

Story behind PF 2016

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Y Soft - Brno

10.2. 2016

PF 2010



<http://georgik.sinusgear.com/2009/12/26/pf-2010/>



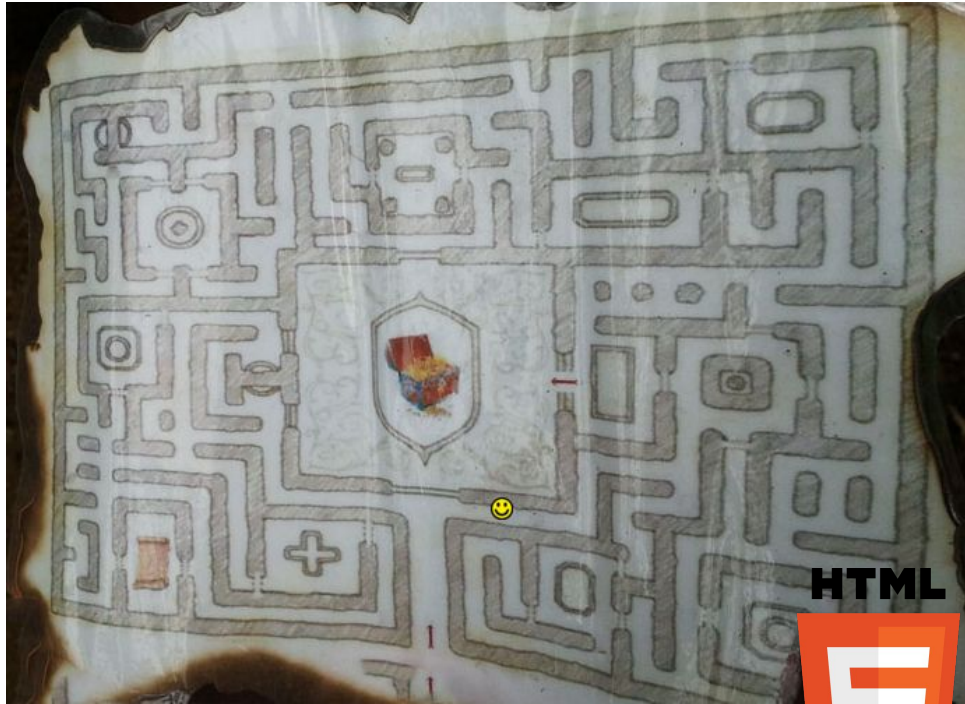
PF 2011



<http://georgik.sinusgear.com/2010/12/23/pf2011/>



PF 2012

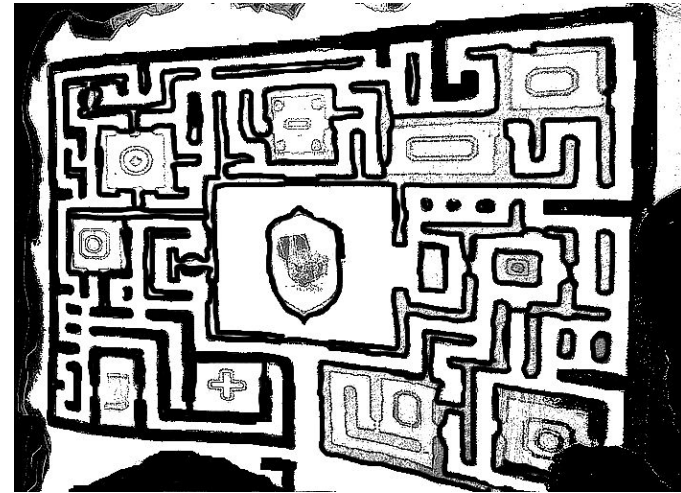


HTML

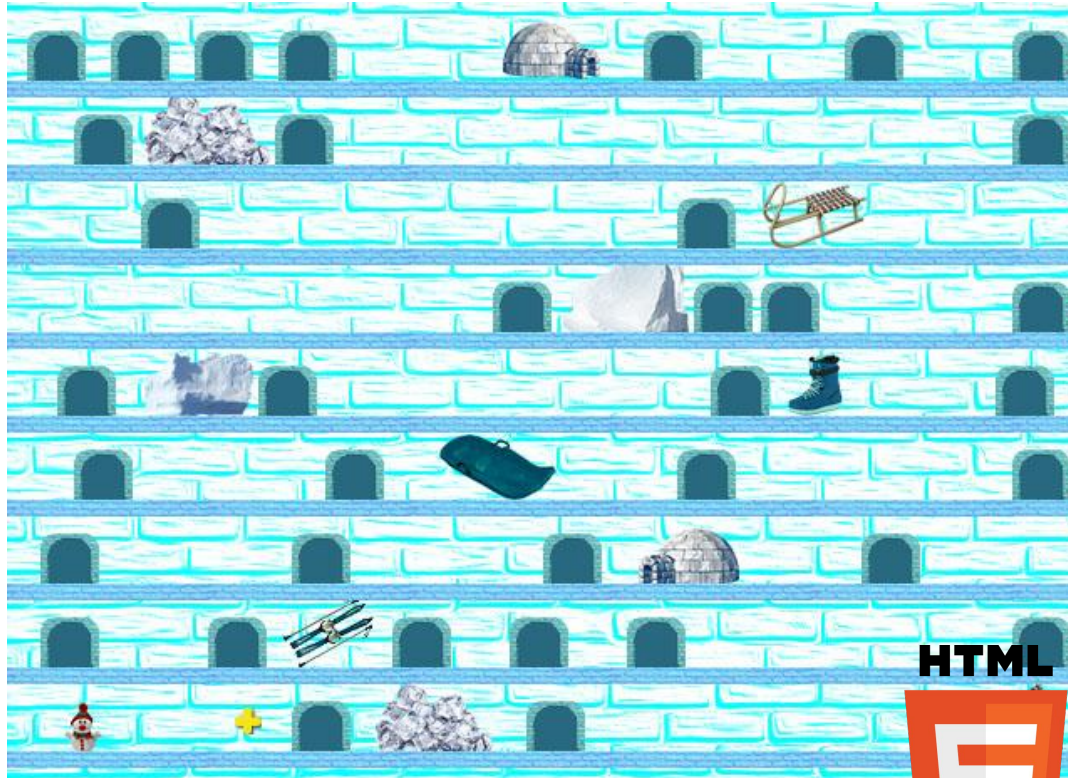


<http://georgik.sinusgear.com/2011/12/31/pf-2012/>

Canvas



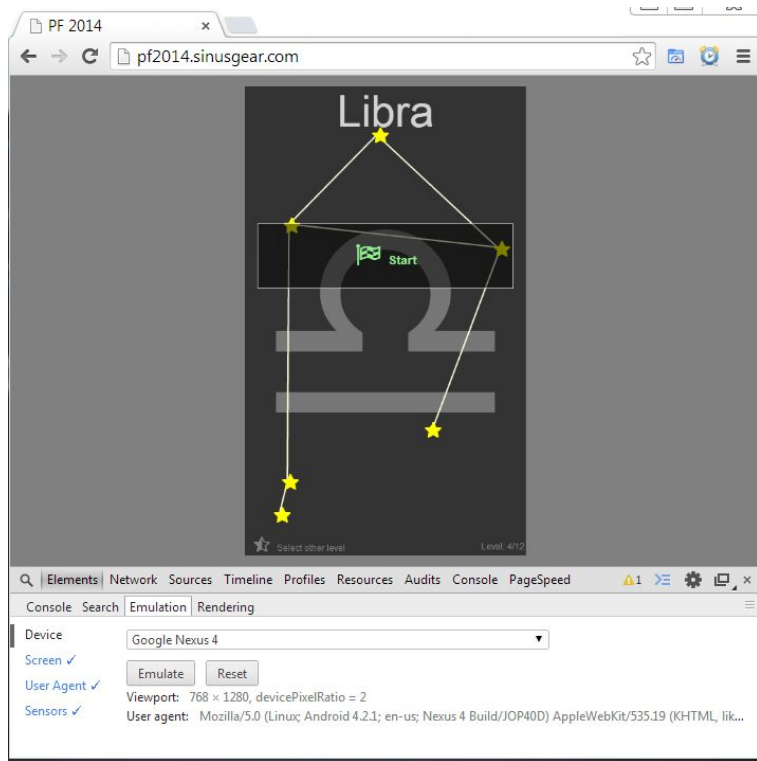
PF 2013



Webfonts

<http://georgik.sinusgear.com/2012/12/22/pf-2013/>

PF 2014

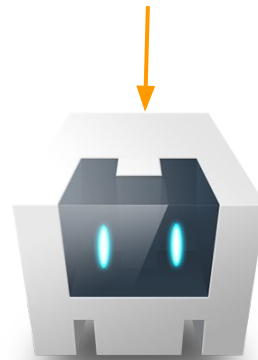


