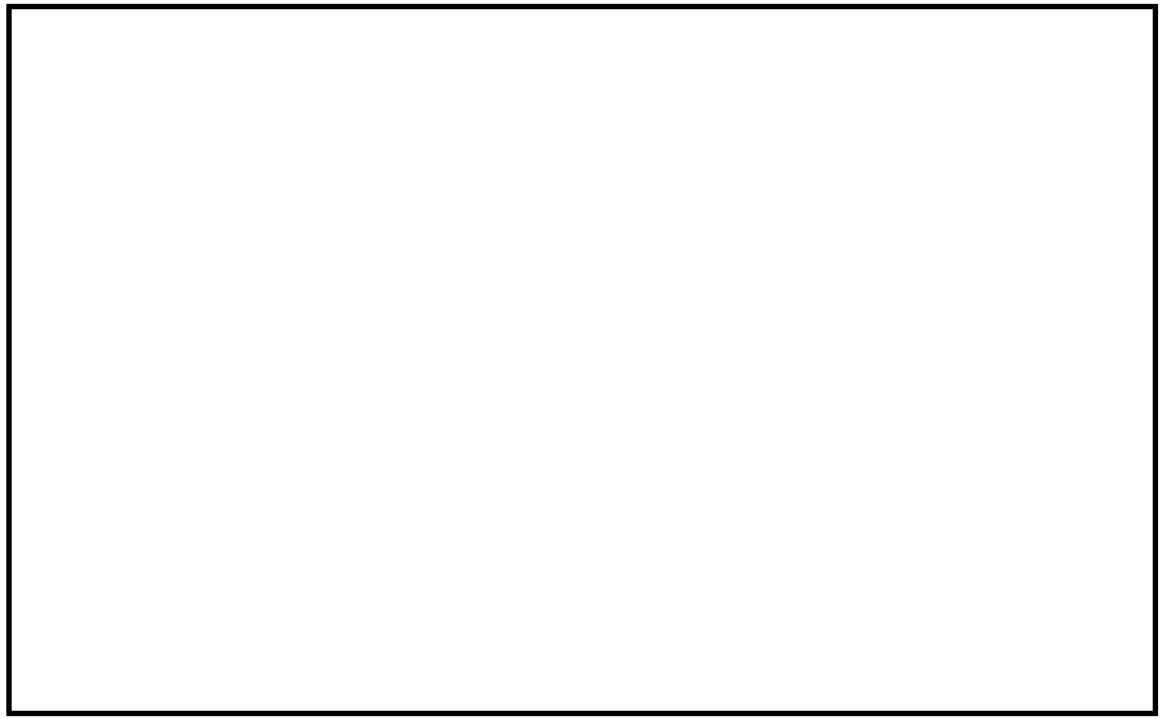
TIME

TIME

Team Members

	DESIGN	BUILDING	ASSEMBLY	TEST			
							
							
							
							
							
							
							

