Story behind PF 2016

Juraj Michálek
Y Soft - Brno
10.2. 2016

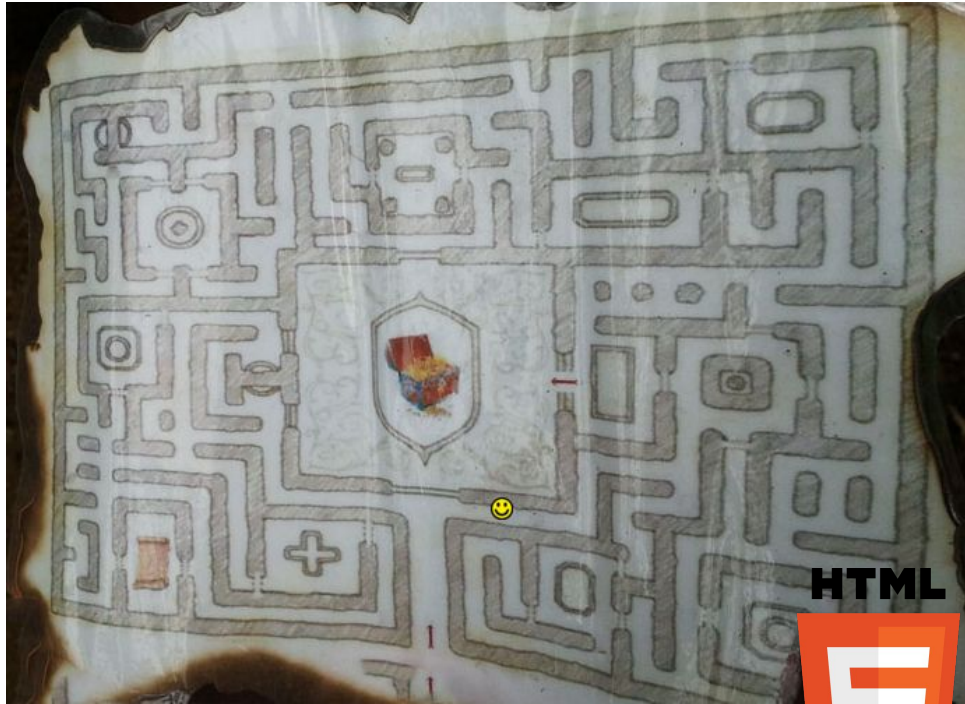# PF 2010

PF 2011
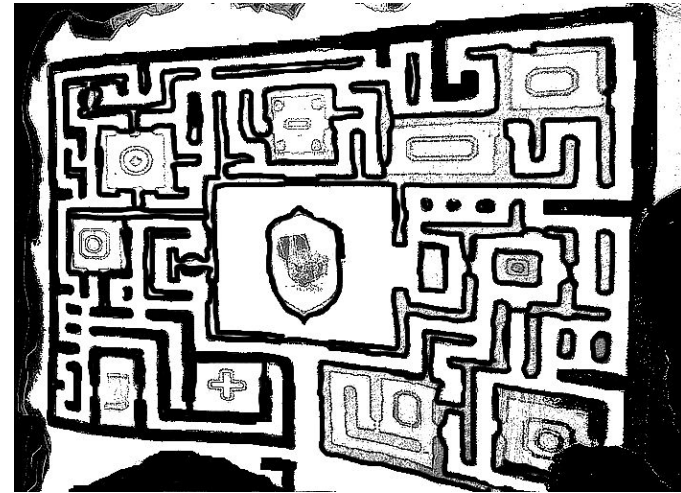

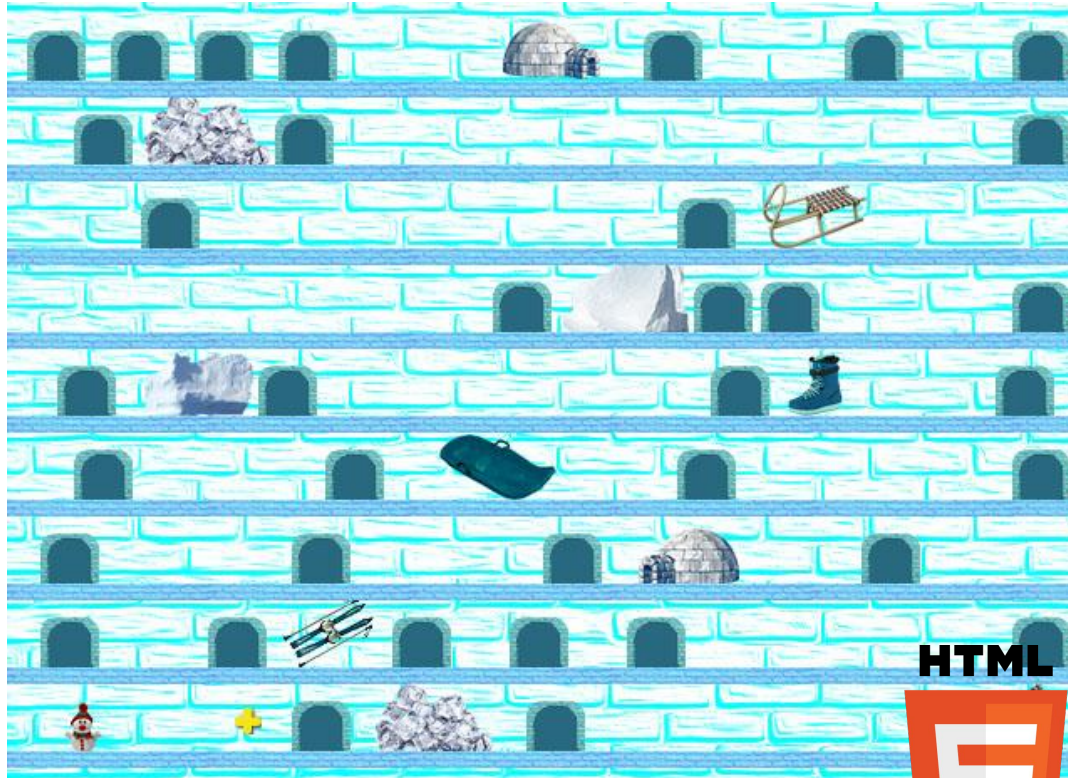

http://georgik.sinusgear.com/2010/12/23/pf2011/

PF 2012

Canvas

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