<http://georgik.sinusgear.com/2013/12/28/pf-2014/>



ANGULARJS
by Google

Phonegap



Windows Phone



PF 2015



<http://www.ysofters.com/2014/12/30/pf2015/>



Cloud9 IDE
Your code anywhere, anytime



Font Awesome

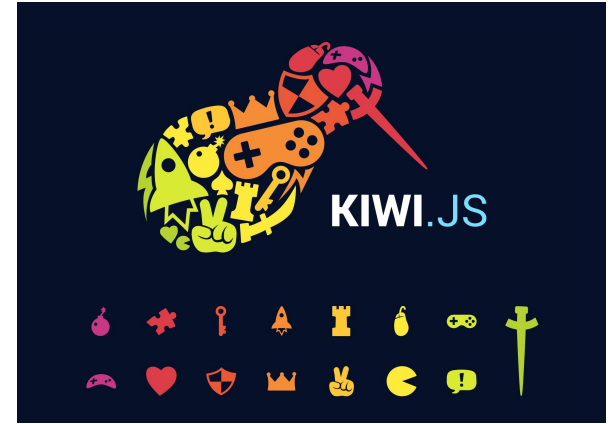
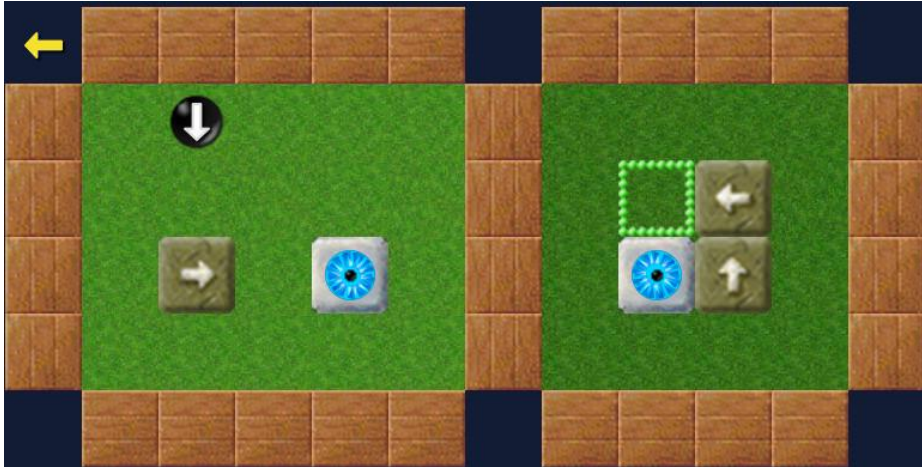
THE ICONIC FONT DESIGNED FOR BOOTSTRAP

 Download

Version 4.0.3 GitHub Project Dec 3, 2015 Created by Dave Gandy



PF 2016



<http://www.ysofters.com/2015/12/30/pf-2016/>
<https://github.com/ysoftdevs/pf2016>

Constraints

Limited time to deliver final product (end of year)

