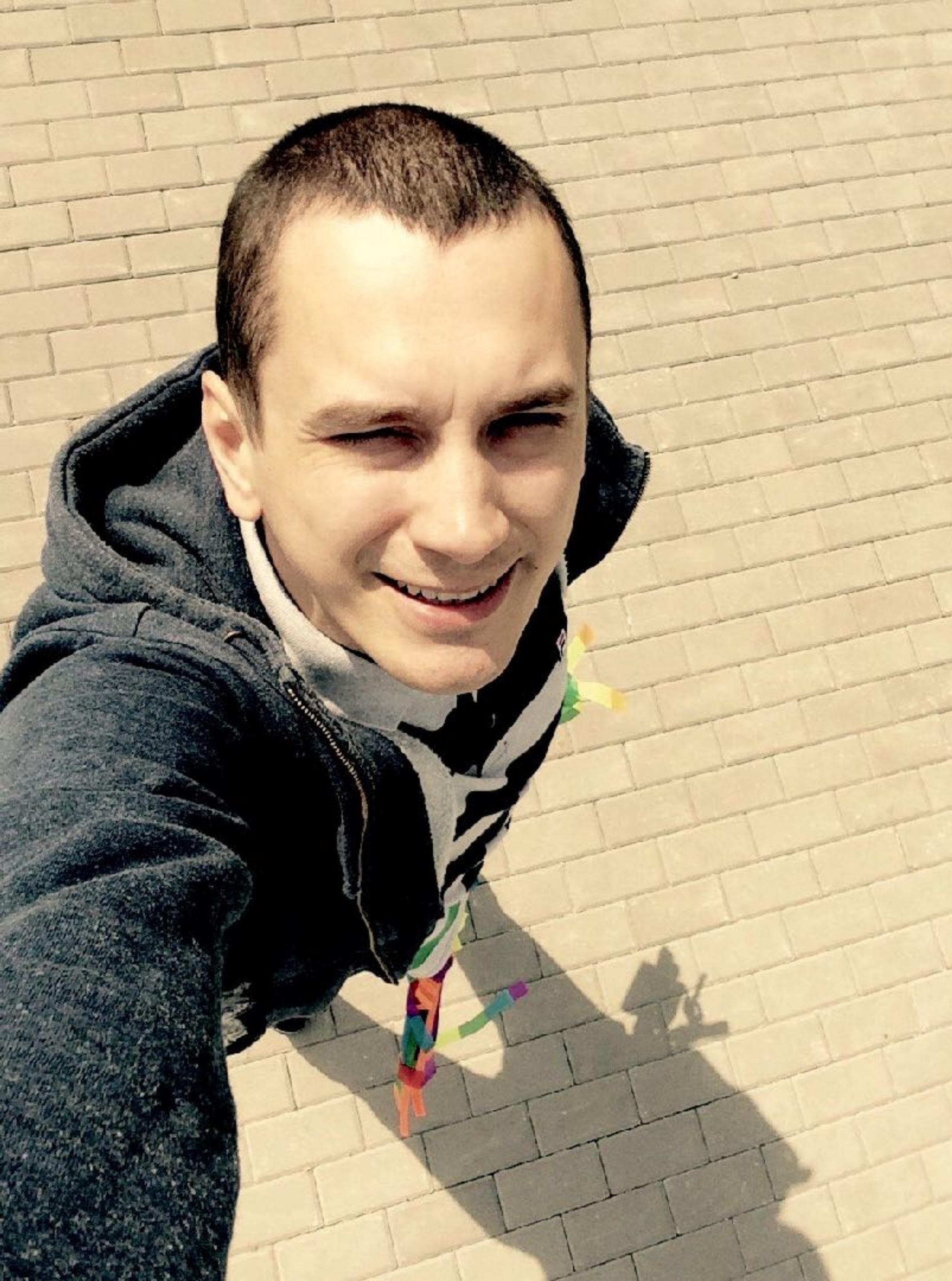


ASYNC/AWAIT С НУЛЯ

АСИНХРОННЫЙ JAVASCRIPT ДЛЯ ЧАЙНИКОВ



agrinn.ru

РАЗРАБОТЧИК В PAY P.S.

