Un ensemble de bibliothèques PHP qui roxx du poney
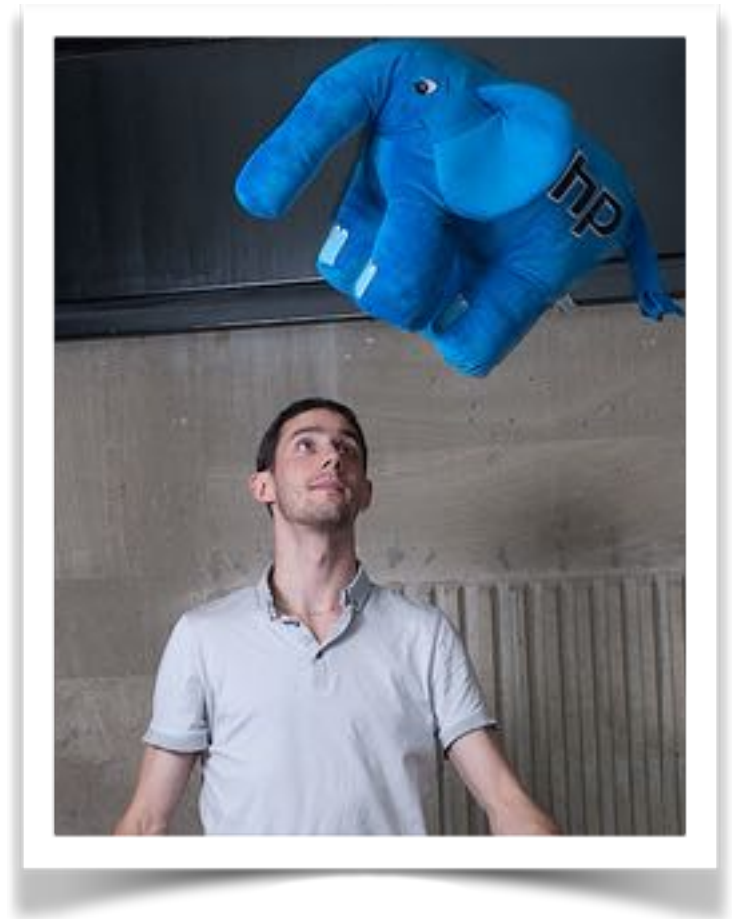
26 janvier 2017

Qui suis-je ?

- Alexis von Glasow

-   @ashgenesis

- https://inovia.fr
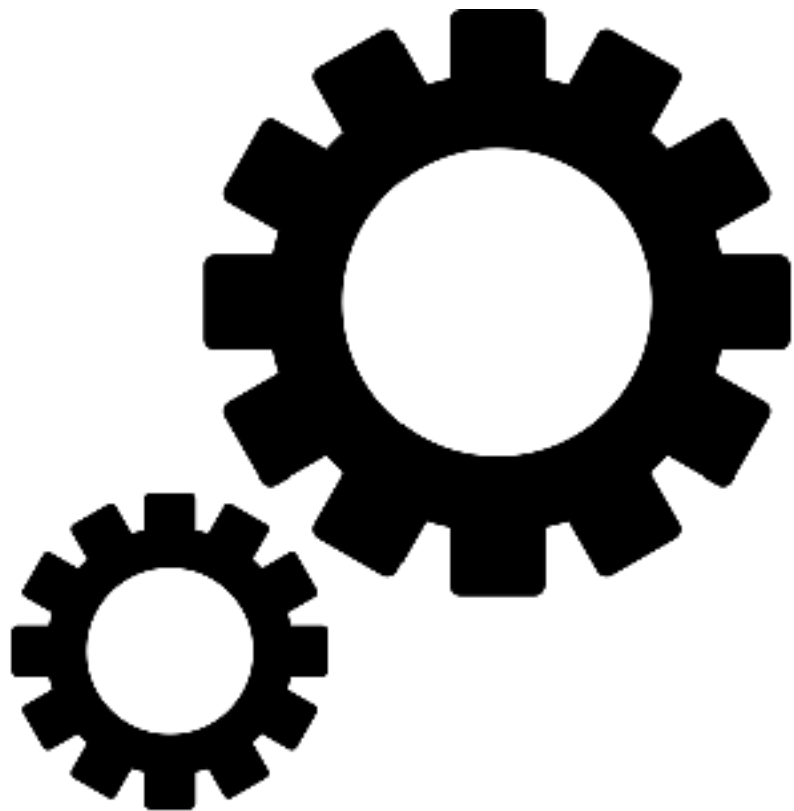
- contributeur:

http://atoum.org

https://hoa-project.net

~ 60

Bibliothèques

Acl	Dispatcher	Iterator	Praspel	Session
Bench	Dns	Json	Promise	Socket	Visitor
Cache	Event	Locale	Protocol	Stream	Websocket
Cli	Eventsource	Log	Prototype	String	Worker
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Devtools	Irc	Notification	Serialize	View	