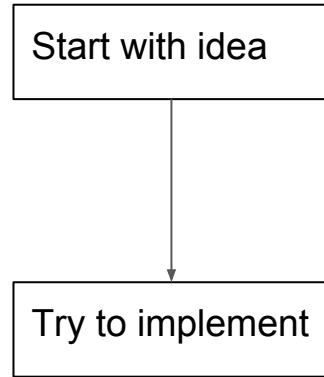
Many interruptions

Only small chunks of time available

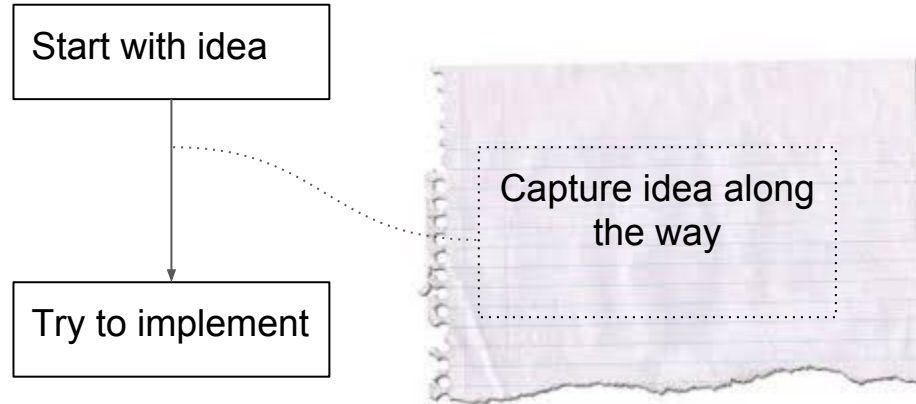
Creative process

Start with idea

Creative process



Creative process

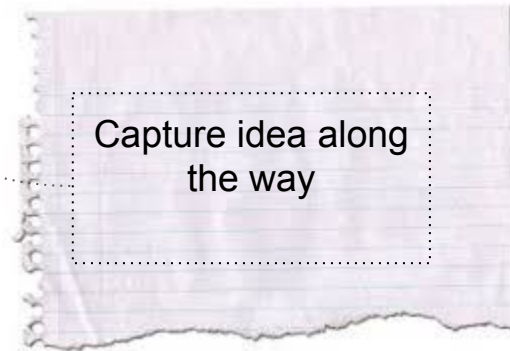


Creative process

Start with idea



Try to implement



too long time
>1h



Creative process

Start with idea



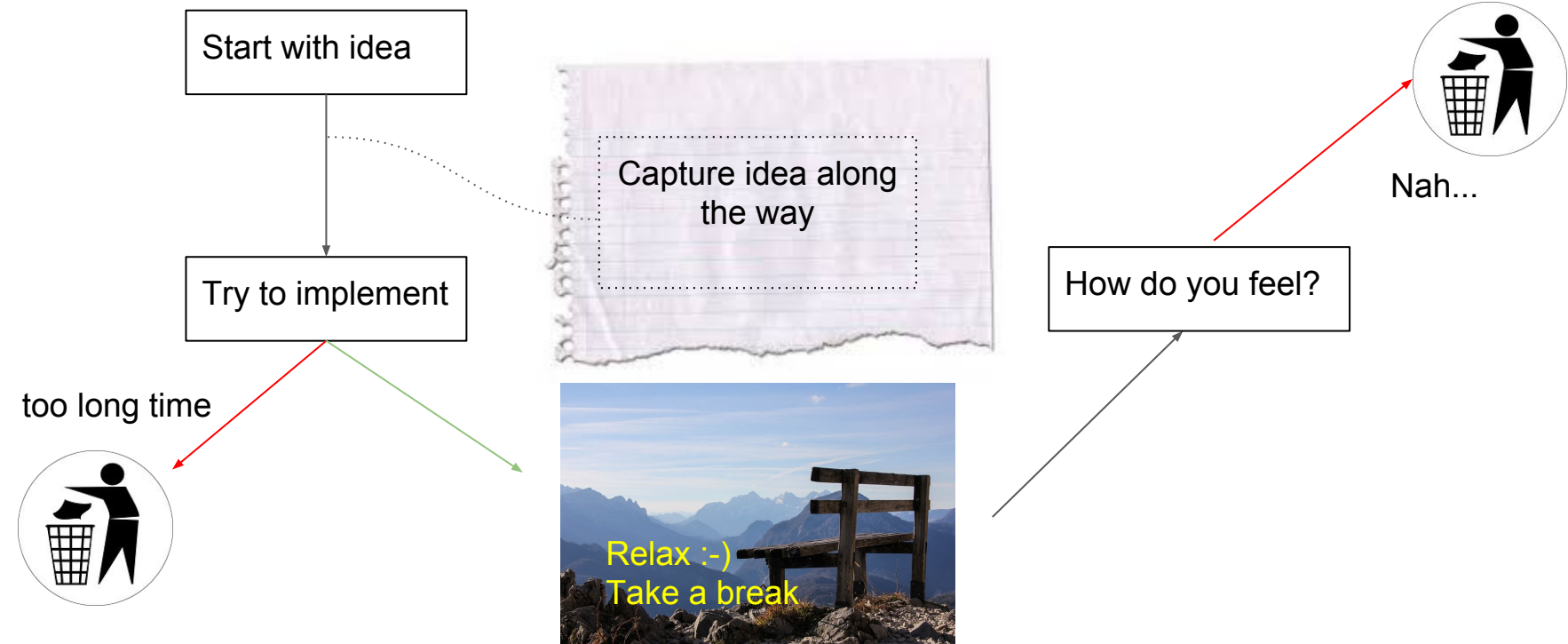
Try to implement



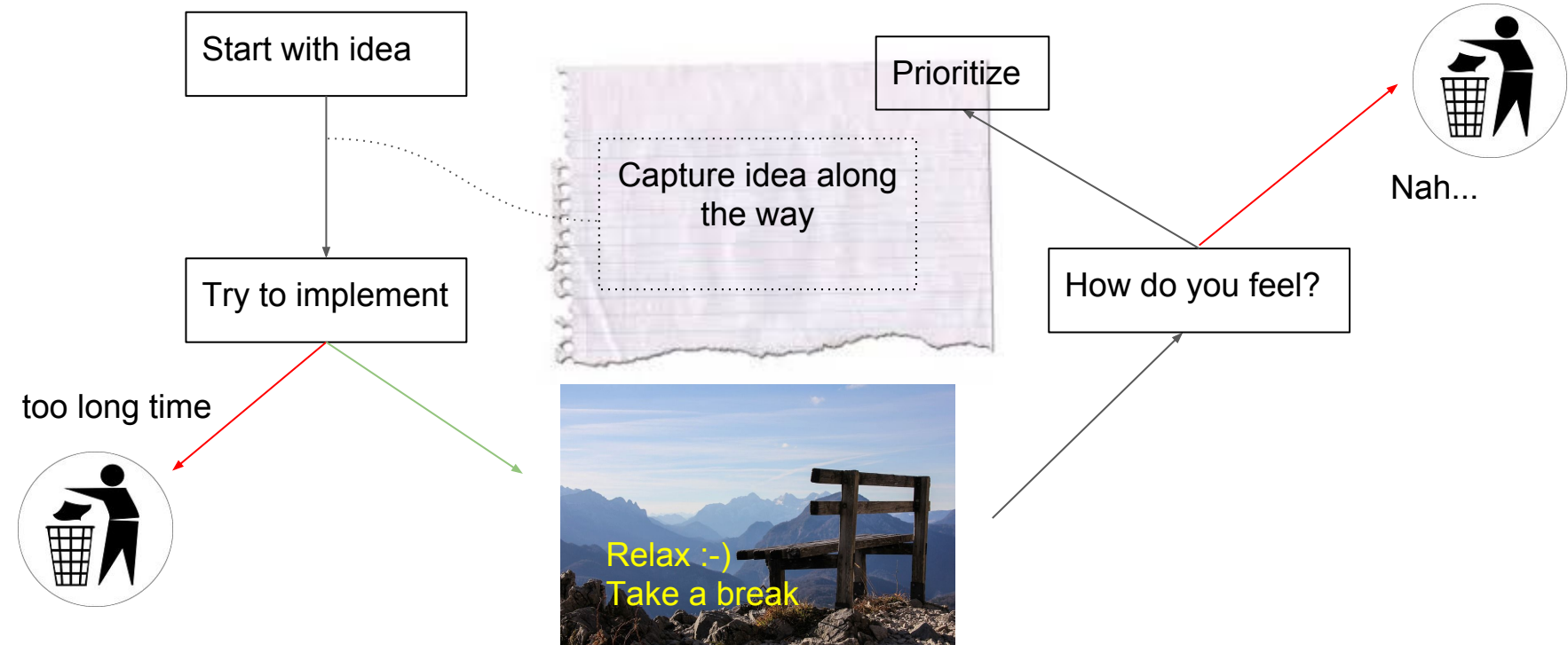
too long time



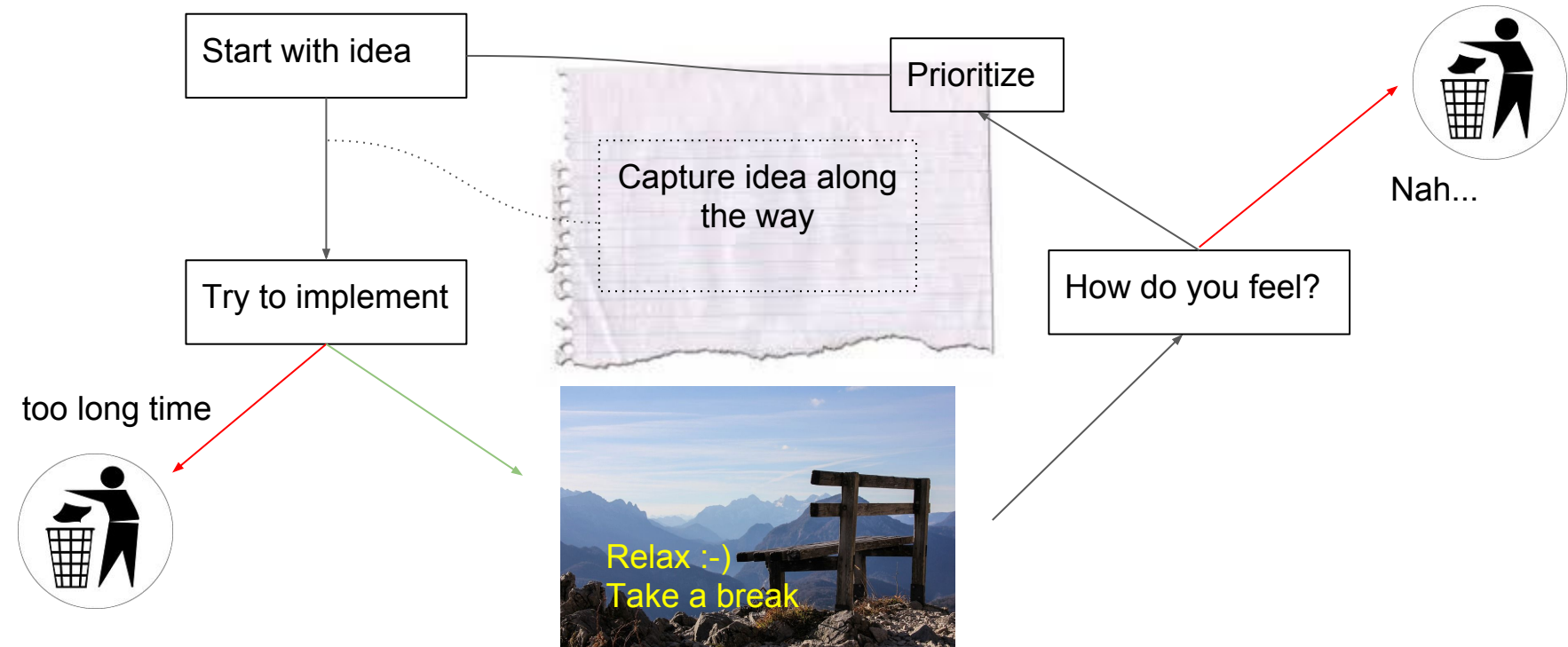
Creative process



Creative process



Creative process





2.0 NOW IN BETA!

One framework.
Mobile and desktop.

GET STARTED



[learn](#)

[play](#)

[download](#)

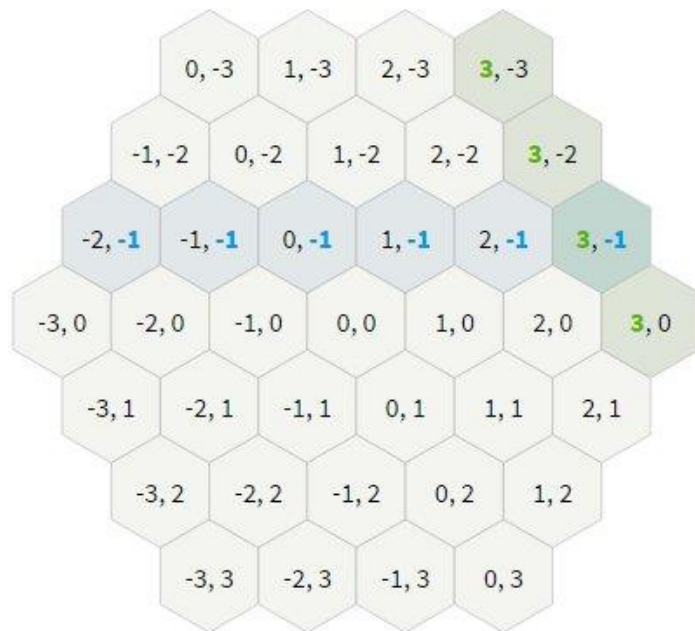
[interact](#)

TypeScript lets you write JavaScript the way you really want to.

TypeScript is a typed superset of JavaScript that compiles to plain JavaScript.

Any browser. Any host. Any OS. Open Source.

Hexagonal grids



<http://www.redblobgames.com/grids/hexagons/>

Reuse graphics from Wesnoth



Troubles - with graphic



Graphic is not limited just to tile.

Tile graphic is changing based on context.

Troubles - with Angular.io



Missing features

Work in progress

Simple HTML stuff is too complex

New architecture, different principles

Experience with TypeScript



Relatively fast (still takes some time to compile)

Compiler could watch directory for changes.

But...

Cloud C9.io significant delay - 2-5 seconds

Structure and type system is great for libraries, but it slows down hacking ;-)

Feeling?