PF 2013

Webfonts

PF 2014

Phonegap

PF 2015

Level 02: 3 Pictures
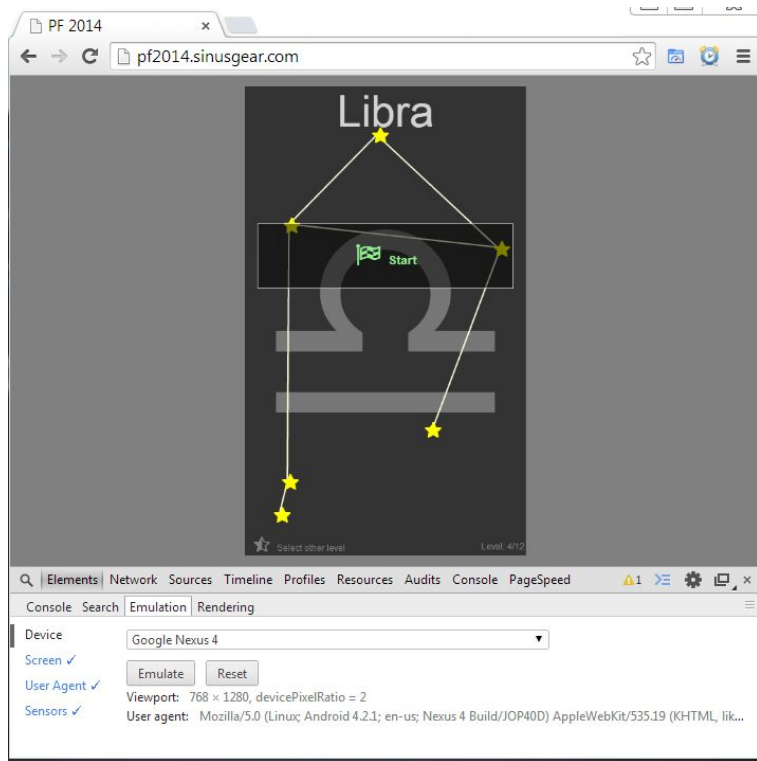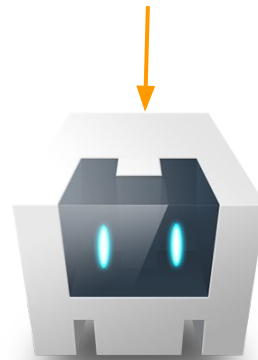
Cloud9 IDE
Your code anywhere, anytime

ANGULARJS
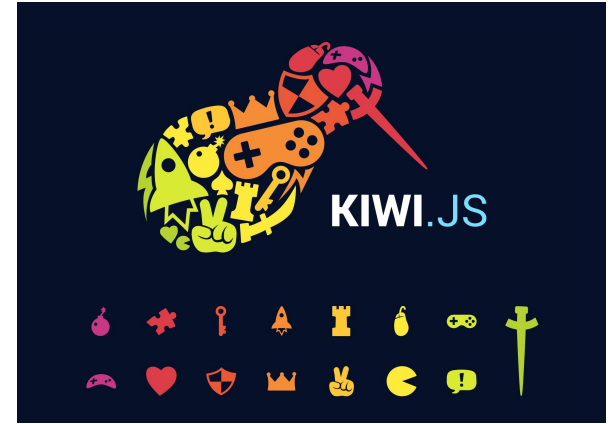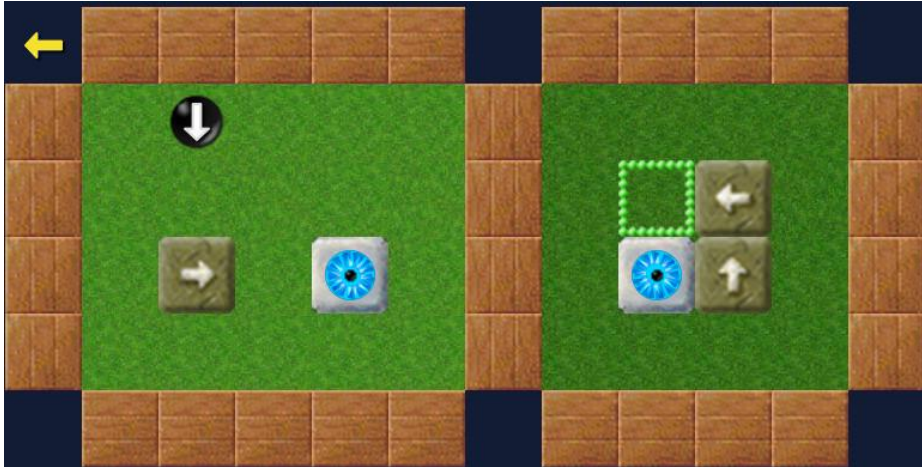by Google