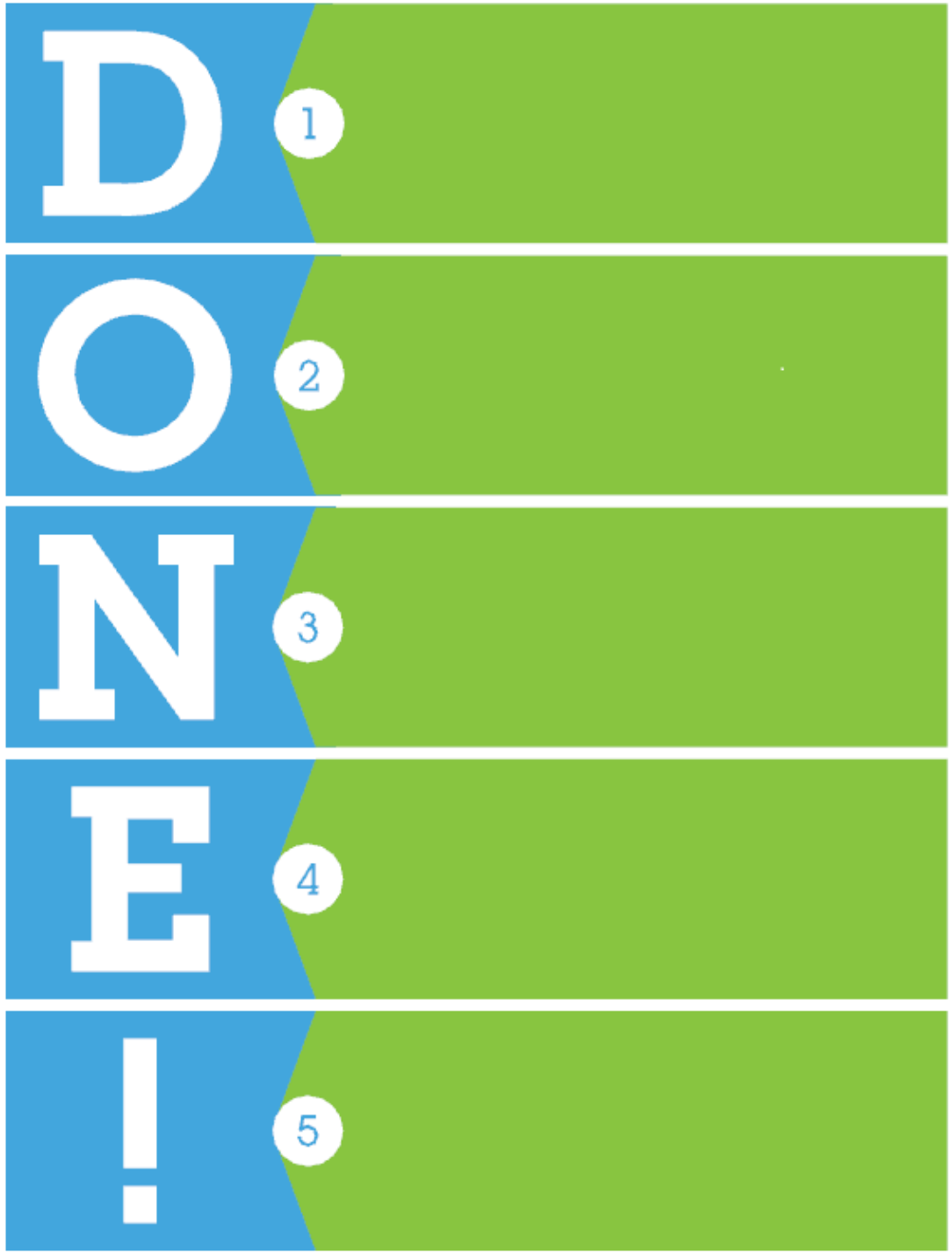
Team Velocity

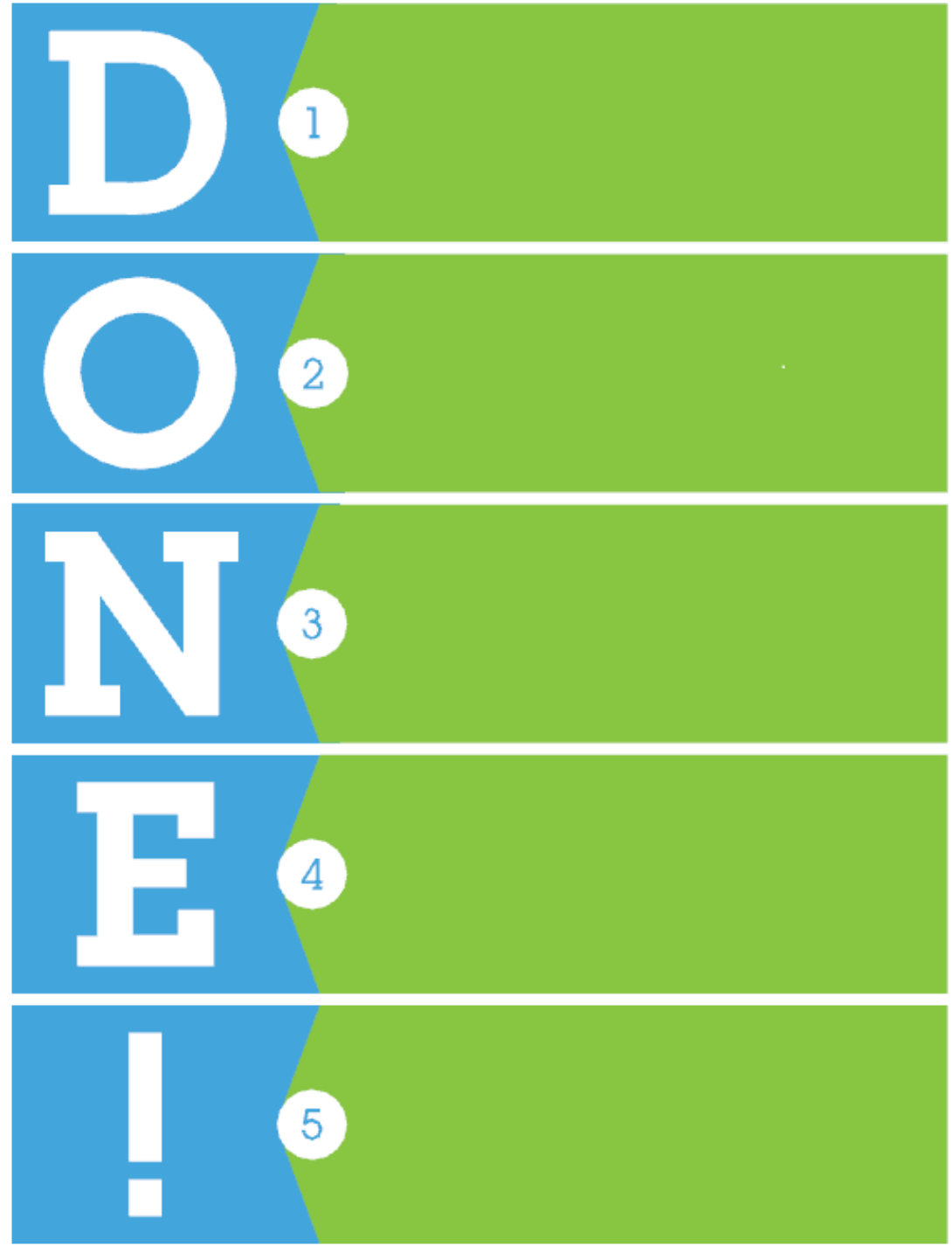


$$\frac{\text{Story Points}}{\text{Sprint}}$$

Definition of Done (DoD)