Combination Angular2 + Hexagon + Adaptive graphics + TypeScript

Like driving with hand brake...



Nah...

Start with idea



Try to implement

too long time



How do you feel?



Nah...

Kiwi.js



Like a Wordpress for building games :)

KIWI FEATURES



2D CANVAS AND WEBGL RENDERING

Your games can target both canvas and WebGL. Use canvas for older browsers and most mobile browsers. Use WebGL for the latest browsers, and in conjunction with Cocoon.js to build fast native mobile apps.



BROAD DISTRIBUTION

Easily and efficiently make games for iOS, Android and Chrome Apps by using platforms such as CocoonJS and the Chrome WebStore.



FLEXIBLE GAME OBJECTS

Support for spritesheets, texture atlases and individual Images give you plenty of options for creating and managing animations and static Images.



FULL DISPLAY LIST

Place your game objects within groups and subgroups to manage their transformation and z - ordering.



ENTITY / COMPONENT SYSTEM

Build your own game objects by extending the core game objects and attaching components such as physics to give them additional functionality.



MULTITOUCH SUPPORT

Make the most of touch device capability and make games for multitouch and well as single touch.



STATE MANAGEMENT

Easily create and manage your game states. States are the main way you arrange and manage your resources.



FILE MANAGEMENT AND LOADING

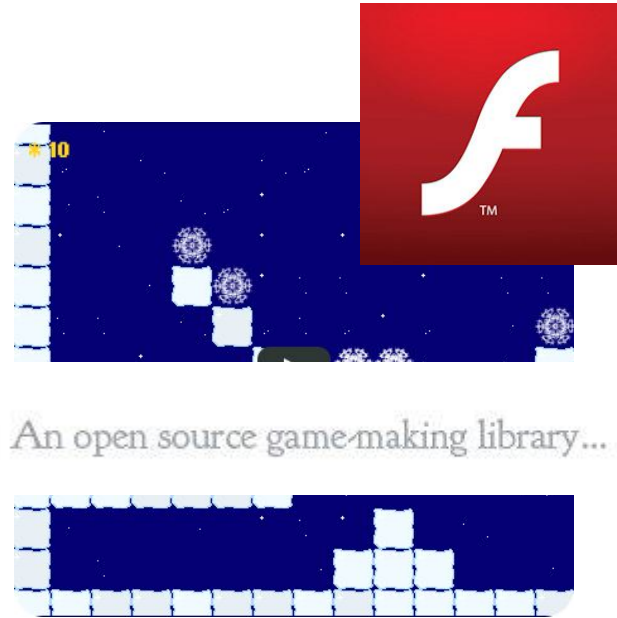
Easily add images, audio and data resources. Includes resource loaders, and easy access and management of your files.

Kiwi.js written in TypeScript

The TypeScript logo, featuring a blue horizontal bar above the word "TypeScript" in a blue, sans-serif font.

