Web Development with Node.js and MongoDB

Andrew Marcinkevičius

Video 3.2

MVC

In this Video, we are going to take a look at...

- What is MVC
- MVC components interaction
- MVC in Express.js

Model-View-Controller

- MVC an architectural pattern
- Separates responsibilities
- Model
- View
- Controller

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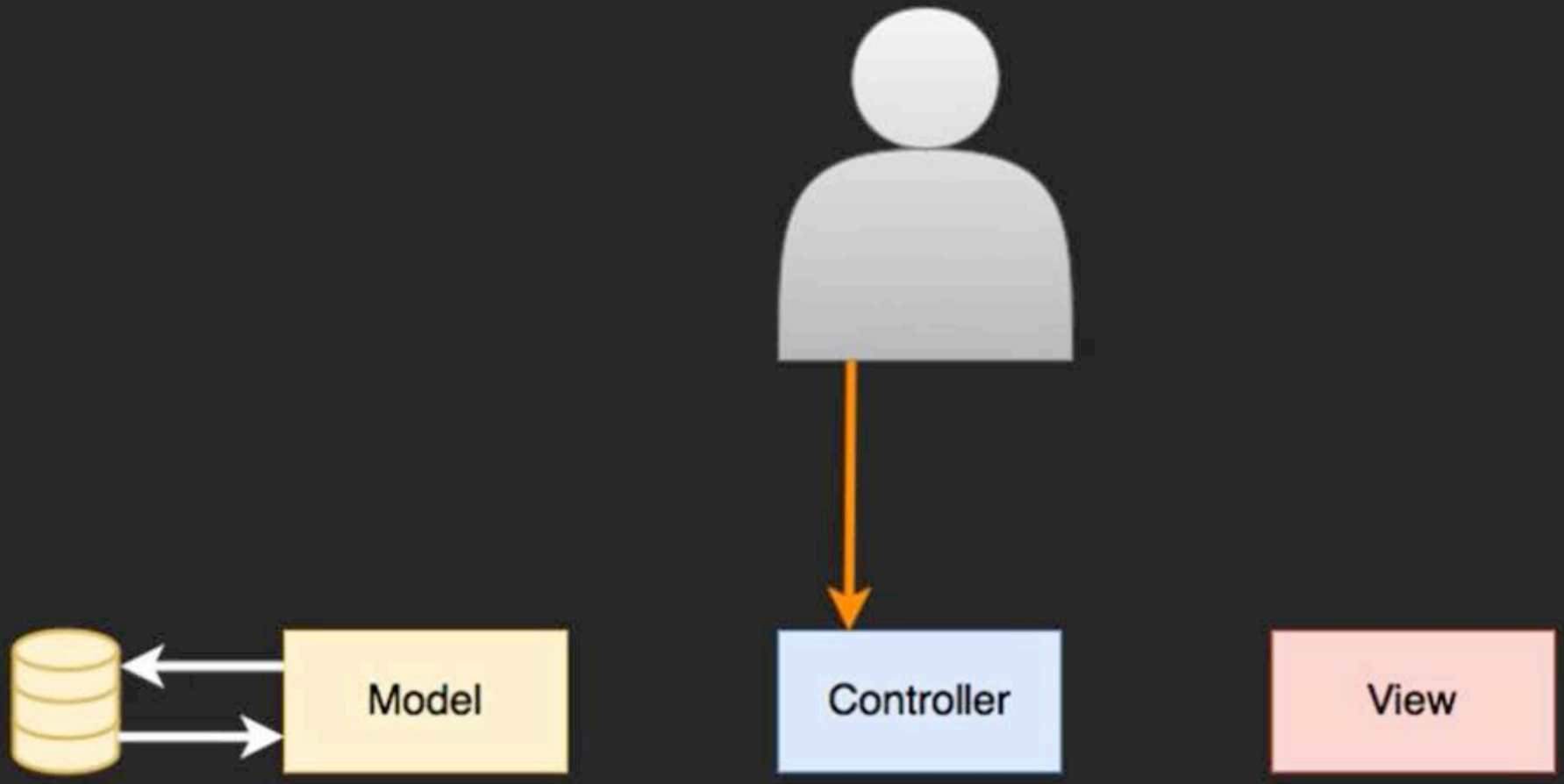
MVC