Font Awesome
THE ICONIC FONT DESIGNED FOR BOOTSTRAP

Download

Version 4.0.3 · GitHub Project · Old 3.2.1 Docs · Created by Dave Gandy

PF 2016

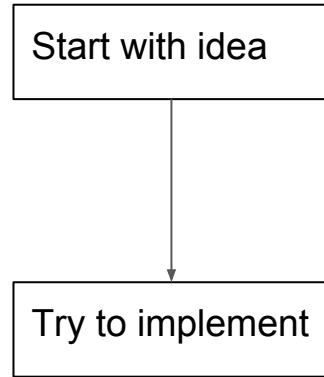# Constraints

Limited time to deliver final product (end of year)

Many interruptions

Only small chunks of time available
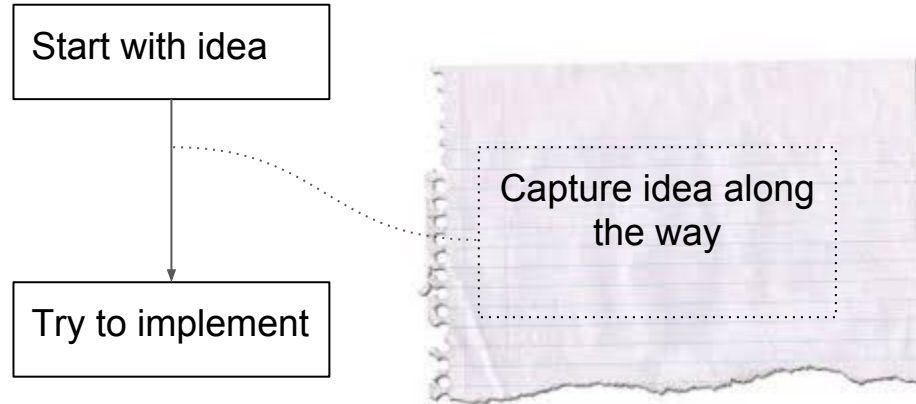
Creative process

Start with idea

Creative process

```
┌─────────────────────┐
│  Start with idea    │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│  Try to implement   │
└─────────────────────┘
```
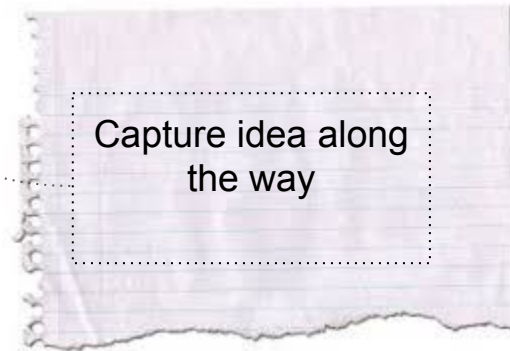
Creative process

Start with idea

Try to implement

Capture idea along the way

Creative process

Start with idea

Try to implement

Capture idea along the way

too long time
>1h

Creative process

Creative process

Start with idea

Capture idea along the way

Nah...