You can code in TypeScript
or in JavaScript

Do you remember? PF 2010 - Flixel physics engine

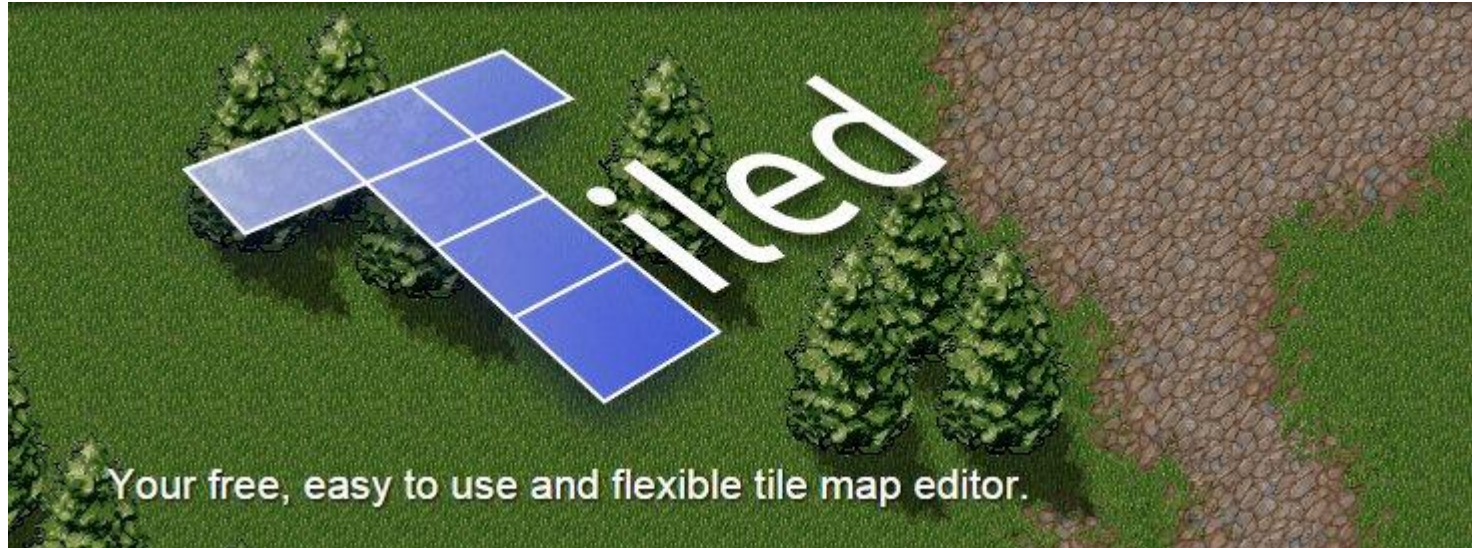


2015 physics ported to Kiwi.js

Inspiration - Enigma open source game

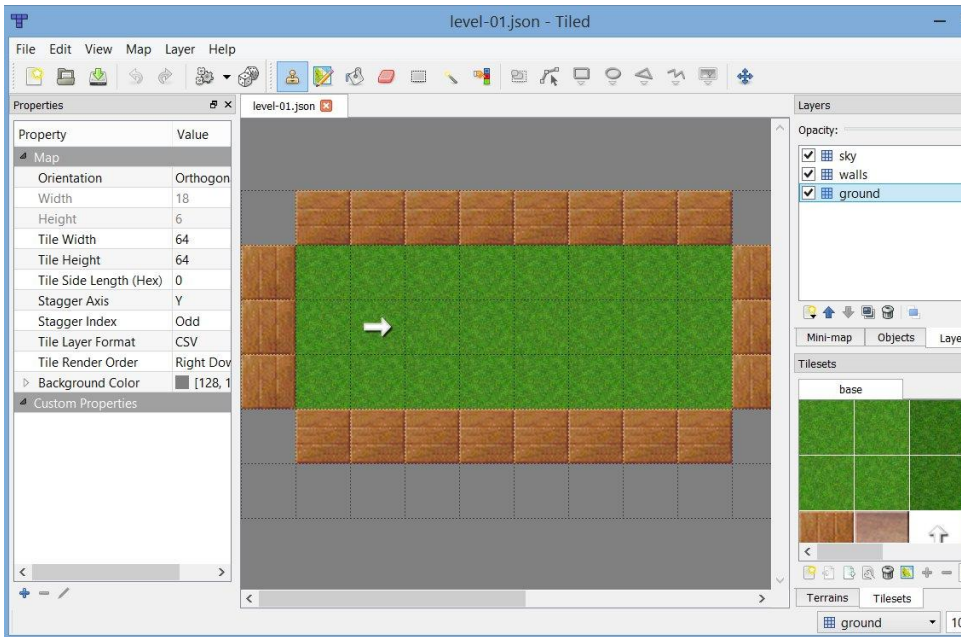


Tiled Map Editor



<http://www.mapeditor.org>

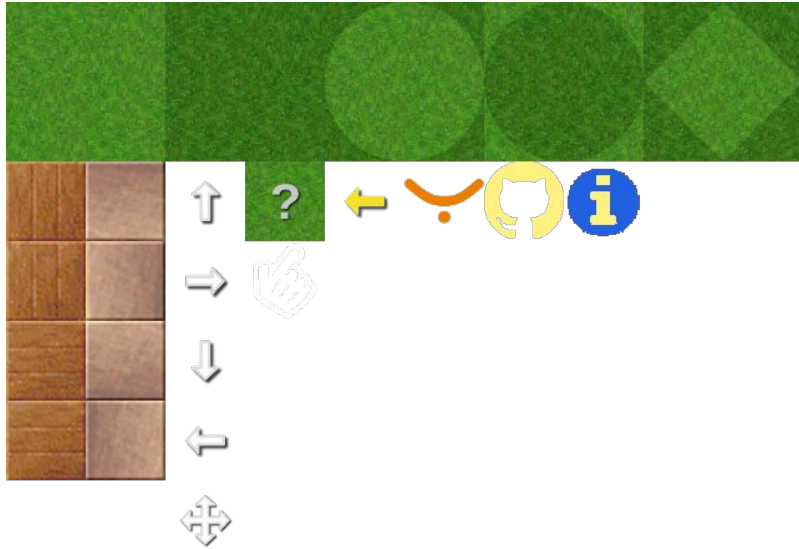
JSON format of map



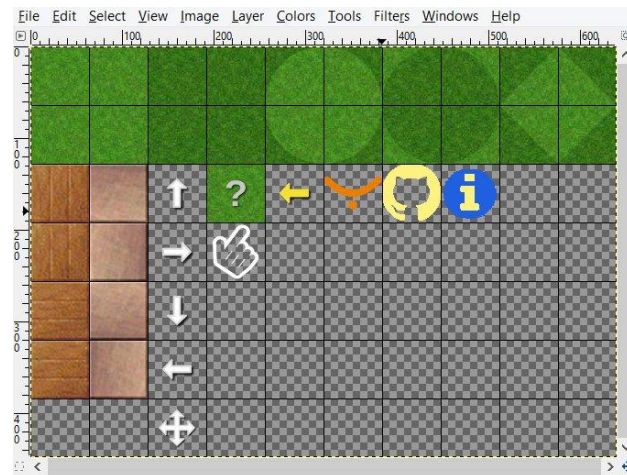
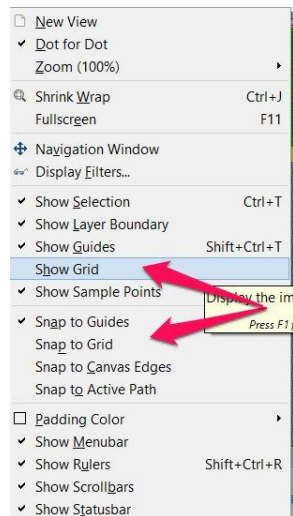
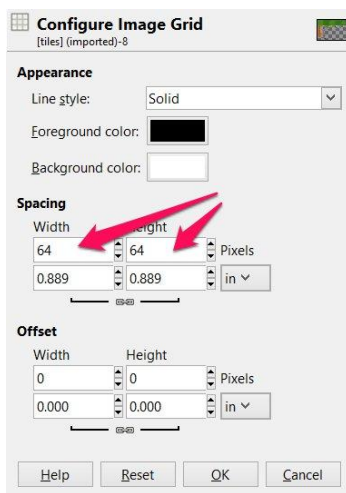
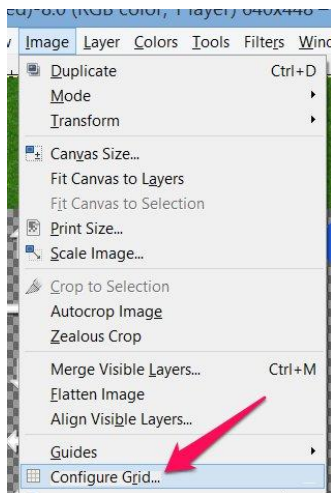
```
level-01.json data\levels
```

```
1 { "height":6,  
2   "layers":[  
3     {  
4       "data":[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,  
5         0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],  
6       "height":6,  
7       "name":"ground",  
8       "opacity":1,  
9       "type":"tilelayer",  
10      "visible":true,  
11      "width":18,  
12      "x":0,  
13      "y":0  
14    },  
15    {  
16      "data":[0, 51, 51, 51, 51, 51, 41, 51, 51, 51, 0, 0, 0,  
17        0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],  
18      "height":6,  
19      "name":"walls",  
20      "opacity":1,  
21      "type":"tilelayer",  
22      "visible":true,  
23      "width":18,  
24      "x":0,  
25      "y":0  
26    },  
27  ],  
28  "width":36,  
29  "x":0,  
30  "y":0  
31 }
```