ARTEM
HALETSKY

ВЫ ЛЮБИТЕ КОФЕ?

ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ КОЛЛБЕКИ

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         console.log("I`m full of energy!!");  
6       } );  
7     } );  
8   } );  
9 }
```

ПОКУПКА КОФЕ ЧЕРЕЗ CALLBACKS



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy  
5         console.log("I`m full of energ  
6           );  
7         );  
8       );  
9     }  
10    );  
11  );  
12};
```



ONE MORE THING...

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           } );  
7         } );  
8       } );  
9     } );  
10 }
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             } );  
8           } );  
9           } );  
10          } );  
11        } );  
12 }
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               } );  
9             } );  
10            } );  
11            } );  
12            } );  
13        } );
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               drinkCoffee(sweetCoffee, energy => {  
9                 //N000000ooooo!!!  
10                }));  
11                }));  
12                }));  
13              });
```

ONE MORE THING...



```
1 function buyCoffee(money){  
2   makeCoffee(money, coffee => {  
3     addSugar(coffee, sweetCoffee => {  
4       drinkCoffee(sweetCoffee, energy => {  
5         doWork(energy, money => {  
6           makeCoffee(money, coffee => {  
7             addSugar(coffee, sweetCoffee => {  
8               drinkCoffee(sweetCoffee, energy => {  
9                 doWork(energy, money => {  
10                makeCoffee(money, coffee => {  
11                  addSugar(coffee, sweetCoffee => {  
12                    // AAAAAAAAaaaaaa!!!!  
13                  })•
```


CALLBACK HELL

```
1 function neil(win) {
2     // for listener purpose
3     return function() {
4         loadLink(win, REMOTE_SRC+'/assets/css/style.css', function() {
5             loadLink(win, REMOTE_SRC+'/lib/async.js', function() {
6                 loadLink(win, REMOTE_SRC+'/lib/easyXDM.js', function() {
7                     loadLink(win, REMOTE_SRC+'/lib/json2.js', function() {
8                         loadLink(win, REMOTE_SRC+'/lib/underscore.min.js', function() {
9                             loadLink(win, REMOTE_SRC+'/lib/backbone.min.js', function() {
10                            loadLink(win, REMOTE_SRC+'/lib/_dev.js', function() {
11                                loadLink(win, REMOTE_SRC+'/assets/isos.js', function() {
12                                    loadLink(win, REMOTE_SRC+'/lib/universal-backbone-loader.js', function() {
13                                        loadLink(win, REMOTE_SRC+'/lib/backbone-uptodate.js', function() {
14                                            loadLink(win, REMOTE_SRC+'/lib/backbone-uptodate-min.js', function() {
15                                                });
16                                            });
17                                        });
18                                    });
19                                });
20                            });
21                        });
22                    });
23                });
24            });
25        );
26    }
}
```

A character from Final Fantasy VII Remake is shown from the waist up, facing right. He has white hair and a beard, wearing a white lab coat over a brown shirt and blue jeans. He is holding a glowing blue energy sphere in his right hand, which is pointed towards the center of the screen. A bright orange and yellow energy beam is being emitted from his hand, curving upwards and to the right. The background is dark, and the code text is visible behind the character.

PROMISE

Переводчик

английс...



русский

promise



обещание



7/5000



Предложить исправление

ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ ОБЕЩАНИЯ

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full of energy!!"))
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full of energy!!"))  
6     .catch(problem => callToMom(problem));  
7 }
```

ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE



```
1 function buyCoffee(money){  
2   makeCoffeeAsync(money)  
3     .then(coffee => addSugarAsync(coffee))  
4     .then(sweetCoffee => drinkCoffeeAsync(sweetCoffee))  
5     .then(energy => console.log("I`m full!"))  
6     .catch(problem => callToMom(problem))  
7 }
```