Try to implement

too long time

Relax :-)
Take a break

How do you feel?
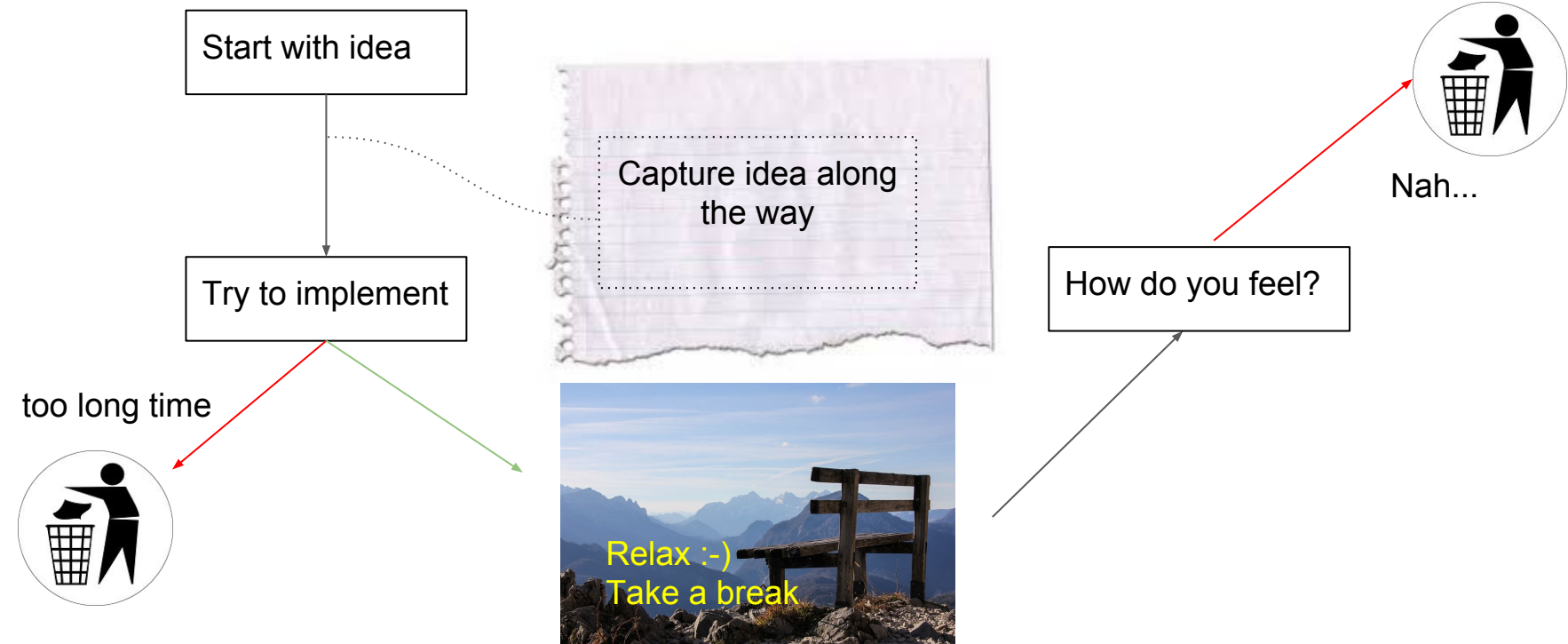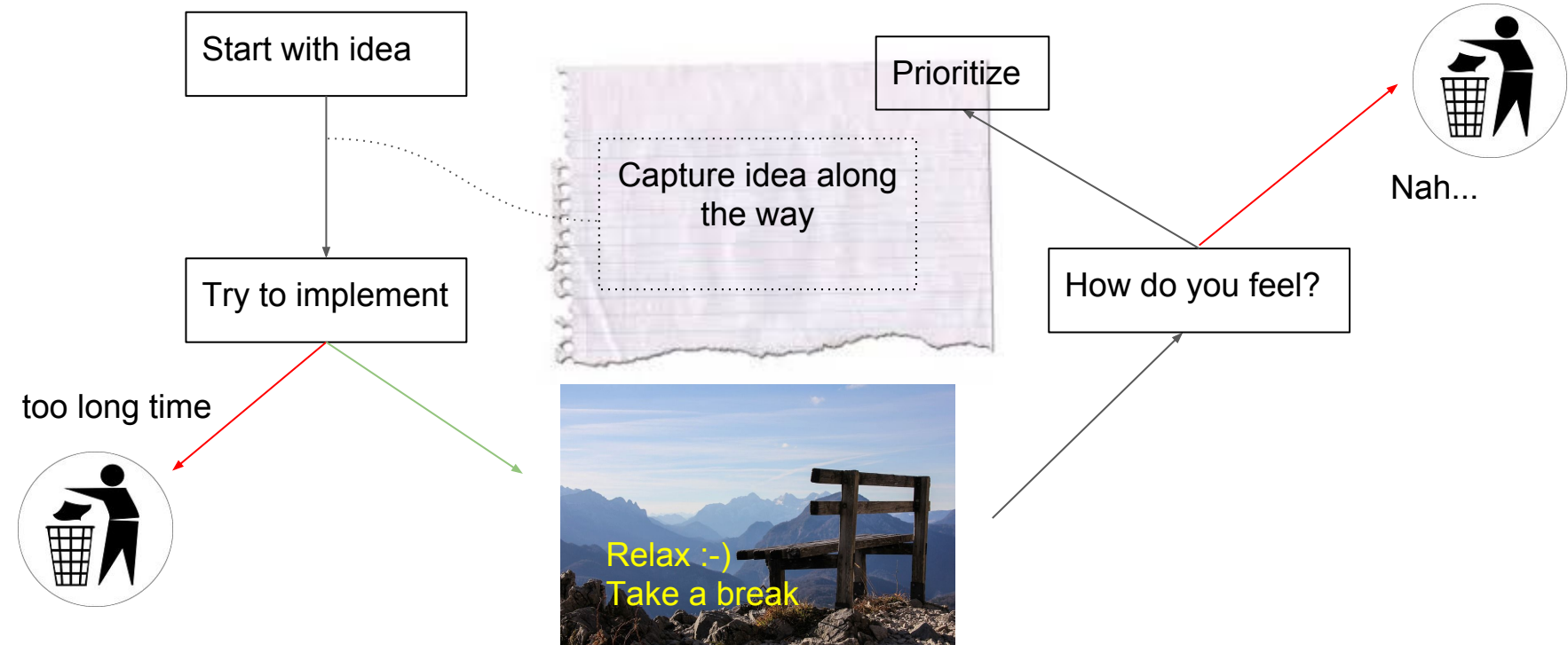
Creative process