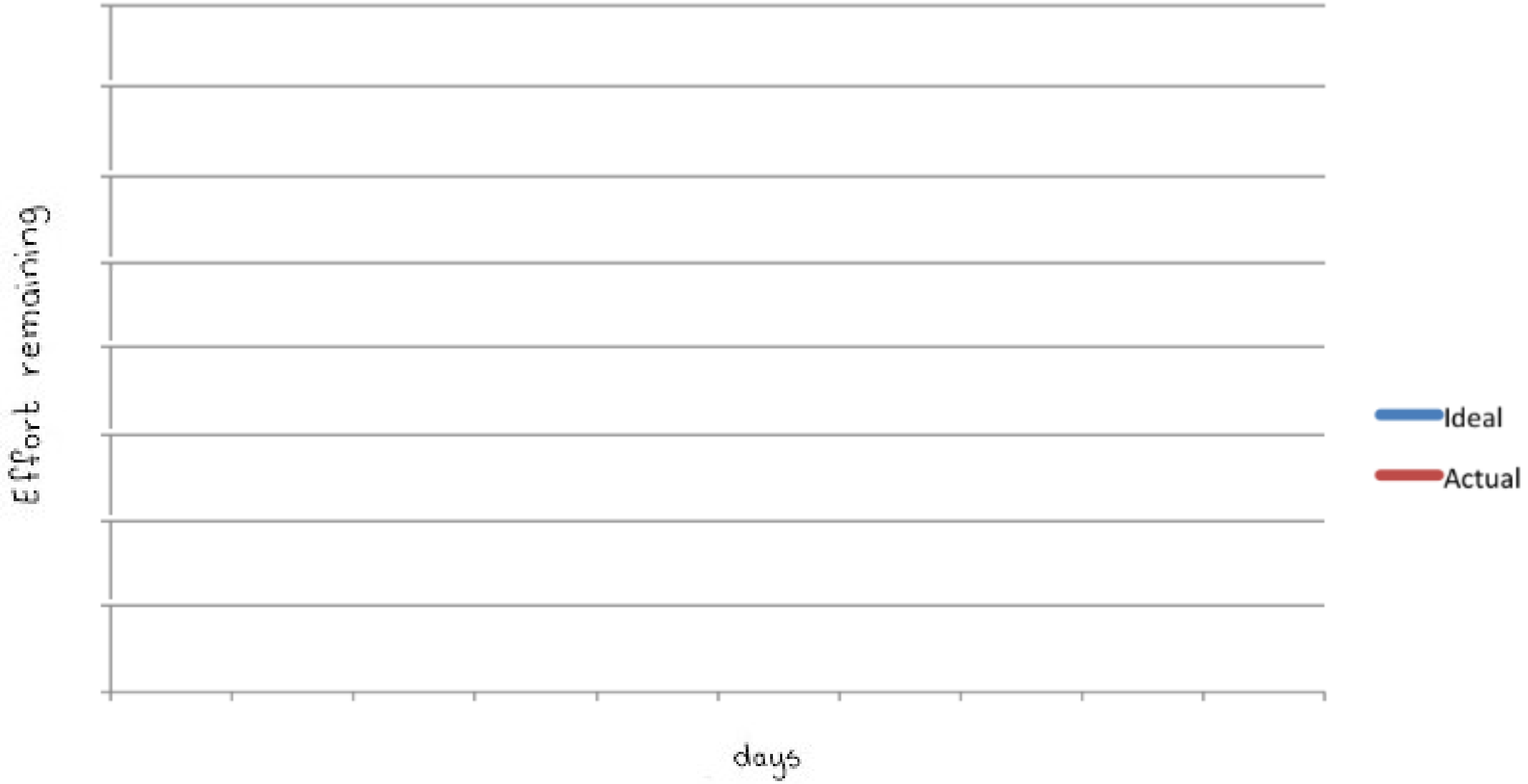
- [x]
- [x]
- [x]
- [x]
- [x]
- [x]
- [x]
- [x]


D
1
O
2
N
3
E
4
!
5

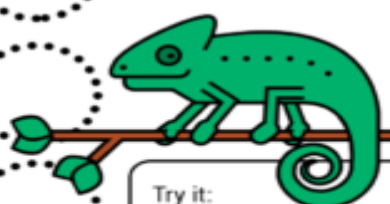

D
1
O
2
N
3
E
4
!
5

W.I.P.

Sprint Burndown Chart



NikoNiko Calendar



Try it:
Add the team member names in the left boxes and dates at the top. Then in the evening each member evaluates his working day by putting a colour dot sticker at the circle:
Green = great day
Yellow = good day
Orange = not so good day
Red = bad day

NüWorks

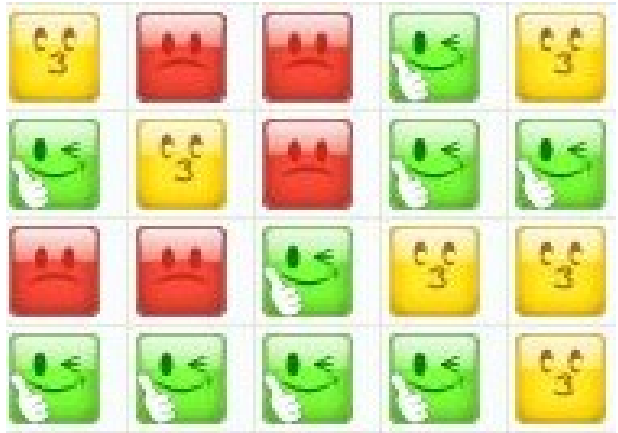
Design: Stefan Nüsperling, Illustrations: Chad Geran