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Compiler

+ **Grammaire**

Compiler

Grammaire

=

Lexèmes (tokens)

+

Règles

Compiler

```
%token      T_OP_PLUS        plus
%token      T_OP_MINUS       moins
%token      T_OP_MULTI       multiplié par
%token      T_OP_DIVIDE      divisé par
%token      T_OP_EQUAL       égale
%token      T_FN             \.[a-zA-Z_][a-zA-Z0-9_]*
%token      T_VAR            @[a-zA-Z_][a-zA-Z0-9_]*
%token      T_CONST          [A-Z_][A-Z0-9_]*
%token      T_NUMBER         \-?[1-9][0-9]*
%token      T_OPEN_PAREN     \(
%token      T_CLOSE_PAREN    \)
%token      T_COMMA          ,
```

Compiler

```
#tml:
    ( fn() | expr() | assign() | str() )+
#expr:
    ( <T_NUMBER> | <T_CONST> | rvar() | fn() )
( operator() expr() )?
#assign:
    lvar() ::T_OP_EQUAL:: rval()
#fn:
    <T_FN> ::T_OPEN_PAREN:: arguments() ::T_CLOSE_PAREN::
#str:
    ::T_QUOTE:: <T_CHAR>* ::T_QUOTE::
#rvar:
    <T_VAR>
#lvar:
    <T_VAR>
```

10 minutes language

```
@neuf égal 4 plus 5
@trois égal @neuf divisé par 3
@mon_age égal @trois multiplié par 10 plus 5

affiche J'ai @mon_age ans 😅
```
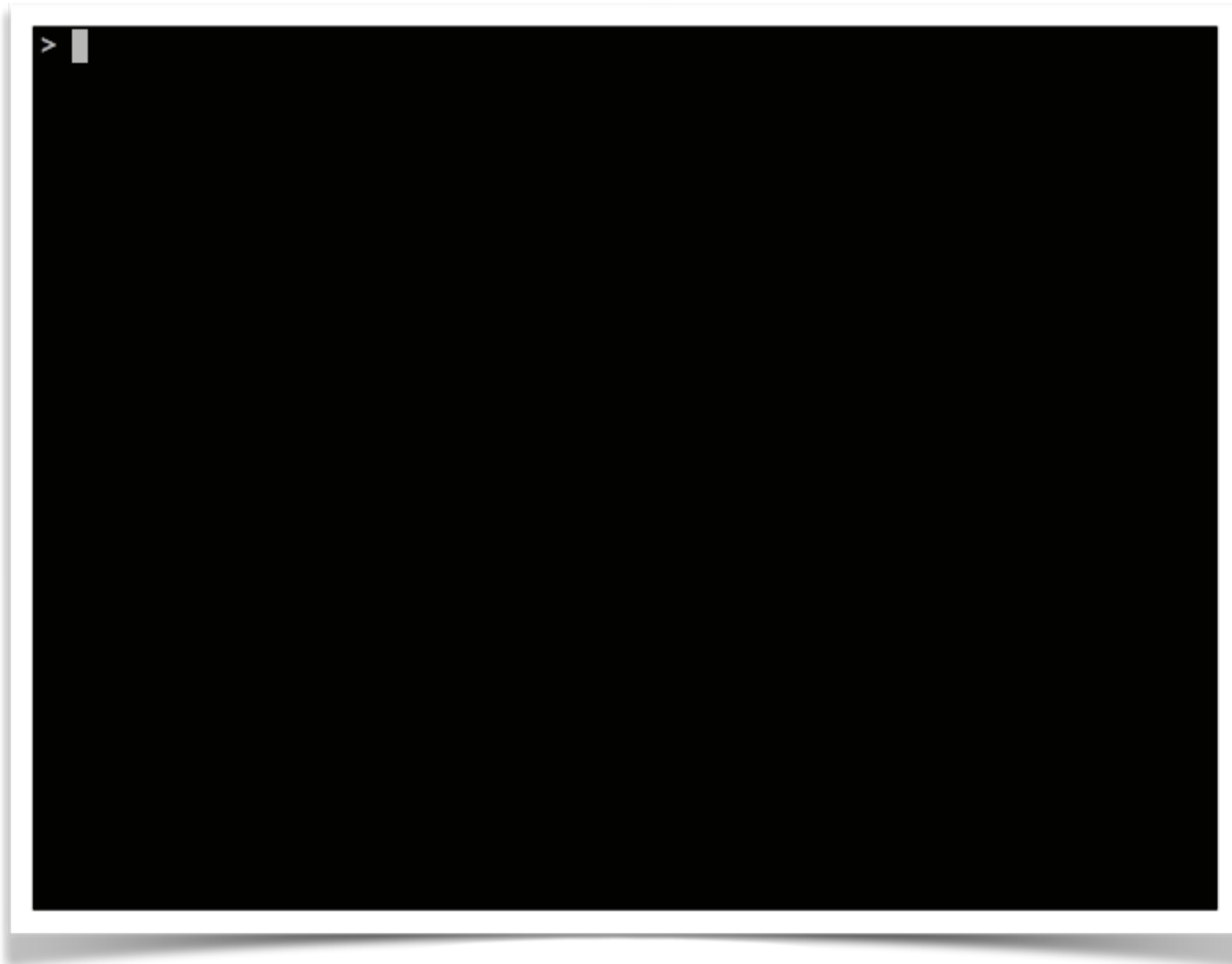
```
J'ai 35 ans 😅
```