- Fat models, thin controllers
- Reduce complexity
- Develop faster and better
- Most web frameworks => request-response frameworks

MVC Components Interaction



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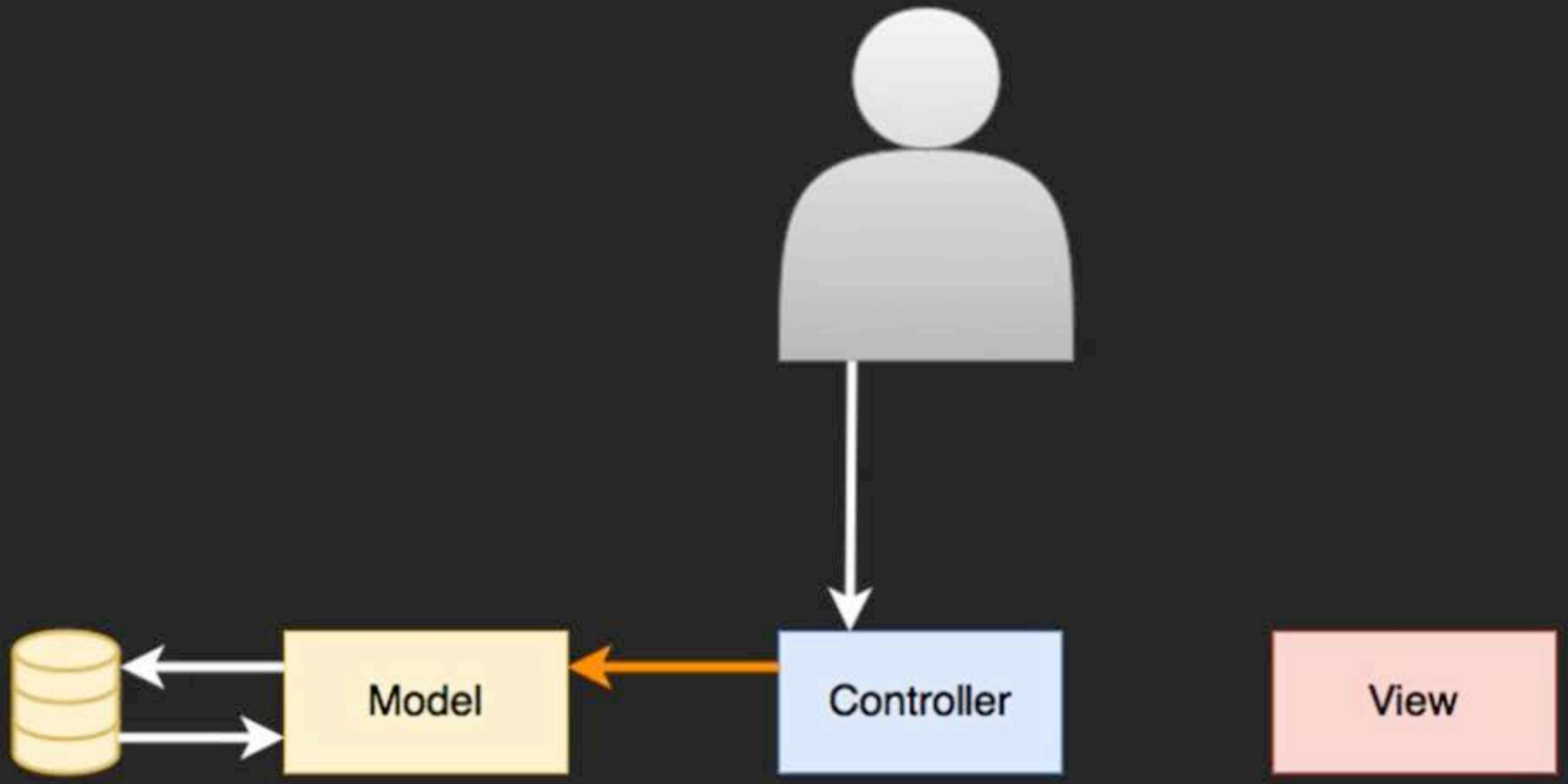
MVC Components Interaction