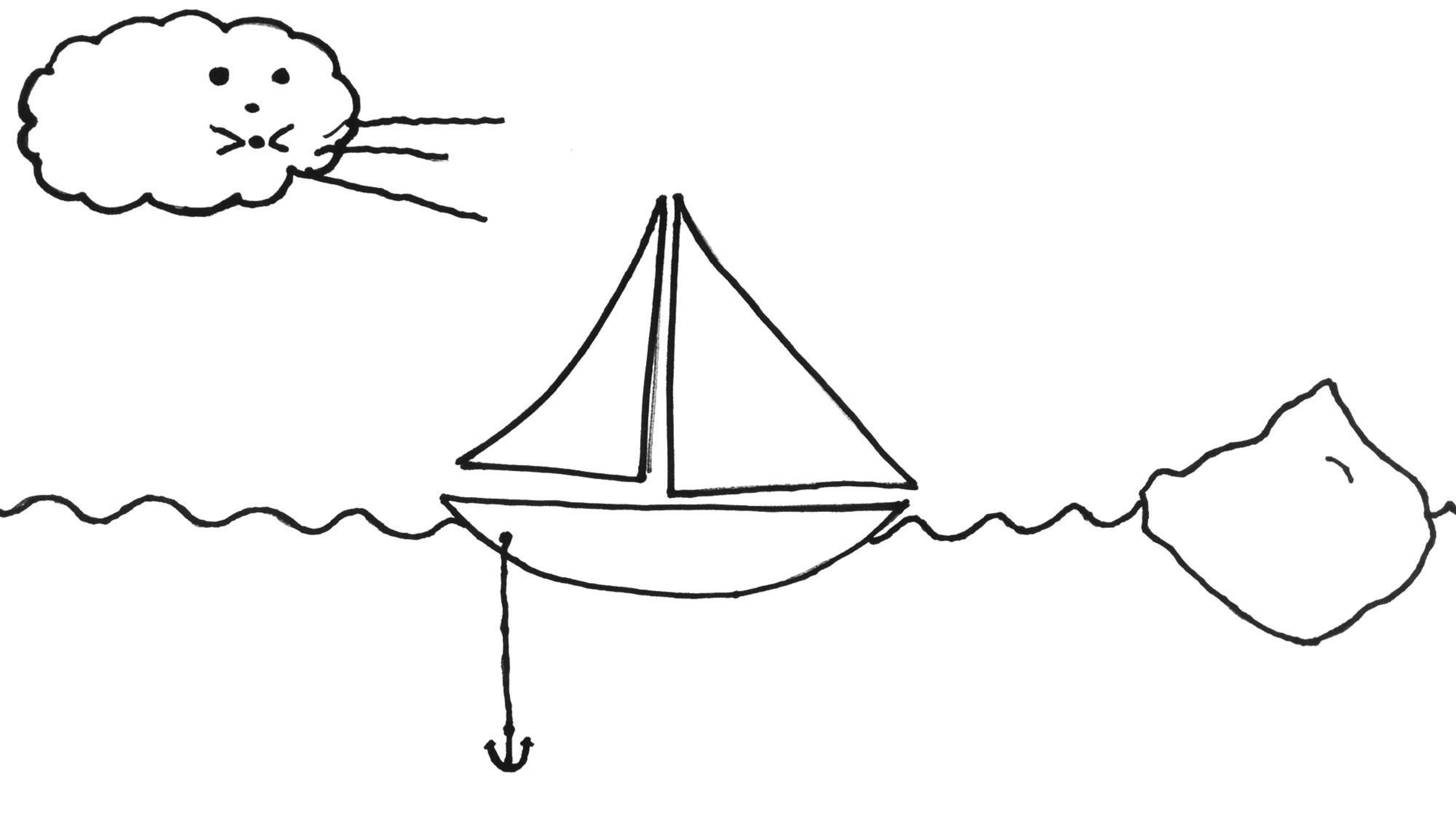
SPRINT 1

	1	2	3	4	5	6	7