ПОКУПКА КОФЕ ЧЕРЕЗ PROMISE

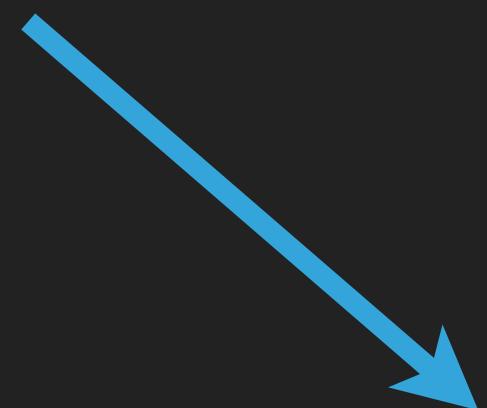


```
1 function makeCoffeeAsync(money){  
2   return new Promise((resolve, reject) => {  
3     makeCoffee(money, coffee => {  
4       resolve(coffee);  
5     });  
6   });  
7 }
```

ITERATOR

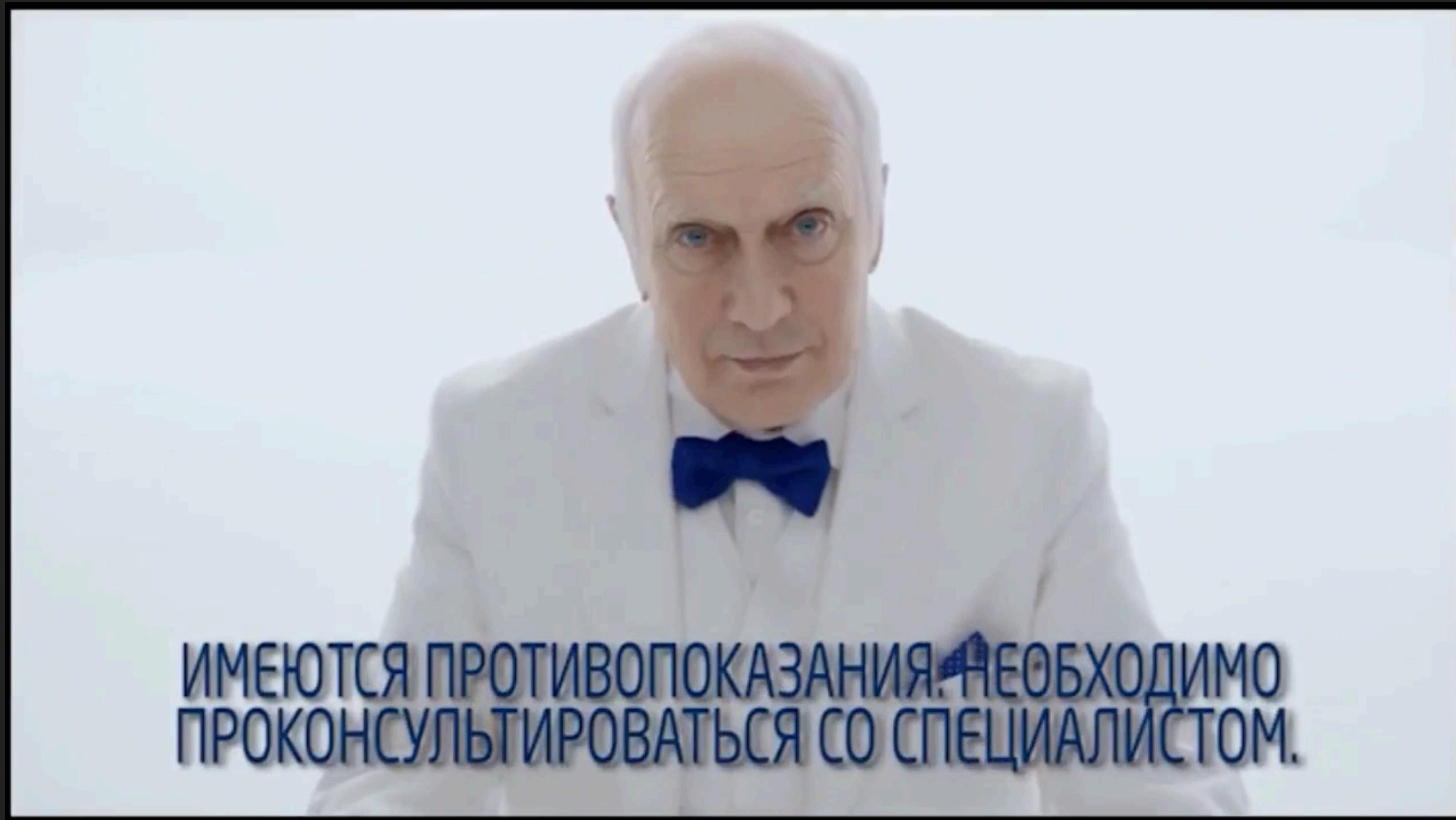
ITERATOR.NEXT()