Creative process
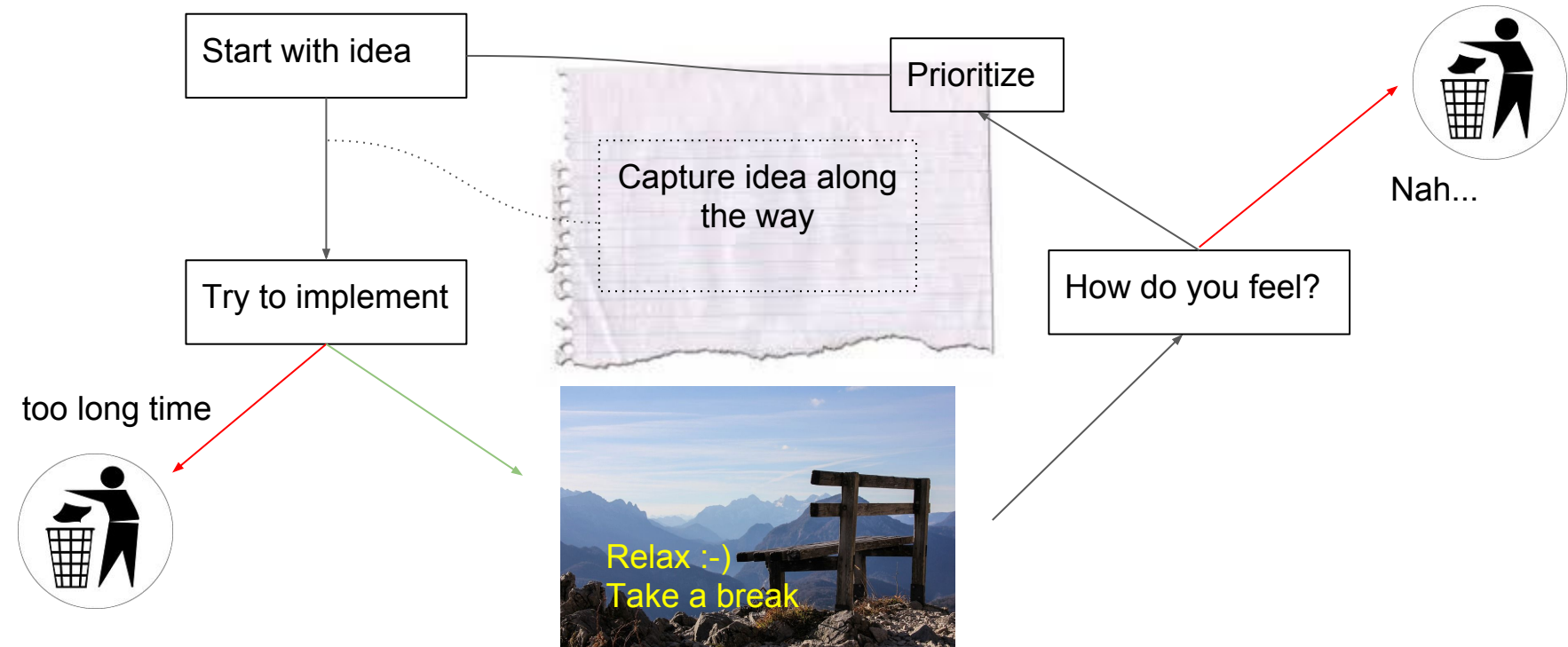
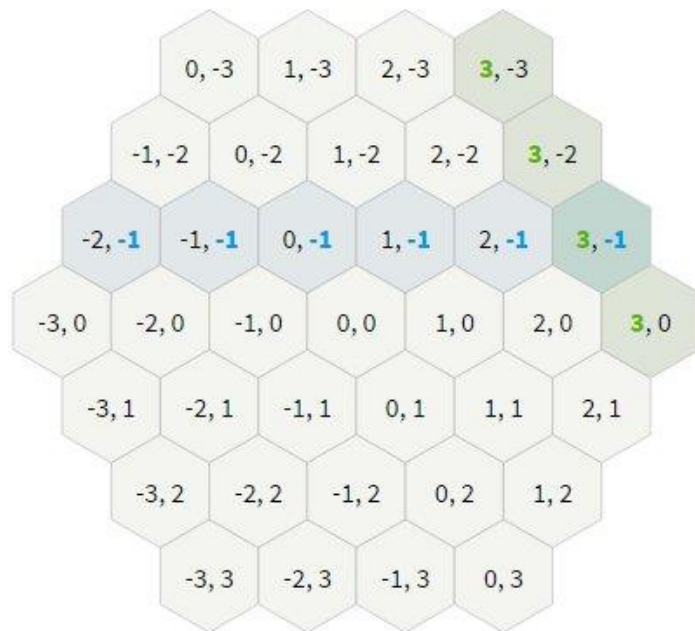2.0 NOW IN BETA!

One framework.
Mobile and desktop.

GET STARTED

TypeScript

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

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 deplay - 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...

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.
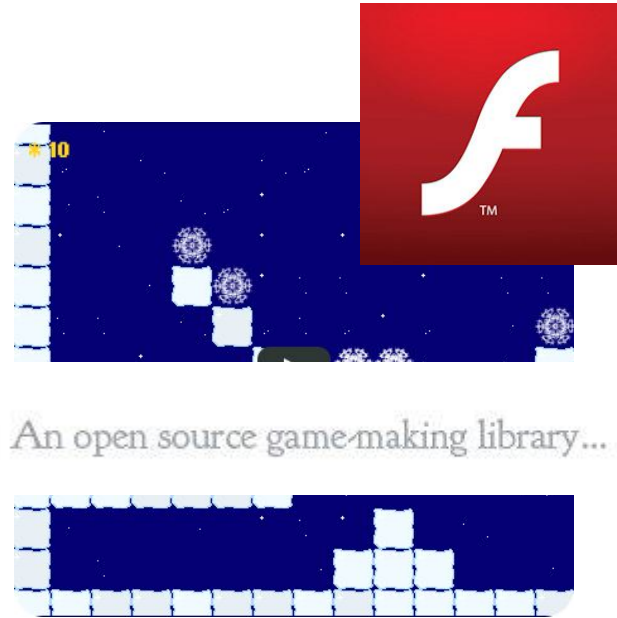
FILE MANAGEMENT AND LOADING