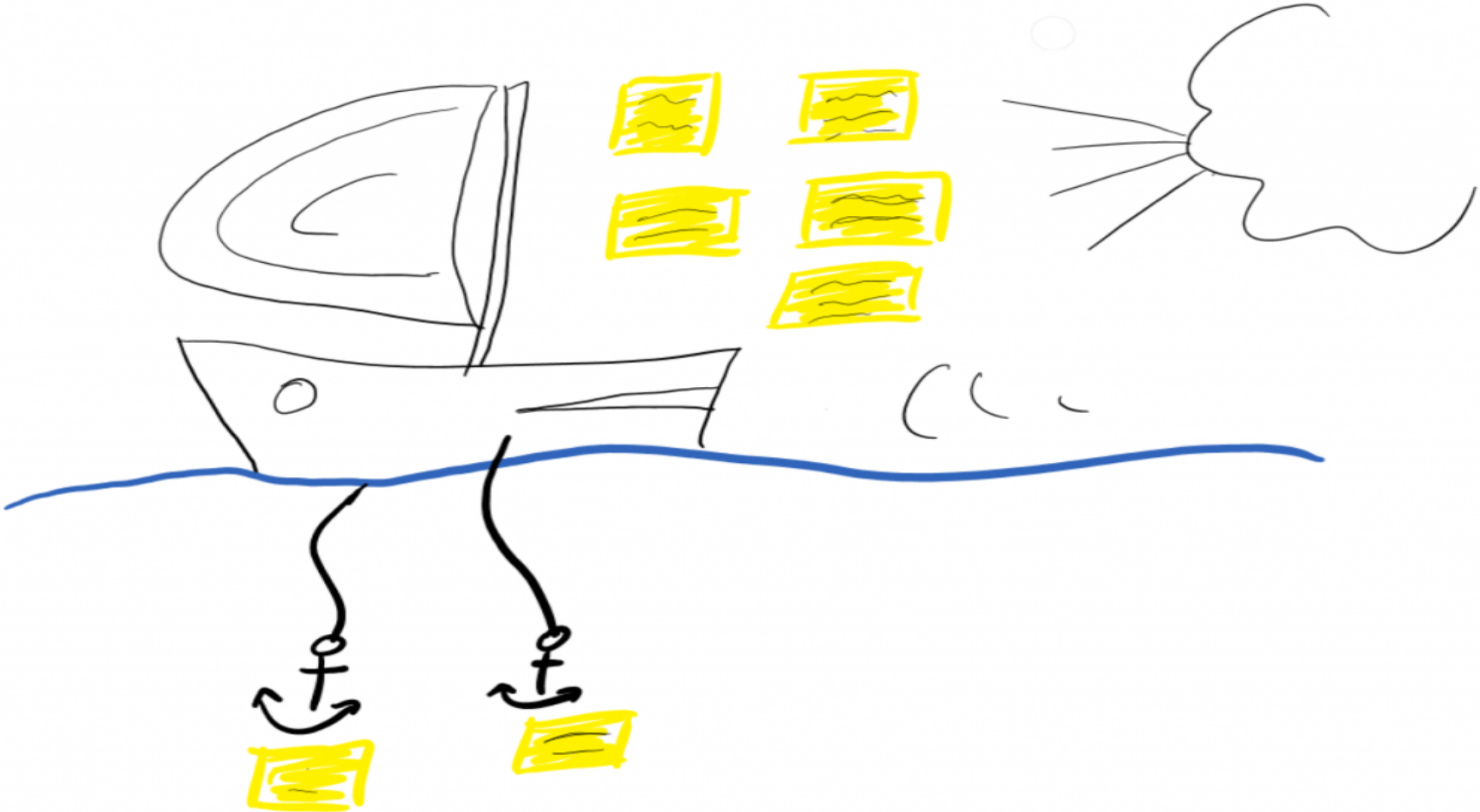
SEPTEMBER 2011

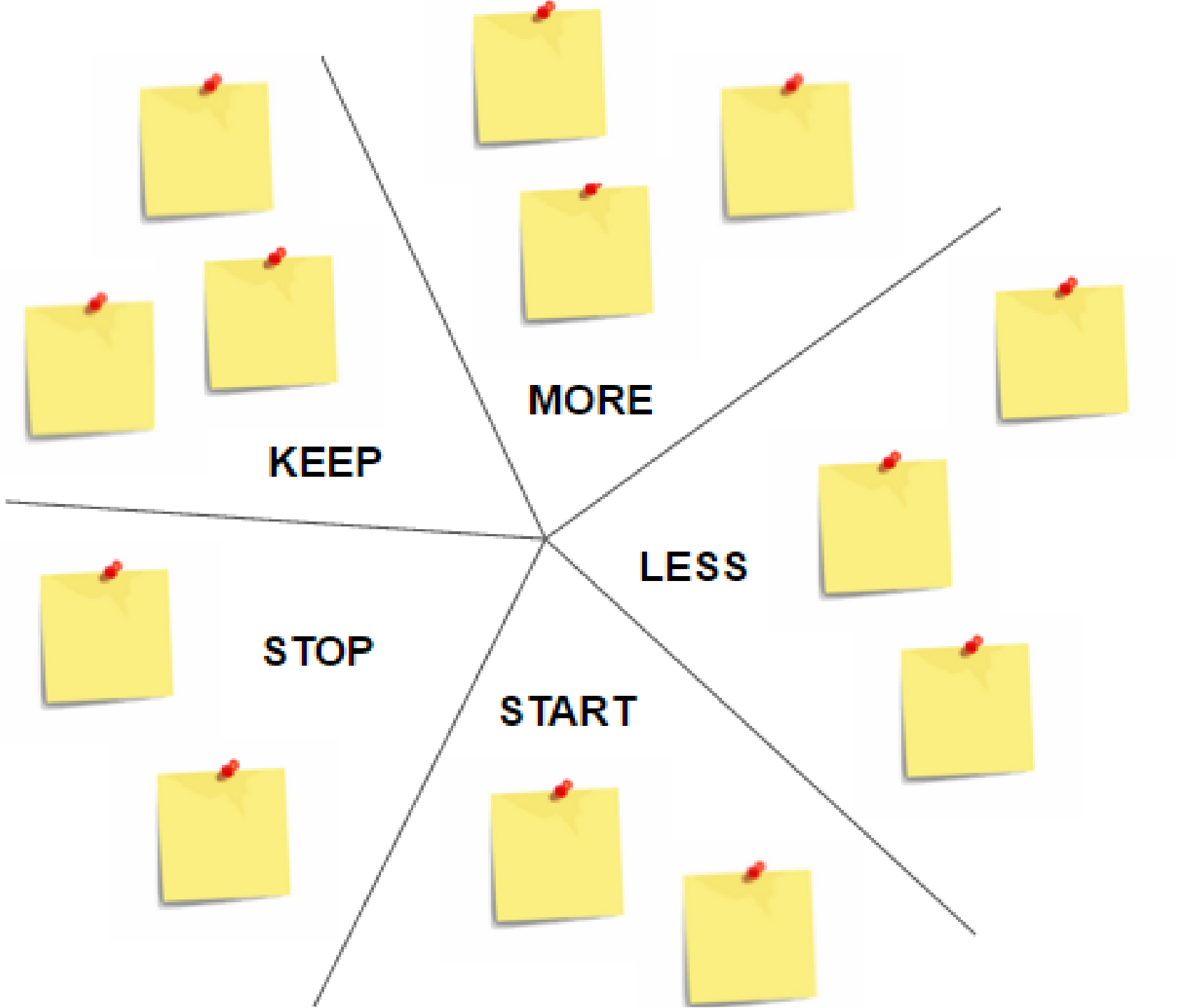
	1	2	3	4	5	6	7
BERND							
MARKO							
ALEX							
MEIKE							
STEFAN							