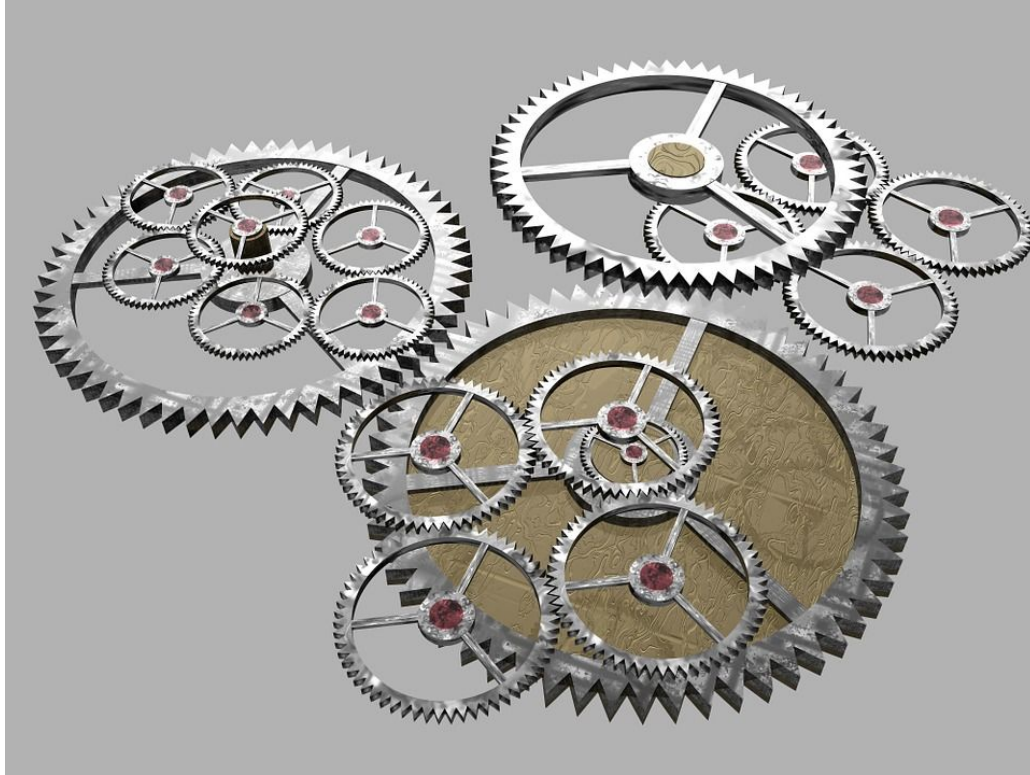
Spritesheet - support in Kiwi.js



Edit sprites - GIMP configuration



Game mechanics



Progress

Let user know that he's moving forward

He should perceive the goal as achievable.

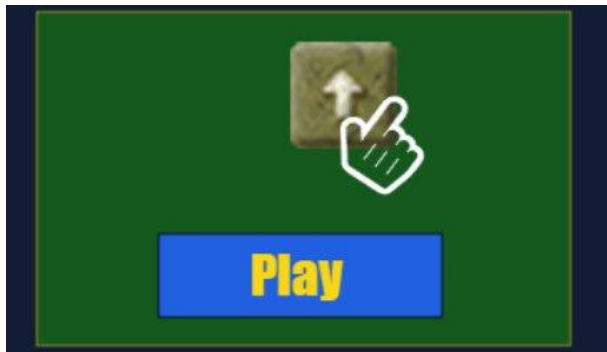


Guidance

Provide instructions.

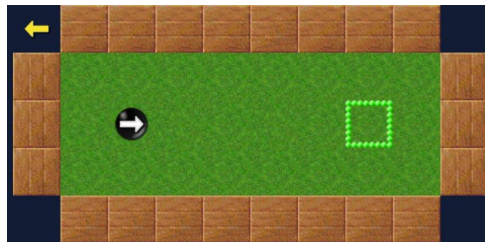
Not everything is clear to new player.

Simple and quick.

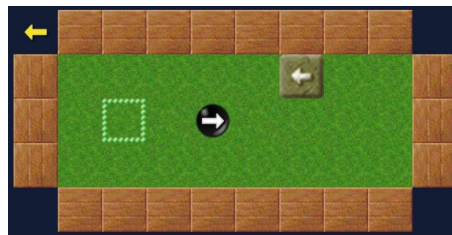


Progressive disclosure

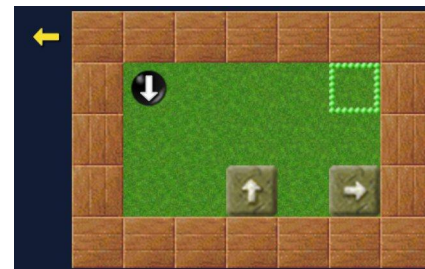
Start with basic stuff



Then show more stuff to user



Do not overload user

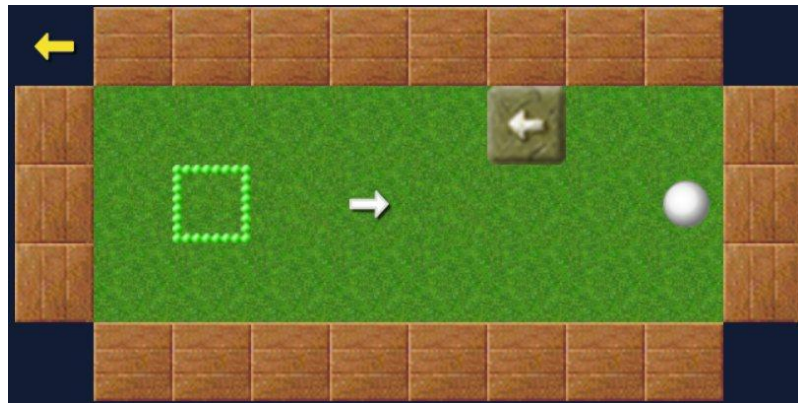
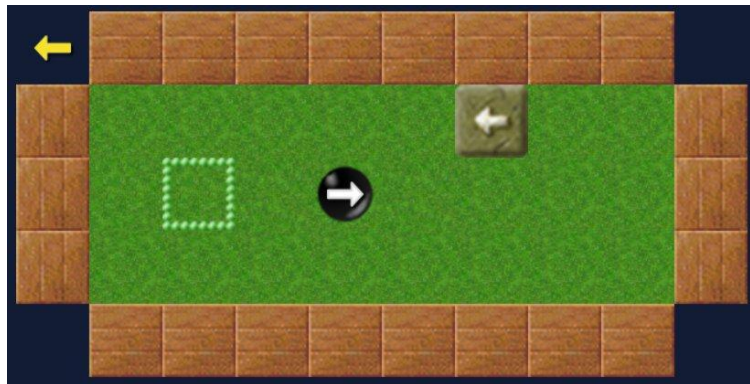


Graceful failure

Penalty for failure should not be too high.