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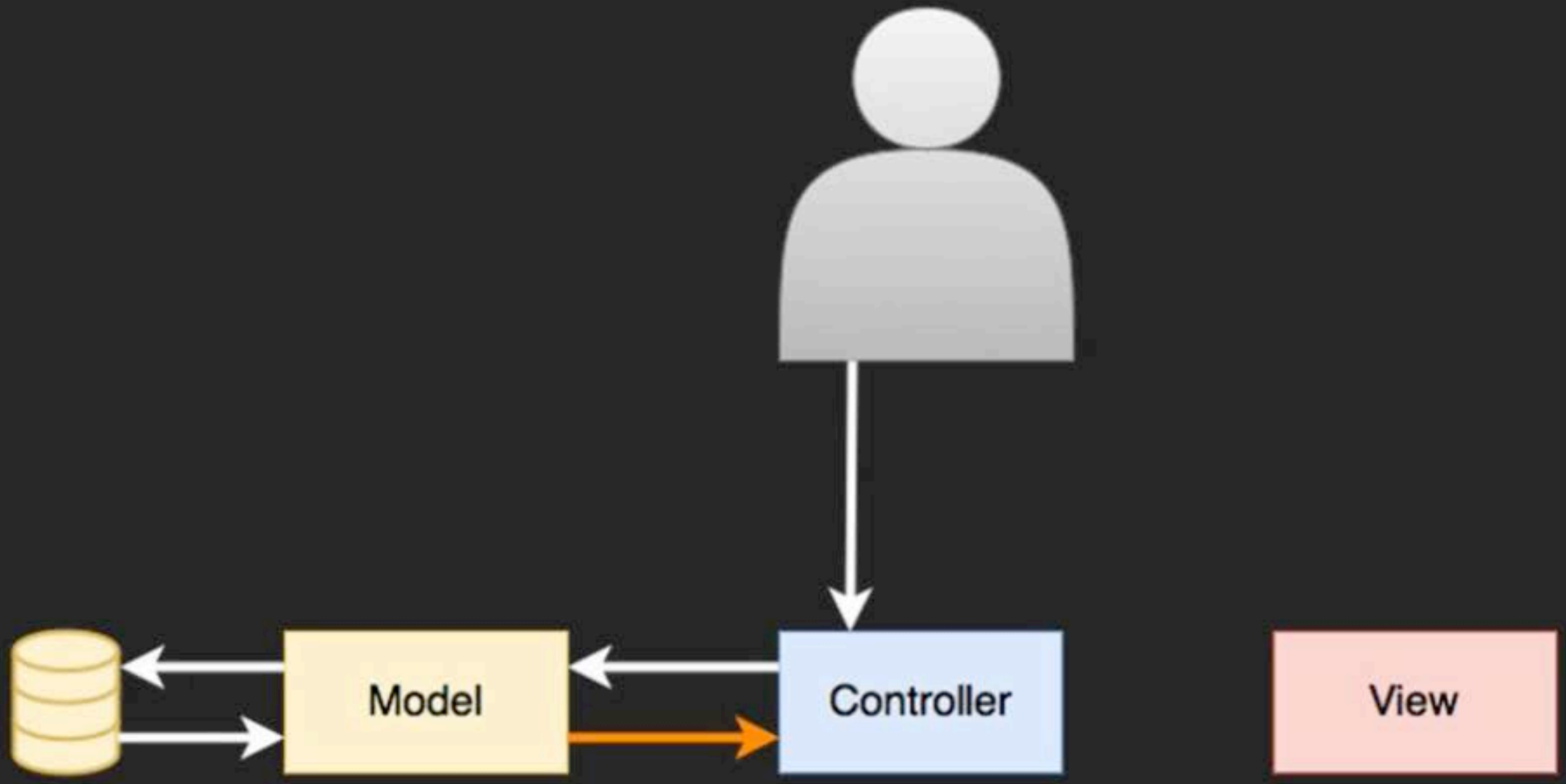
