ECMASCRIPT HARMONY

PlovdivConf 2015

ЙОРДАН ИВАНОВ

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КОИ СТЕ ВИЕ?

ВЪВЕДЕНИЕ

СЪВМЕСТИМОСТ

http://kangax.github.io/compat-table/es6

Платформа	Съвместимост
Babel.js	76%
Microsoft Edge	72%
Mozilla Firefox 37	62%
Traceur	60%
Google Chrome 42	43%
Microsoft IE 11	15%

КАКВО ДА ПРАВИМ ДНЕС?

- https://babeljs.io
- https://github.com/google/traceur-compiler

```javascript
var gulp = require('gulp');
var babel = require('gulp-babel');

gulp.task('default', function () {
  return gulp.src('src/app.js')
  .pipe(babel())
  .pipe(gulp.dest('dist'));
});
```

КАКВО НОВО?

- let и const
- Object.observe()
- Аргументи
- Arrows
- Promises
- Класове
- Шаблони
- Модули

LET И CONST

```javascript
function let_const() {
  let foo;

  if(true) {
    // OK
    const foo = 'bar';

    // Error
    foo = 'baz';
  }

  // Error
  let foo = 'baz';
}
```

```javascript
function letTest() {
  let x = 31;

  {
    let x = 71;
    console.log(x);  // 71
  }

  console.log(x);  // 31
}
```

OBJECT.OBSERVE()

```javascript
let obj = {
  foo: 0,
  bar: 1
};

Object.observe(obj, function(changes) {
  console.log(changes);
});

obj.baz = 2;
// [{name: 'baz', object: [object], type: 'add'}]
```

СТОЙНОСТИ ПО ПОДРАЗБИРАНЕ

```javascript
function setBackgroundColor(element, color = 'rosybrown') {
  element.style.backgroundColor = color;
}

setBackgroundColor(someDiv);            // 'rosybrown'
setBackgroundColor(someDiv, undefined); // 'rosybrown'
setBackgroundColor(someDiv, 'blue');    // 'blue'
```

ОСТАВАЩИ ПАРАМЕТРИ

```javascript
let add = function(category, ...items) {
  console.log(category + ': ' + items.join(', '));
};

add('fruit', 'apple');         // fruit: apple
add('dairy', 'milk', 'cheese'); // dairy: milk, cheese
```

ARROWS

```javascript
let bob = {
  name: 'Bob',
  friends: [],
  printFriends() {
    this.friends.forEach(friend => {
      console.log(this.name + ' knows ' + friend);
    });
  }
}
```

PROMISES

```javascript
function timeout(duration = 0) {
  return new Promise((resolve, reject) => {
    setTimeout(resolve, duration);
  });
}

let promise = timeout(1000).then(() => {
  return timeout(2000);
}).then(() => {
  throw new Error('hmm');
}).catch(err => {
  return Promise.all([timeout(100), timeout(200)]);
});
```

КЛАСОВЕ

```javascript
class Barracks extends Building {
  constructor({x, y}) {
    let position = new Position(x, y);
    super(position);
  }

  spawnMarine() {
    return new Marine('Jim Raynor');
  }

  static price() {
    return 150;
  }
}
```

ШАБЛОНИ

```javascript
const template = `<table>
  ${people.map(person => `
    <tr>
      <td>$${person.firstName}</td>
      <td>$${person.lastName}</td>
    </tr>
  `)}
</table>`;
```

МОДУЛИ

```js
// lib/math.js
export function sum(x, y) {
  return x + y;
};

export var pi = 3.141593;

// app.js
import * as math from 'lib/math';
alert('2π = ' + math.sum(math.pi, math.pi));
```

ВЪПРОСИ?

БЛАГОДАРЯ ВИ?