ITERATOR.NEXT()



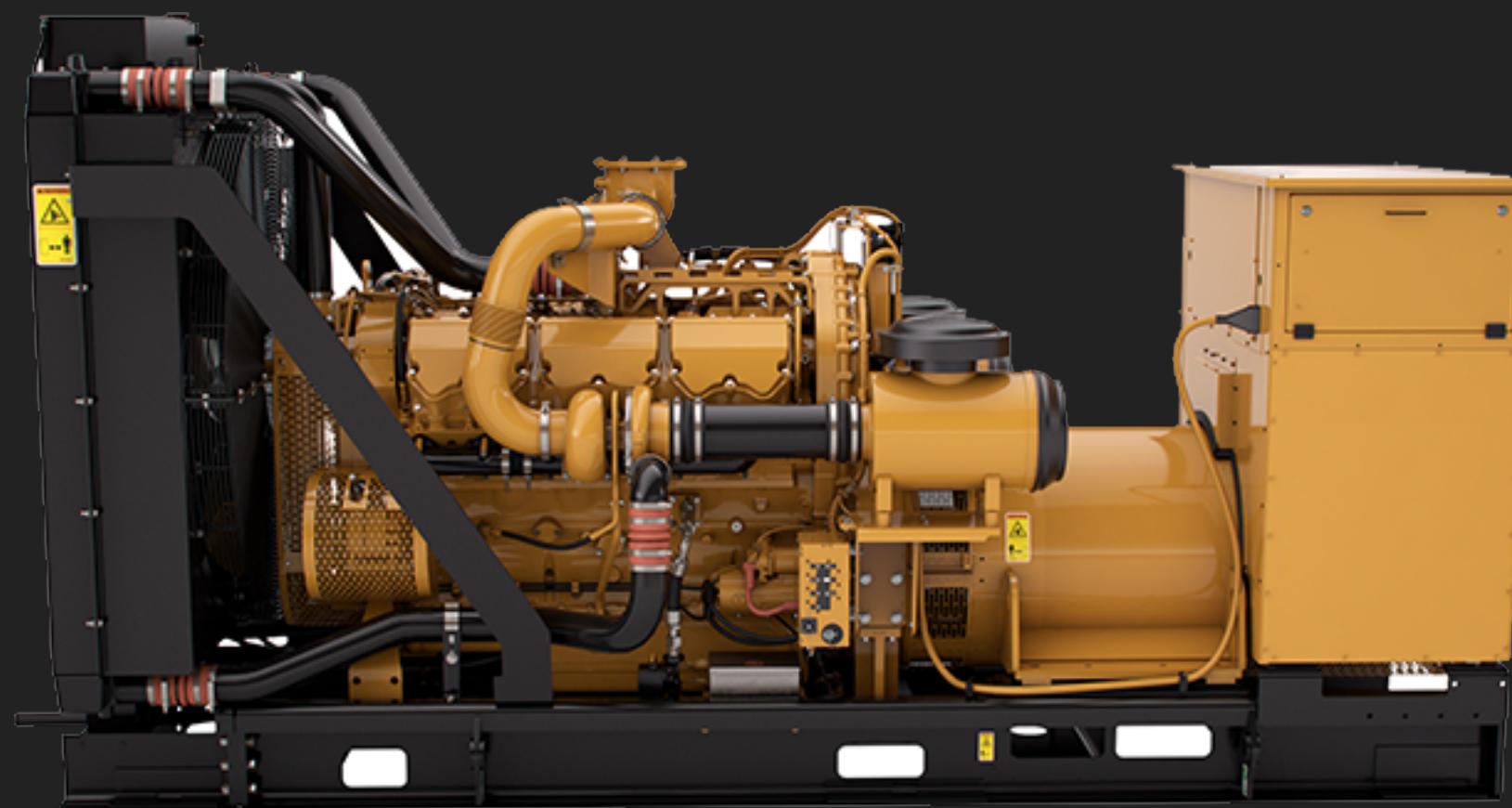
{ VALUE; DONE }

ВСПОМНИМ ОБ ИТЕРАТОРАХ



ИМЕЮТСЯ ПРОТИВОПОКАЗАНИЯ. НЕОБХОДИМО
ПРОКОНСУЛЬТИРОВАТЬСЯ СО СПЕЦИАЛИСТОМ.

GENERATOR



FUNCTION* GENERATOR(){}

ITERATOR = GENERATOR()

YIELD

```
FUNCTION* GENERATOR() {
```

```
    ...
```

```
    YIELD
```

```
    ...
```

```
}
```

ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD

...

}

ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD //PAUSE

...

}

LET A = ITERATOR.NEXT()

FUNCTION* GENERATOR() {

...

YIELD 1

...

}

LET A = ITERATOR.NEXT(B)

FUNCTION* GENERATOR() {

...

LET VALUE = YIELD 1

...

}

```
LET A = ITERATOR.NEXT(B)
LET A2 = ITERATOR.NEXT(B2)

FUNCTION* GENERATOR() {
    ...
    LET VALUE = YIELD 1
    ...
    LET VALUE2 = YIELD 2
    ...
}
```

```
LET A = ITERATOR.NEXT(B)  
LET A2 = ITERATOR.NEXT(B2)
```

```
FUNCTION* GENERATOR() {
```

```
    ...
```