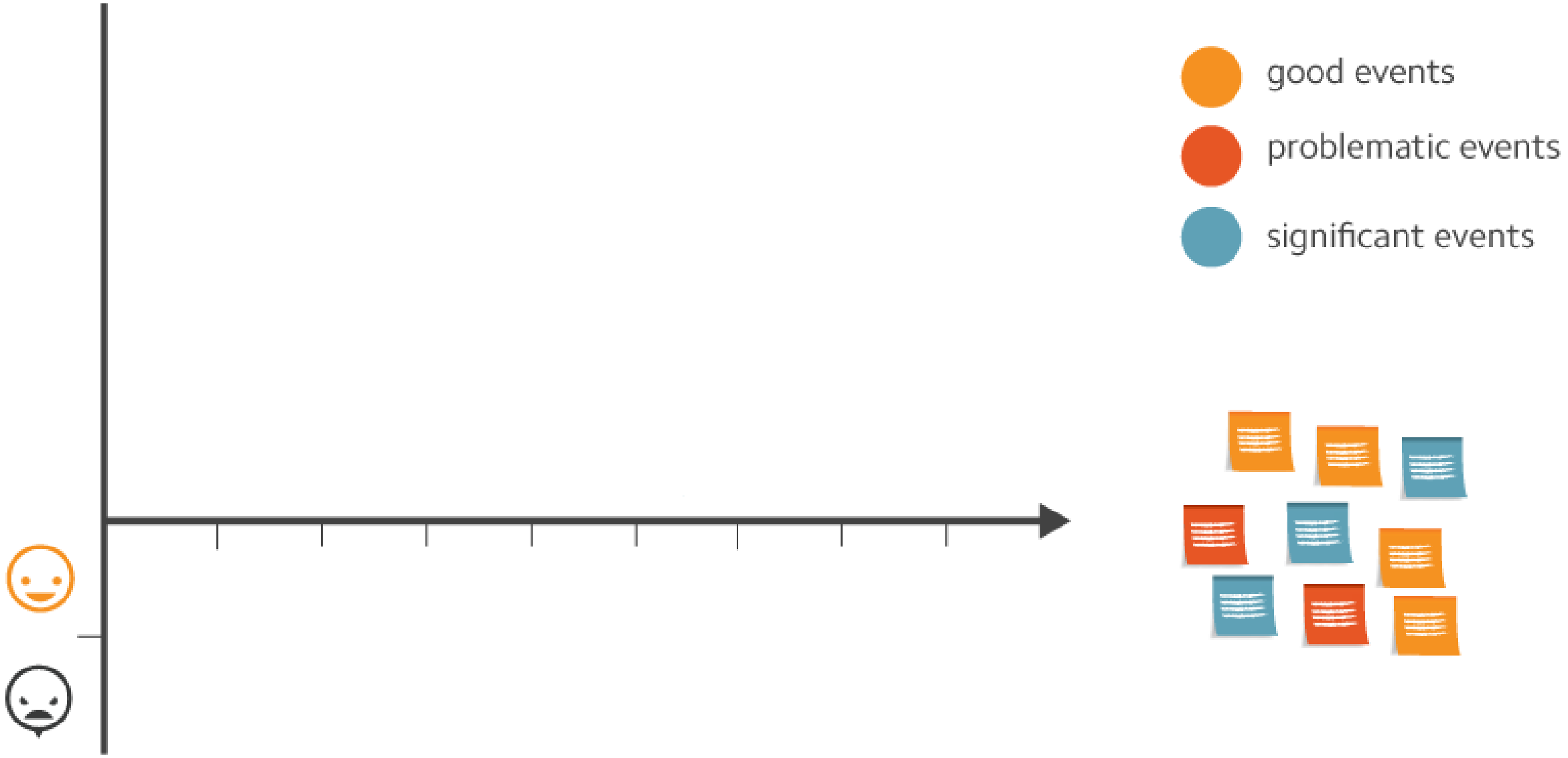


bit.ly/speed-boat




MORE
KEEP
LESS
STOP
START

What worked well?	What could be improved?	What will we commit to doing in the next Sprint?


good events
problematic events
significant events