

Ruby - Javascript Interoperation

Ruby Code

```
1 # ruby access js object
2 `Opal.global.text = 'hello world from JS!'`
3 puts $.text
4
5 #-----
6
7 # ruby access js function
8 `Opal.global.sum = function(a,b) {return a+b}`
9 puts "1+2 = #{$.sum(1,2)}"
10
11 #-----
12
13 # js access ruby object
14 local_var = "hello world from Ruby"
15 `console.log(local_var)`
16
17 #-----
18
19 # js access ruby function
20 mul = ->(a,b) { a*b }
21 `console.log(mul(2,3))`
22
23 nil
```

Output

```
hello world from JS!
1+2 = 3
```

```
hello world from Ruby
6
```

Javascript Code

```
1 Opal.queue(function(Opal) { /* Generated by Opal 1.5.0 */
2   var self = Opal.top, nil = Opal.nil, $gvars = Opal.gvars, $lambda = Opal.lambda, $rb
3   if ($gvars.$ == null) $gvars.$ = nil;
4
5   Opal.add_stubs('puts,text,sum,*');
6
7   Opal.global.text = 'hello world from JS!';
8   self.$puts($gvars.$.$text());
9   Opal.global.sum = function(a,b) {return a+b};
10  self.$puts("1+2 = " + ($gvars.$.$sum(1, 2)));
11  local_var = "hello world from Ruby";
12  console.log(local_var);
13  mul = $lambda(function $$1(a, b){
14
15
16    if (a == null) a = nil;;
17
18    if (b == null) b = nil;;
19    return $rb_times(a, b);}, 2);
20  console.log(mul(2,3));
21  return nil;
22 });
23
```

Debug : Source Map

Ruby Code

```
1 def add(a,b)
2   return a+b
3 end
4
5 puts add(1,"foo")
```

Error

```
TypeError: String can't be coerced into Numeric
TypeError: String can't be coerced into Numeric
  at Object.Opal.send2 (https://opalrb.com/assets/application.js:1910:17)
  at Opal.send (https://opalrb.com/assets/application.js:1898:17)
  at Function.$$exception (https://opalrb.com/assets/application.js:5687:14)
  at Function.$$raise (https://opalrb.com/assets/application.js:5270:31)
  at Number.$$__coerced__ (https://opalrb.com/assets/application.js:12247:26)
  at Number.$Number_$slash$4 (https://opalrb.com/assets/application.js:17184:21)
  at Opal.rb_divide (https://opalrb.com/assets/application.js:2781:111)
  at constructor.$$div (eval at $$eval_code (https://opalrb.com/assets/try.js:6731:14), <anonymous>:9:12)
  at eval (eval at $$eval_code (https://opalrb.com/assets/try.js:6731:14), <anonymous>:11:26)
  at Object.Opal.queue (https://opalrb.com/assets/application.js:2768:17)
```

Source Map

generated

```
Opal.queue(function(Opal) { /* Generated by Opal 1.5.0 */
  var self = Opal.top, nil = Opal.nil, $rb_divide = Opal.rb_divide, $def = Opal.def;

  Opal.add_stubs('/', puts, div');

  $def(self, '$div', function $$div(a, b) {
    return $rb_divide(a, b)
  }, 2);
  return self.$puts(self.$div(1, 0));
});
```

original

```
def div(a,b)
  return a/b
end
puts div(1,0)
```

mappings

```
5:
6:
7: 0->1:0 2->1:0 21->1:0 36->1:8 37->1:7 39->1:10 40->1:0
8: 0->1:0
9: 4->2:4 11->2:12 22->2:11 23->2:12 25->2:13 26->2:12
10: 2->1:0 3->1:0 6->1:0
11: 2->5:0 9->5:0 13->5:0 19->5:0 20->5:5 24->5:5 29->5:5 30->5:9 31->5:5 33->5:11 34->5:5 35->5:0
12: 0->1:0
```