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Console

```php
$functions = get_defined_functions();

$readline->setAutocompleter(
    new Hoa\Console\Readline\Autocompleter\Aggregate([
        new Hoa\Console\Readline\Autocompleter\Path(),
        new Hoa\Console\Readline\Autocompleter\Word(
            $functions['internal'])
        ]
    )
);
```

Console

https://github.com/hoaproject/Console#readline

Console

```
$options = new Hoa\Console\GetOption(
    array(
        array('colonnes',  Hoa\Console\GetOption::REQUIRED_ARGUMENT, 'y'),
        array('lines',  Hoa\Console\GetOption::REQUIRED_ARGUMENT, 'x'),
        array('random',   Hoa\Console\GetOption::OPTIONAL_ARGUMENT, 'r'),
        array('glider-gun', Hoa\Console\GetOption::OPTIONAL_ARGUMENT, 'g'),
        array('help',   Hoa\Console\GetOption::OPTIONAL_ARGUMENT, 'h'),
    ),
    $parser
);
```

Console

```
Hoa\Console\Cursor::clear('↕');
Hoa\Console\Cursor::hide();
Hoa\Console\Cursor::move('↓', 1);

do {
    $hash = $this->computeHash();
    $this->displayWorld();
    $this->computeNewState();
} while ($hash !== $this->computeHash());

Hoa\Console\Cursor::show();
Hoa\Console\Cursor::colorize('default');
Hoa\Console\Cursor::move(
    '↓',
    $this->universe->getWidth()
);
```
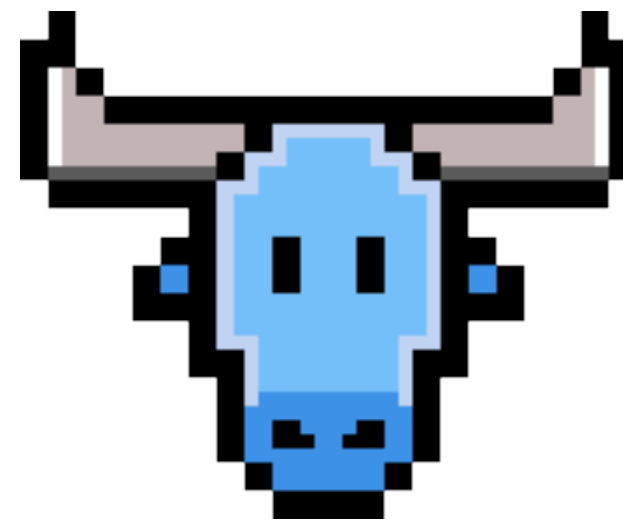
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Praspel

Praspel

```
$this->sample(
    $this->realdom->boundinteger(7, 13)
        ->or->boundinteger(42, 153)
)
```

```
$data = $this->realdom
    ->regex('/[\w\-_]+(\.[\w\-\_]+)*@\w\.(net|org)/');
$this->string($this->sample($data))
    ->contains(…)->…;
```

Praspel

```
%token  true              true
%token  false             false
%token  null              null
//…
%token  brace_            {
%token  _brace            }
%token  bracket_          \[
%token  number            \-?(0|[1-9]\d*)(\.\d+)?([eE][\+\-]?\d+)?
```

```
value:
    <true> | <false> | <null> | string() | object() | array() | number()

number:
    <number>

#object:
    ::brace_:: pair() ( ::comma:: pair() )* ::_brace::

#pair:
    string() ::colon:: value()

#array:
    ::bracket_:: value() ( ::comma:: value() )* ::_bracket::

//…
```