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

Kiwi.JS written in TypeScript

TypeScript

You can code in TypeScript
or in JavaScript

Do you remember? PF 2010 - Flixel physics engine
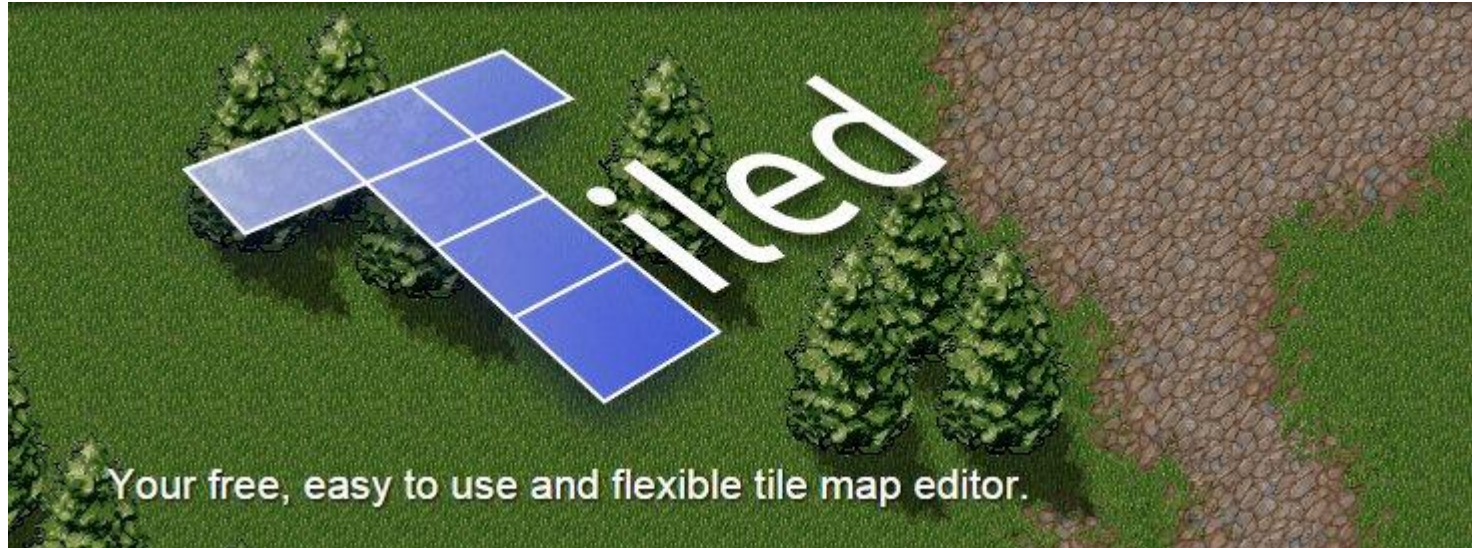

An open source game-making library…

2015 physics ported to Kiwi.JS

Inspiration - Enigma open source game
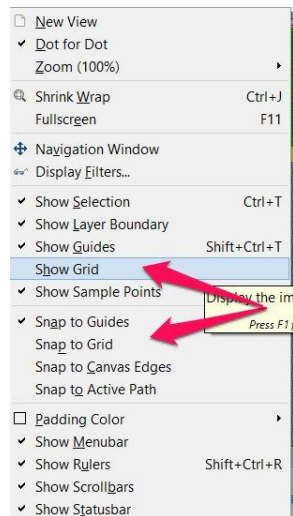
Tiled Map Editor

Your free, easy to use and flexible tile map editor.
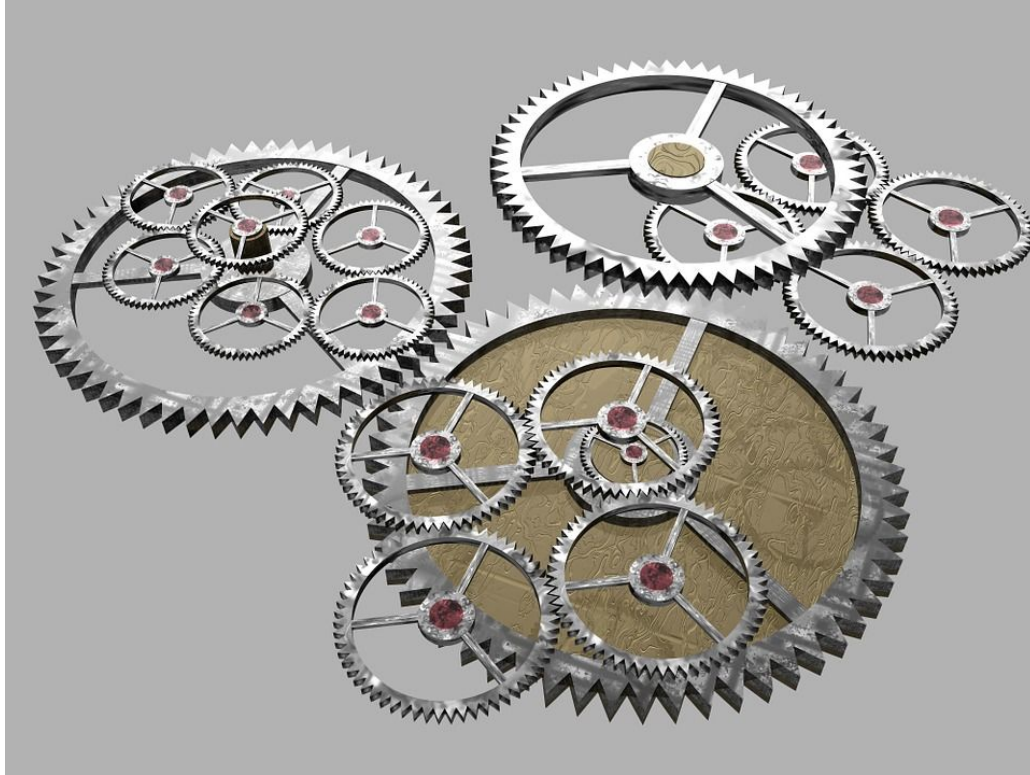
http://www.mapeditor.org