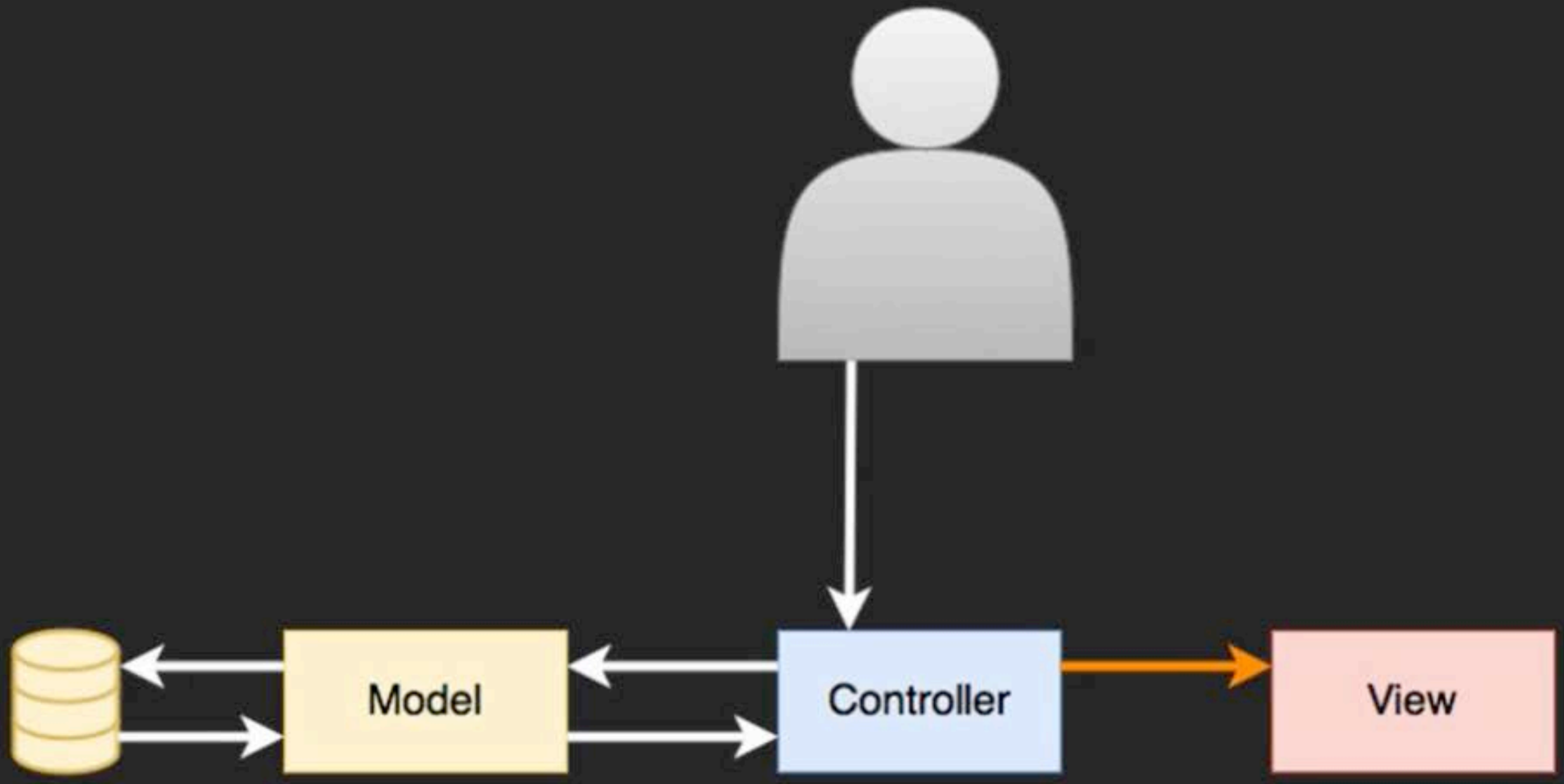
MVC Components Interaction