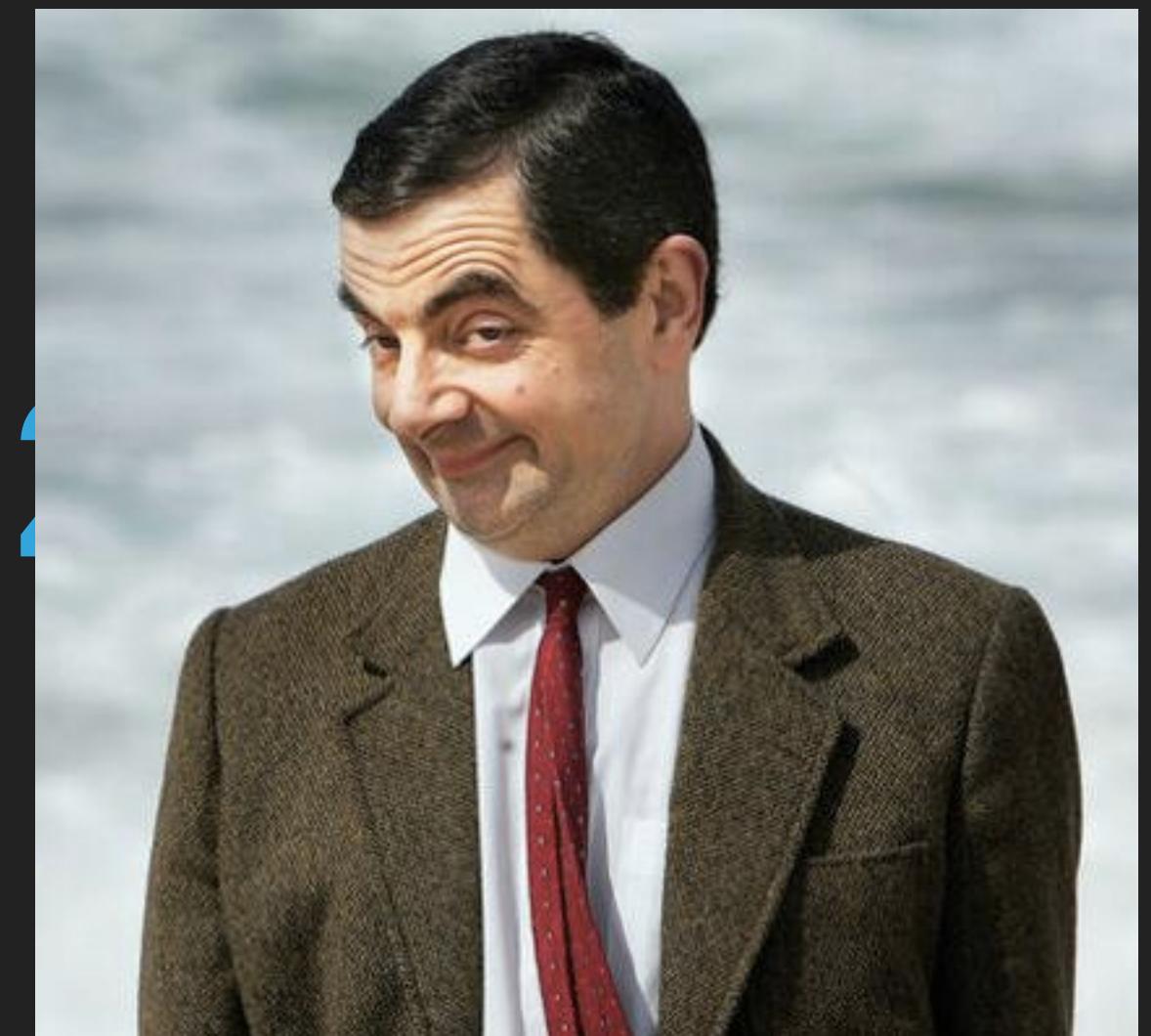
```
    LET VALUE = YIELD 1
```

```
    ...
```

```
    LET VALUE2 = YIELD 2
```

```
    ...
```

```
}
```



ПОПРОБУЕМ КУПИТЬ КОФЕ
ИСПОЛЬЗУЯ GENERATOR И PROMISES

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 }
```

GENERATOR + PROMISE



```
1 function execute(iterator, yieldValue) {  
2   let current = iterator.next(yieldValue);  
3   if (!current.done) {  
4     current.value  
5       .then(result => execute(iterator, result))  
6       .catch(err => iterator.throw(err));  
7   }  
8 }
```

GENERATOR + PROMISE



```
1 function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 }  
7 execute(buyCoffee(money));
```

CO

БИБЛИОТЕКА СО



```
1 co(function* buyCoffee(money){  
2   let coffee      = yield makeCoffeeAsync(money);  
3   let sweetCoffee = yield addSugarAsync(coffee);  
4   let energy      = yield drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 });
```

ПОКУПАЕМ КОФЕ
ИСПОЛЬЗУЯ ASYNC/AWAIT

ASYNC/AWAIT ВЕРСИЯ