Failure should be source for learning, not for damnation

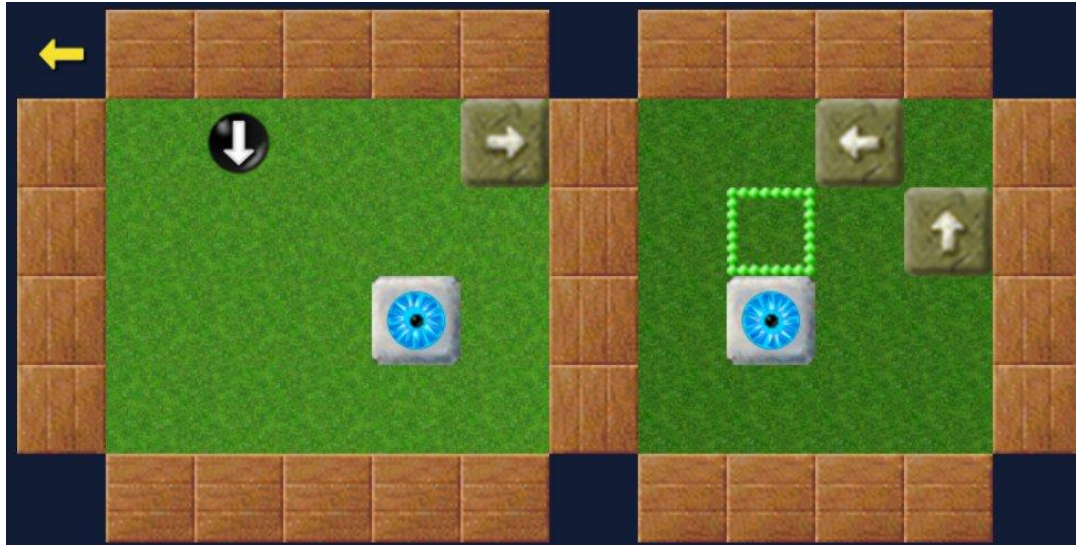
Try to avoid pattern with losing life. It could be very stressful.



Surprise

New element or rule can bring positive surprise.

E.g. teleport



Google Analytics Live view

Prehled

Aktuální počet aktivních uživatelů na webu:

5

STOLNÍ POČÍTAČ TABLET



Nejčastější odkazující stránky:

Zdroj	Aktivní uživatelé ↓
1 website-analyzer.info	1

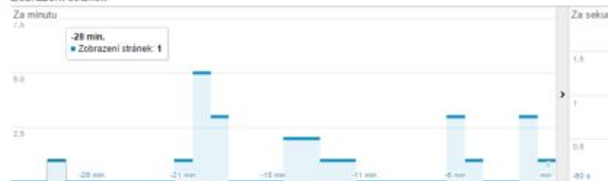
Nejvýraznější provoz ze sociálních sítí:

Zdroj	Aktivní uživatelé ↓
Pro tento výběr dat nejsou k dispozici žádná data.	

Nejčastější klíčová slova:

Klíčové slovo	Aktivní uživatelé ↓
1 (not provided)	1

Zobrazení stránek



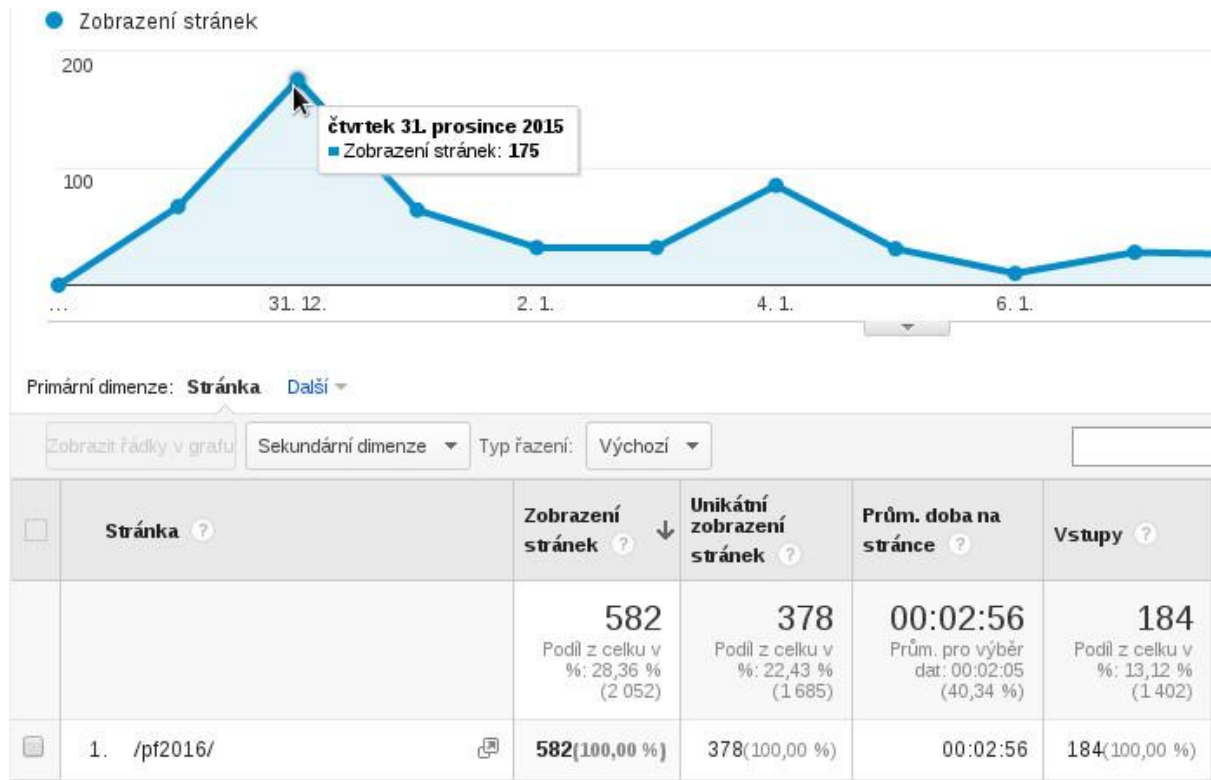
Nejlépejší aktivní stránky:

Aktivní stránka
1 /2014/09/10/simple-trick...-at-last-command-in-shell/
2 /p/2016/
3 /

Nejčastější umístění:



Google Analytics



Troubles?

Storage plugin was not working on iPhone

- result: resetting lock on levels

NTB with touch displays were not able to process mouse event

- Kiwi switched automatically only to touch resource
- <https://github.com/gamelab/kiwi.js/issues/230>

Want to learn more about mechanics?

Some books and video trainings are available also on Safari



Want to learn about yourself? ;-)

<http://www.gamerdna.com/quizzes/bartle-test-of-gamer-psychology>

Bartle's Player Type



EXPLORER

gamerDNA	EXPLORER	ACHIEVER	SOCIALIZER	KILLER
Quiz taken Feb 21, 2015	E 87%	A 53%	S 53%	K 7%
BARTLE GAMER PSYCHOLOGY QUIZ				

The Explorer motto:

"No stone unturned!"

Summary