Praspel

```php
public function testJsonExhaustively()
{
    $compiler = \Hoa\Compiler\Llk\Llk::load(
        new \Hoa\File\Read(__DIR__ . DS . 'JsonGrammar.pp'
    );
    $sampler  = new \Hoa\Compiler\Llk\Sampler\BoundedExhaustive(
        $compiler,
        new \Hoa\Regex\Visitor\Isotropic(new \Hoa\Math\Sampler\Random()),
        5
    );

    foreach($sampler as $json) {

        json_decode($json);

        $this->integer(json_last_error())
              ->isEqualTo(JSON_ERROR_NONE);
    }
}
```

Praspel

```
> atoum path: /private/tmp/praspel/vendor/atoum/atoum/vendor/bin/atoum
> atoum version: 2.6.1
> PHP path: /usr/local/Cellar/php70/7.0.12_5/bin/php
> PHP version:
=> PHP 7.0.12 (cli) (built: Oct 14 2016 09:56:59) ( NTS )
=> Copyright (c) 1997-2016 The PHP Group
=> Zend Engine v3.0.0, Copyright (c) 1998-2016 Zend Technologies
=>     with Zend OPcache v7.0.12, Copyright (c) 1999-2016, by Zend Technologies
=>     with Xdebug v2.4.1, Copyright (c) 2002-2016, by Derick Rethans
> Praspel\tests\units\Example...
[SSS_____][3/3]
=> Test duration: 0.84 second.
=> Memory usage: 4.00 Mb.
> Total test duration: 0.84 second.
> Total test memory usage: 4.00 Mb.
> Running duration: 0.41 second.
Success (1 test, 3/3 methods, 0 void method, 0 skipped method, 2129 assertions)!
```

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Ruler

```php
$ruler              = new Hoa\Ruler\Ruler();
$rule               = 'logged(user) and points > 30';

$context            = new Hoa\Ruler\Context();
$context['user']    = new User();
$context['points'] = 42;

// Declare the `logged` function.
$asserter = new Hoa\Ruler\Visitor\Asserter();
$asserter->setOperator('logged', $logged);

$ruler->setAsserter($asserter);

// Assert!
var_dump(
    $ruler->assert($rule, $context)
);

/**
 * Will output:
 *     bool(true)
 */
```

RulerZ

```php
$highRankFemalesRule = 'gender = "F" and points > 9000';
```

```php
// or an array of objects
$playersObj = [
    new Player('Joe',   'M', 40, 2500),
    new Player('Moe',   'M', 55, 1230),
    new Player('Alice', 'F', 27, 9001),
];
```

```php
$isHighRankFemale = $rulerz->satisfies($playersObj[0], $highRankFemalesRule);
```

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Websocket

```php
$server = new Websocket\Server(
    new Socket\Server(
        'ws://127.0.0.1:8080')
    );

$server
    ->getConnection()
    ->setNodeName(Player::class);

$server->on(
    'open',
    function (Event\Bucket $bucket) {
        echo 'New player', "\n";
    }
);
```