JSON format of map

Spritesheet - support in Kiwi.JS
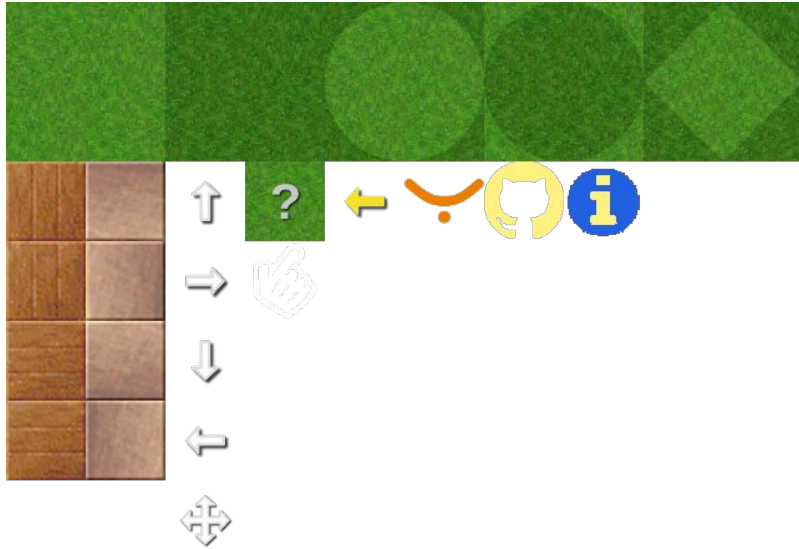
Edit sprites - GIMP configuration
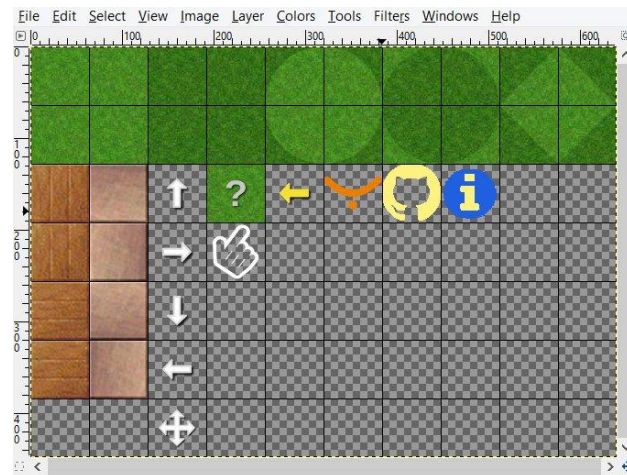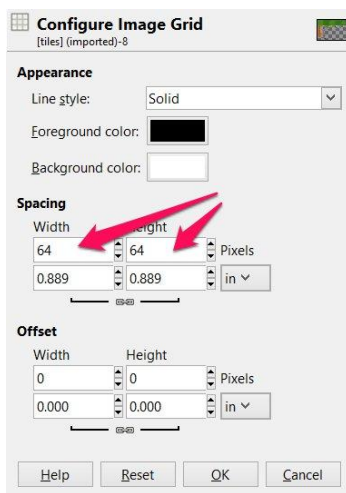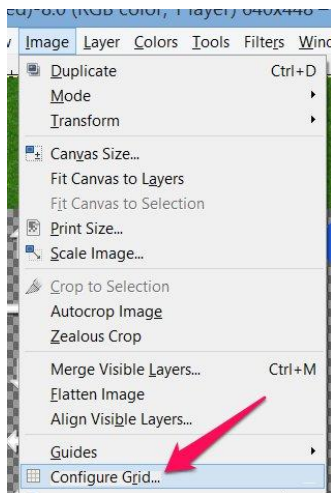
Game mechanics

Progress

Let user know that he's moving forward
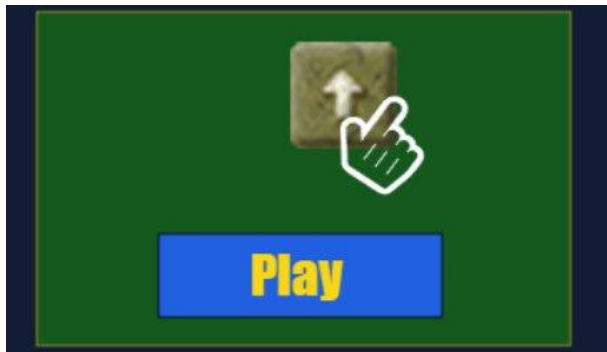
He should peceive the goal as achievable.