```
1 async function buyCoffee(money){  
2   let coffee      = await makeCoffeeAsync(money);  
3   let sweetCoffee = await addSugarAsync(coffee);  
4   let energy      = await drinkCoffeeAsync(sweetCoffee);  
5   console.log("I`m full of energy!!");  
6 } );
```



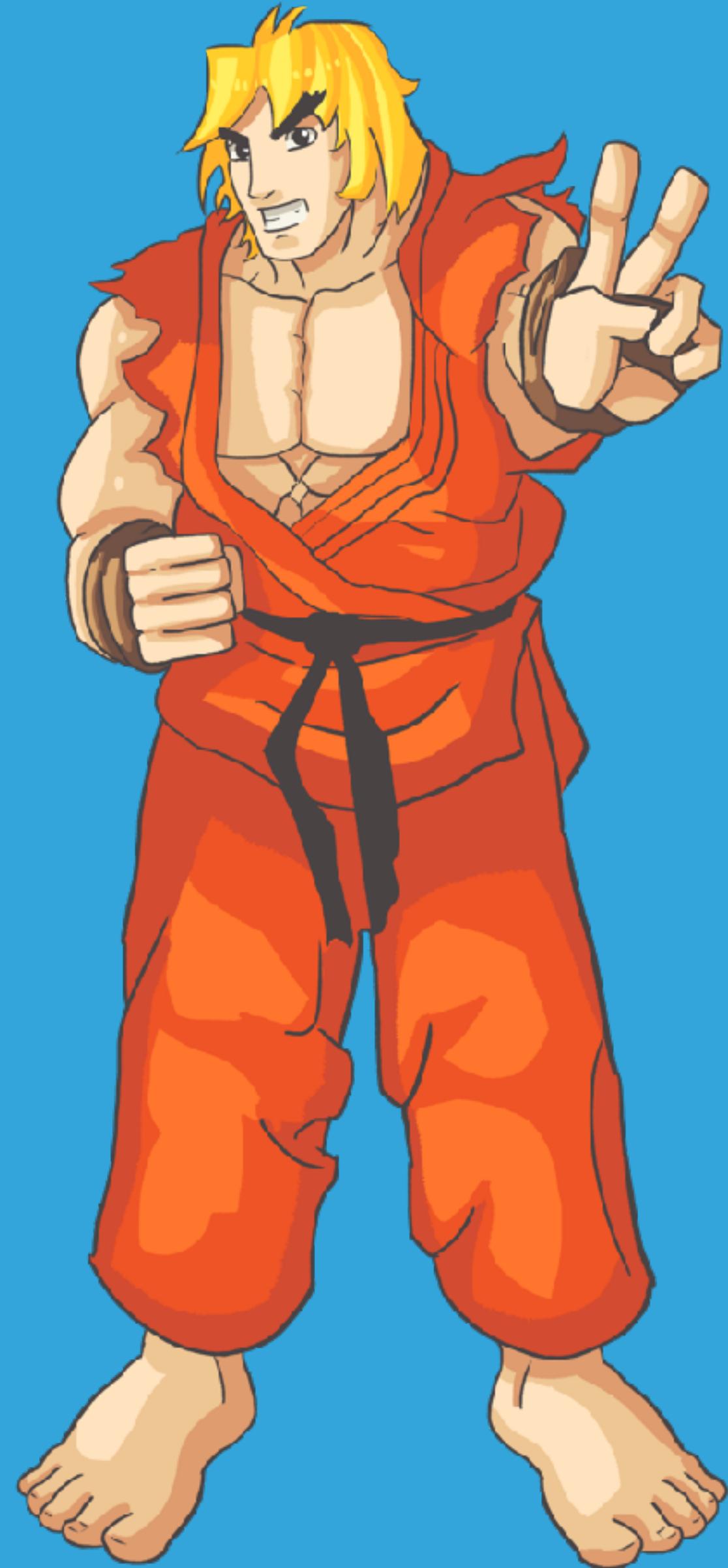
КОНТАКТЫ

- ▶ <http://agrinn.ru>
- ▶ <https://t.me/grinnart>

КОМПАНИЯ PAY P.S.

- ▶ <https://payps.ru>





ВСЕМ СПАСИБО!

... а теперь вопросы =)