Websocket

```php
$server->on(
    'message',
    function (Event\Bucket $bucket) use ($scores) {
        //…

        if (false === $message = @json_decode($data['message'])) {
            $bucket->getSource()->close();

            return;
        }

        switch ($message->type) {
            case 'server/player/new':
                //…
                break;

            case 'server/bubble/new':
                //…
                break;

            case 'server/bubble/delete':
                $bucket->getSource()->broadcast(
                    json_encode([
                        'type' => 'client/bubble/delete',
                        'id'   => $message->id
                    ])
                );
        }
    }
);
```
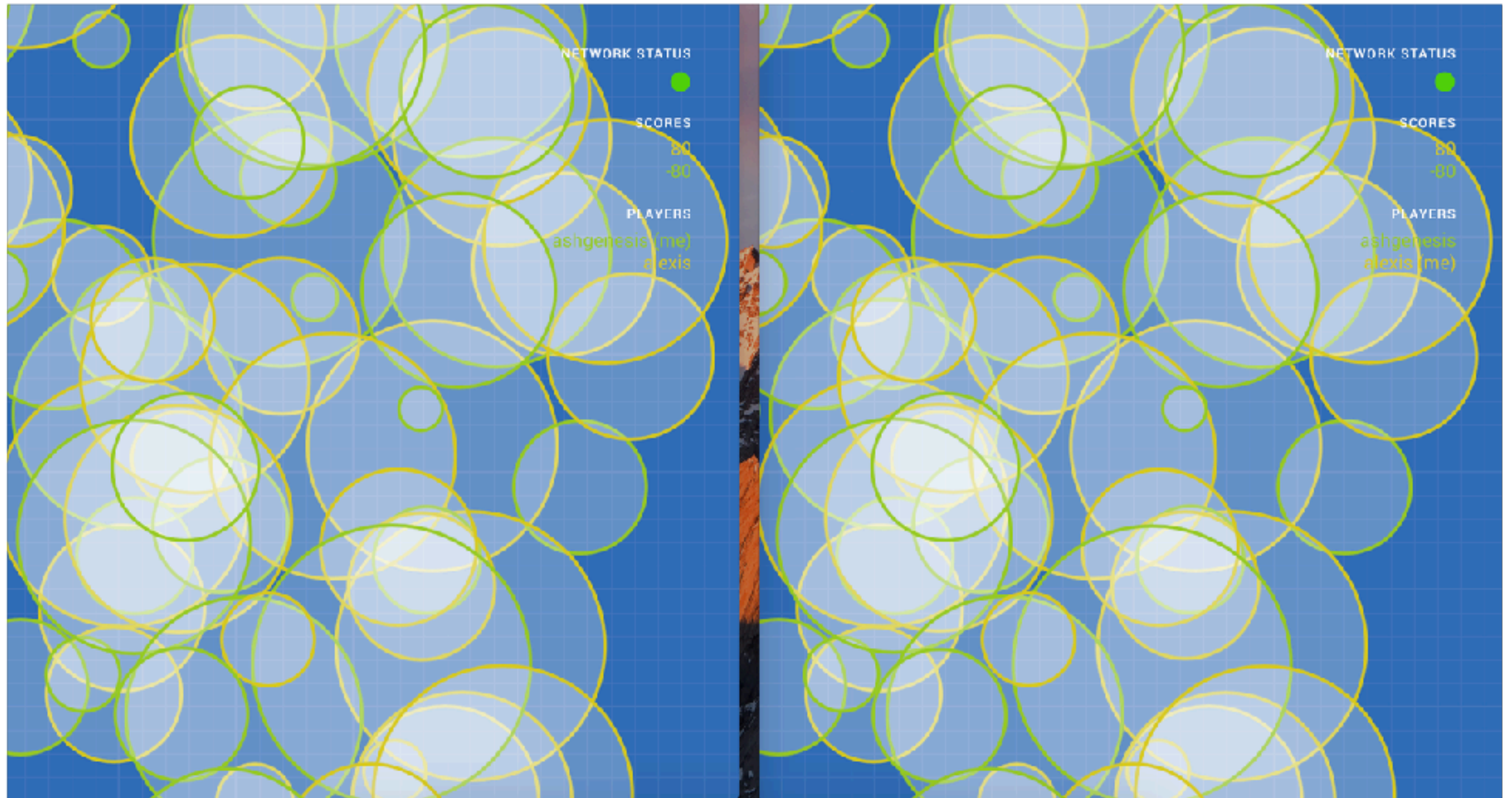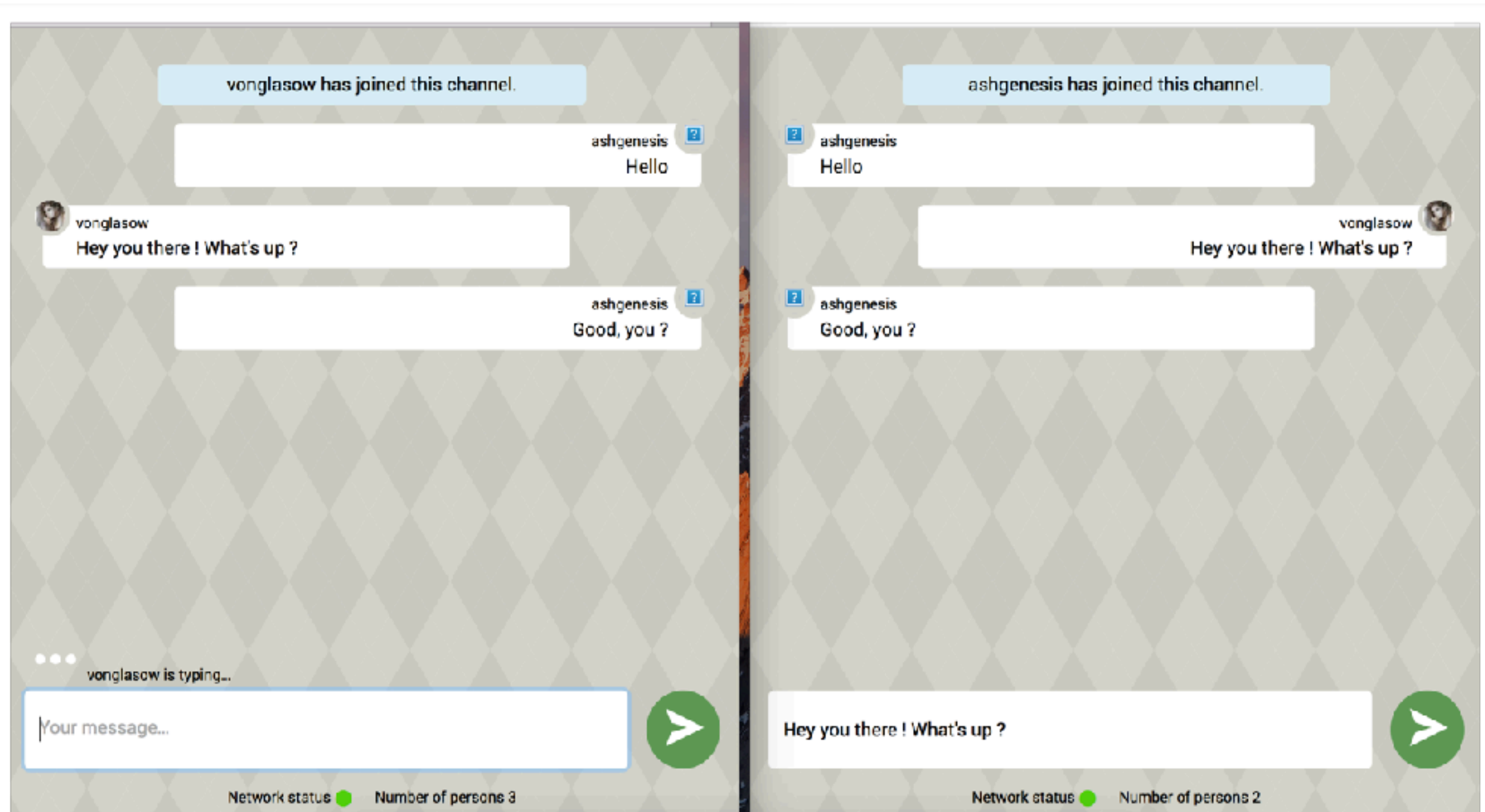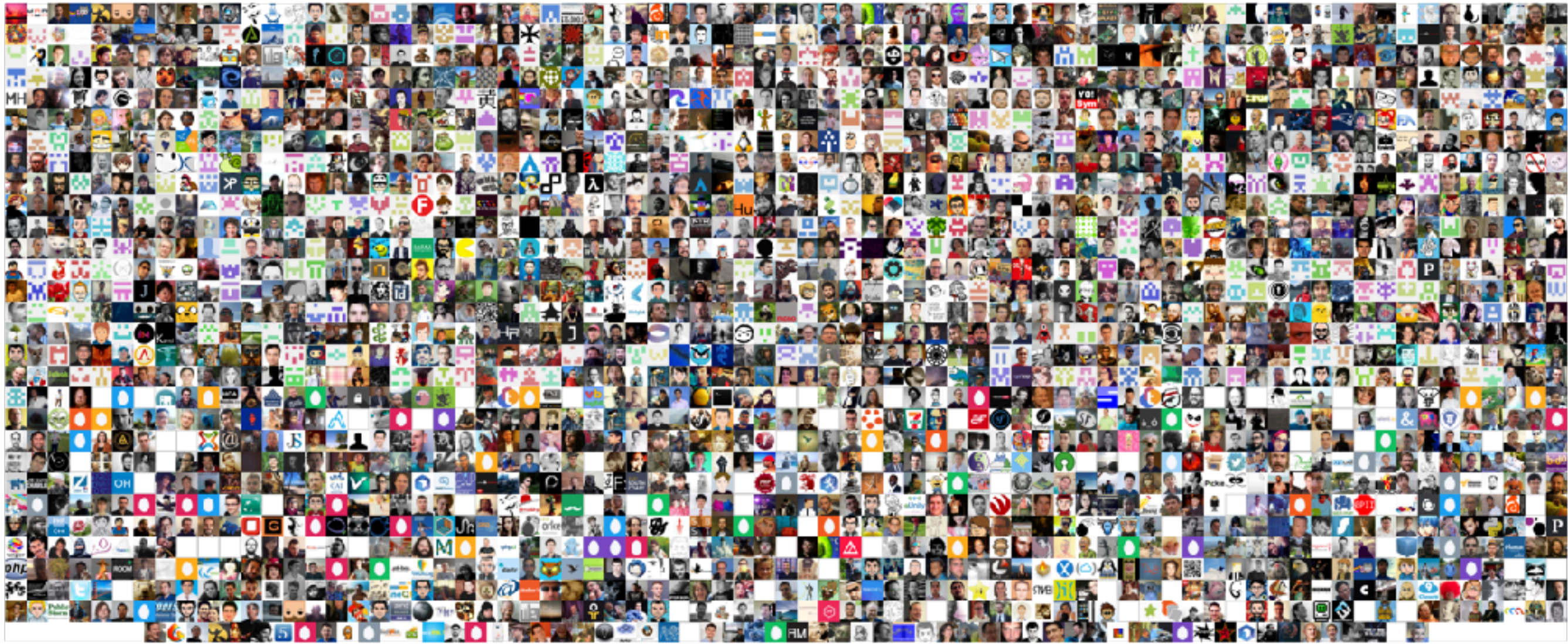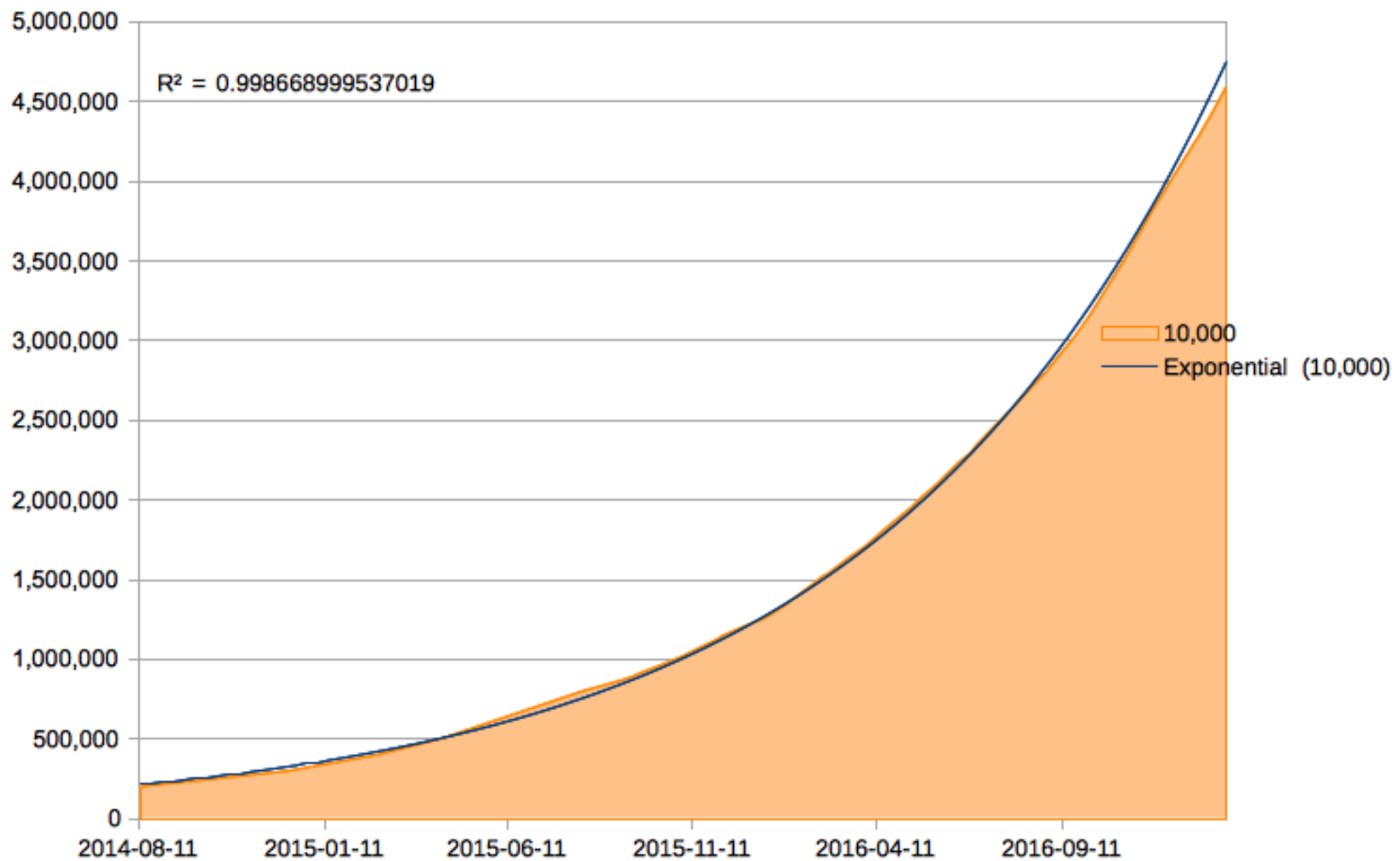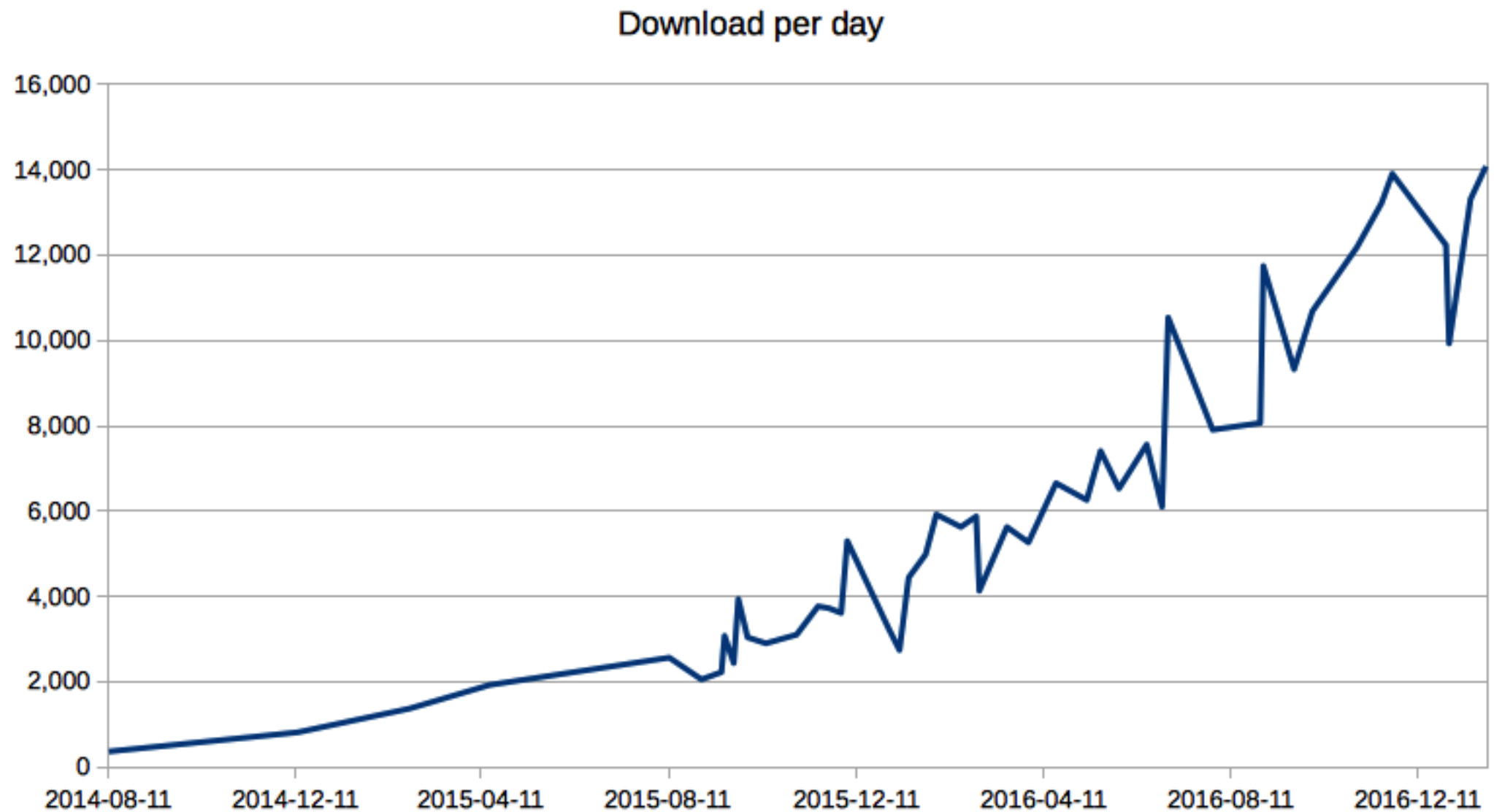
Bubble Game

Chat

vonglasow has joined this channel.

ashgenesis [?]
Hello

vonglasow
Hey you there ! What's up ?

ashgenesis [?]
Good, you ?

• • •
vonglasow is typing...

Your message...

Network status ●   Number of persons 3

---

ashgenesis has joined this channel.

[?] ashgenesis
Hello

vonglasow
Hey you there ! What's up ?

[?] ashgenesis
Good, you ?

Hey you there ! What's up ?

Network status ●   Number of persons 2

Communauté

~2200 personnes

Packagist

Packagist activity

Téléchargement

Download per day

Ils nous font confiance

Merci

- https://hoa-project.net

- [twitter bird] @hoaproject

- irc: freenode #hoaproject

- https://github.com/doctrine/annotations/pull/75

- http://psysh.org

- https://github.com/hoaproject/Contributions-Atoum-PraspelExtension

- https://github.com/vonglasow/game-of-life

- https://github.com/jubianchi/tml

- https://github.com/Hywan/ForumPHP2016

- https://github.com/K-Phoen/rulerz

- https://hoa-project.net/Fr/Awecode/Console-readline.html

- https://hoa-project.net/Fr/Awecode/Websocket.html