Guidance
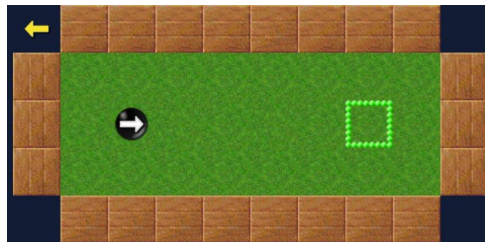
Provide instructions.

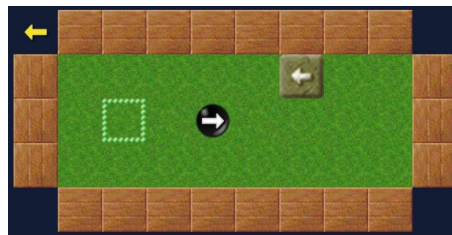Not everything is clear to new player.

Simple and quick.
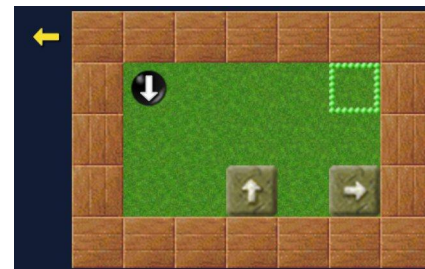
Progressive disclosure

Start with basic stuff

Then show more stuff to user
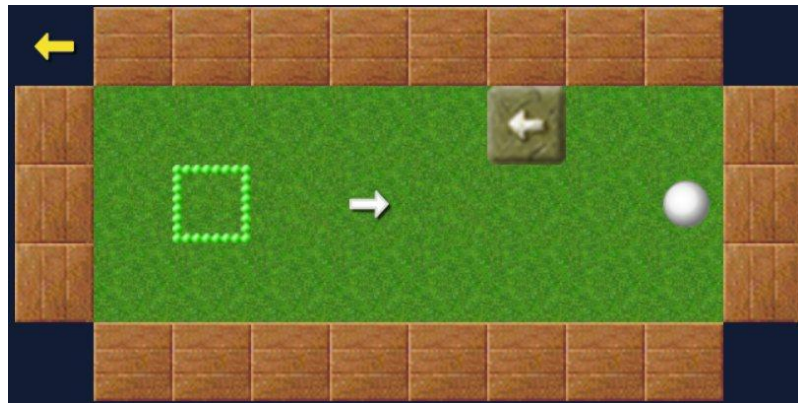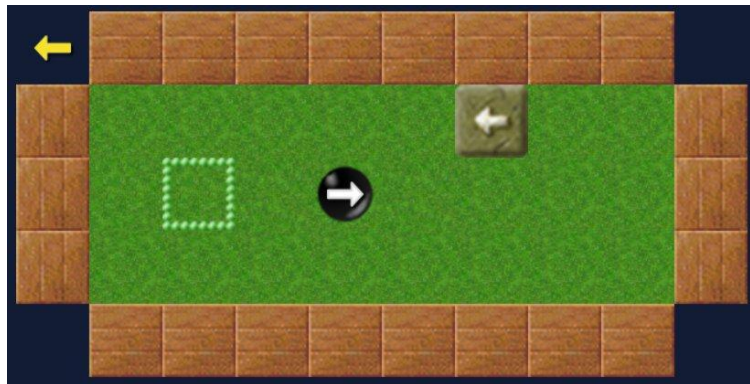

Do not overload user

Graceful failure

Penalty for failure should not be too high.

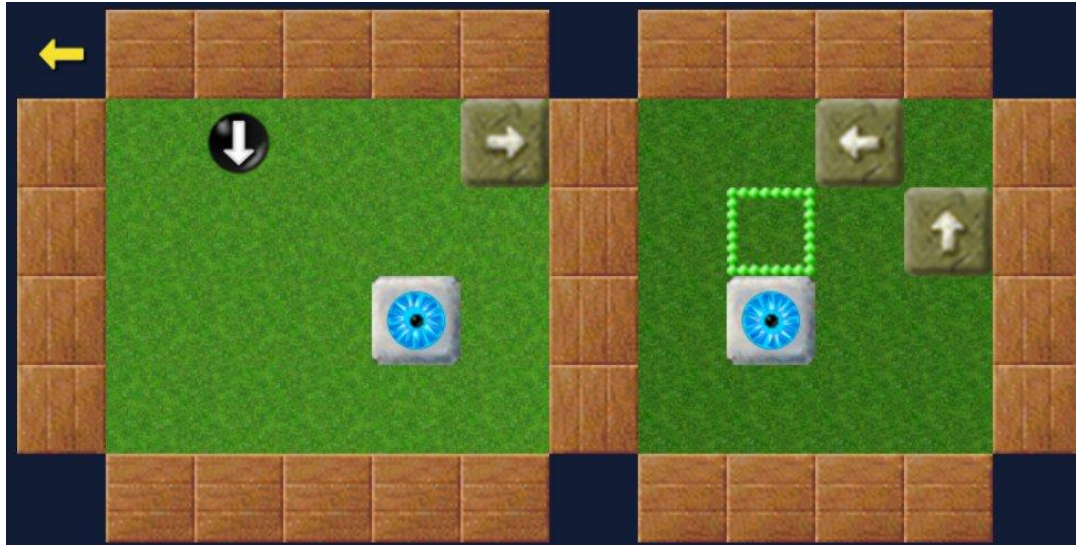Failure should be source for learning, not for damnation

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

Surprise

New element or rule can bring positive surprise.

E.g. teleport

Google Analytics Live view

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

Gabe
Zichermann

Want to learn about yourself? ;-)

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

Summary