MVC Components Interaction



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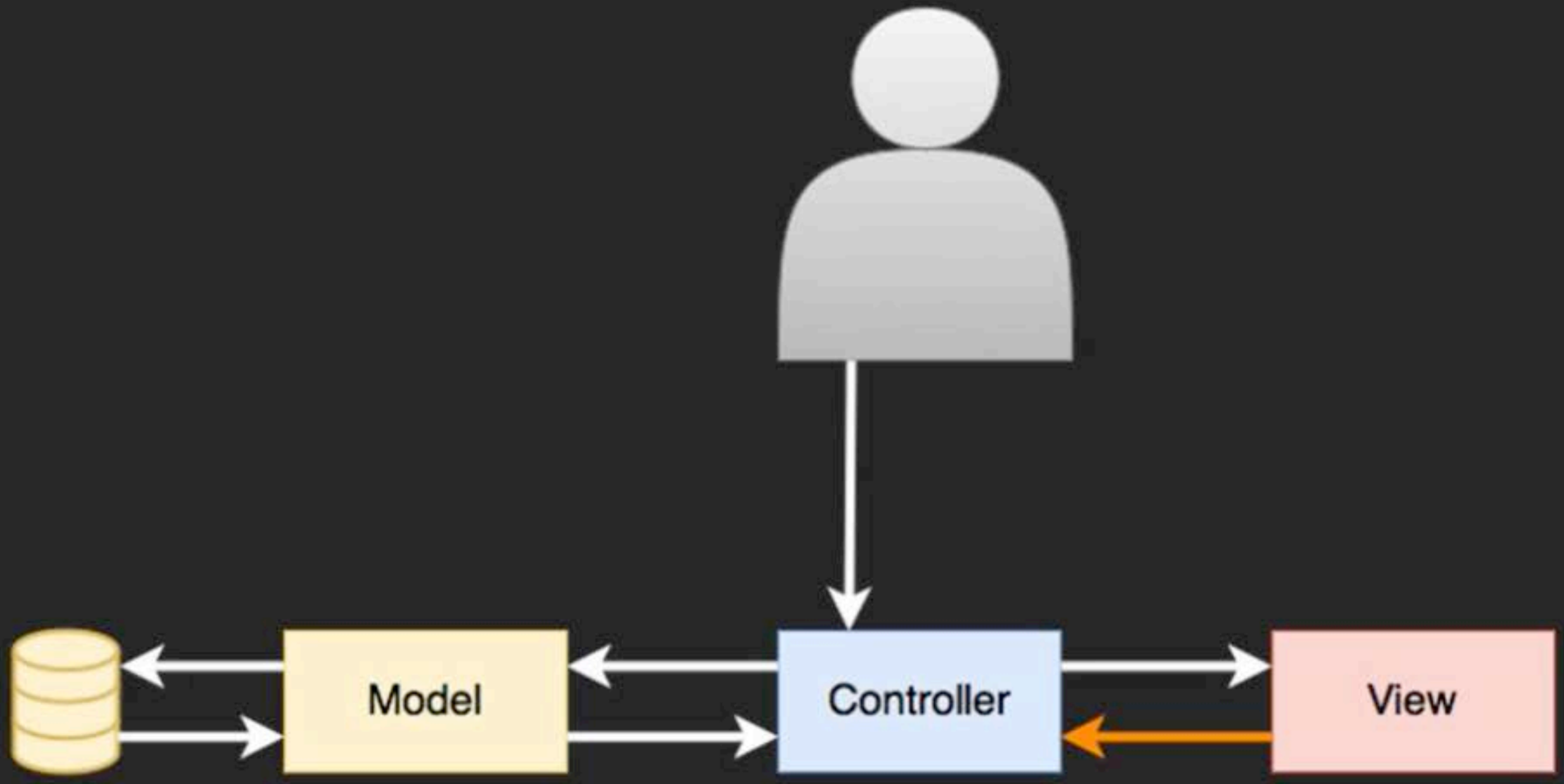
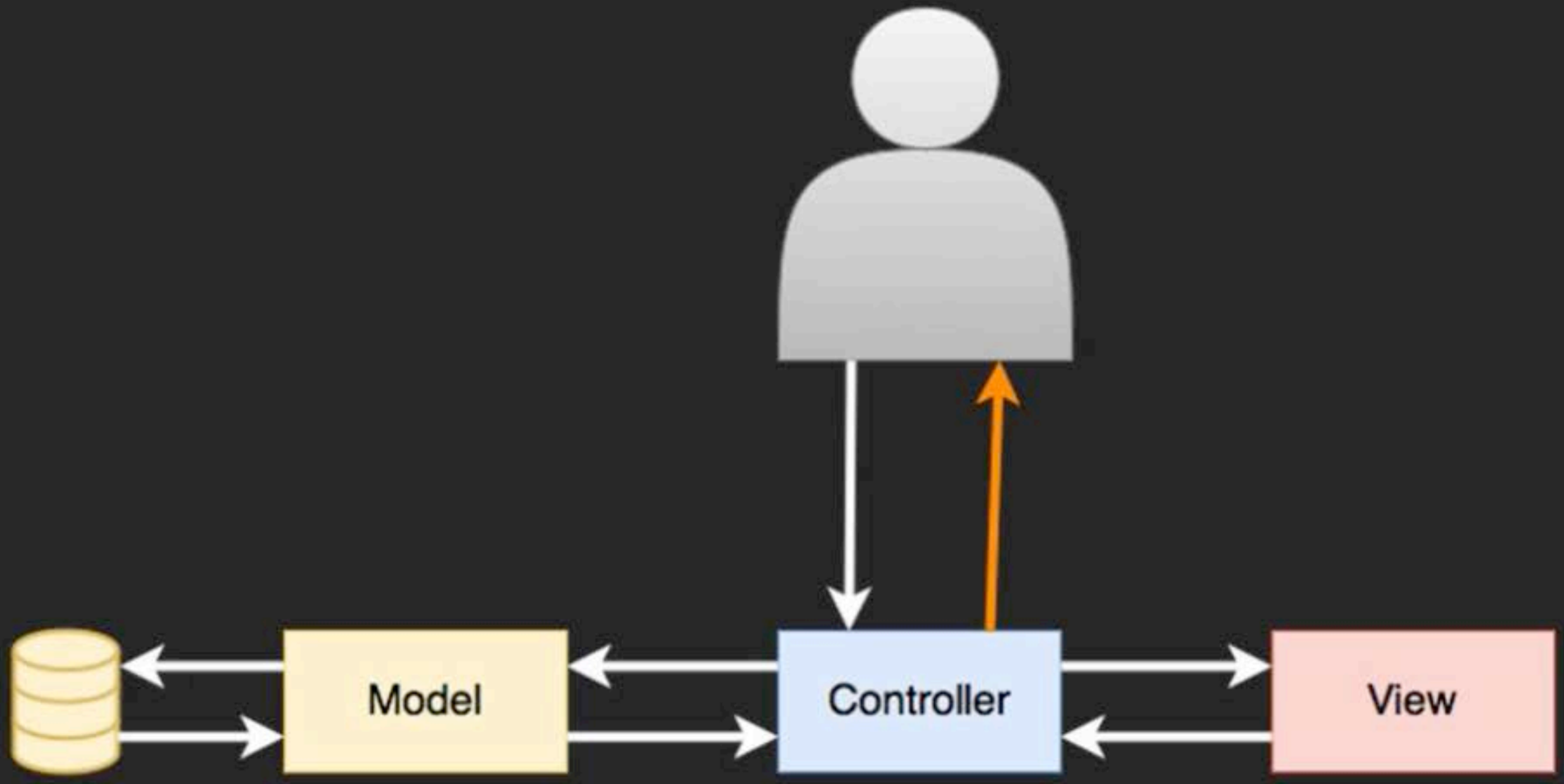
MVC Components Interaction



MVC Components Interaction



Views

- Different representations for data
- Web page --> <html>...</html>
- RESTful API --> {"user": ...}

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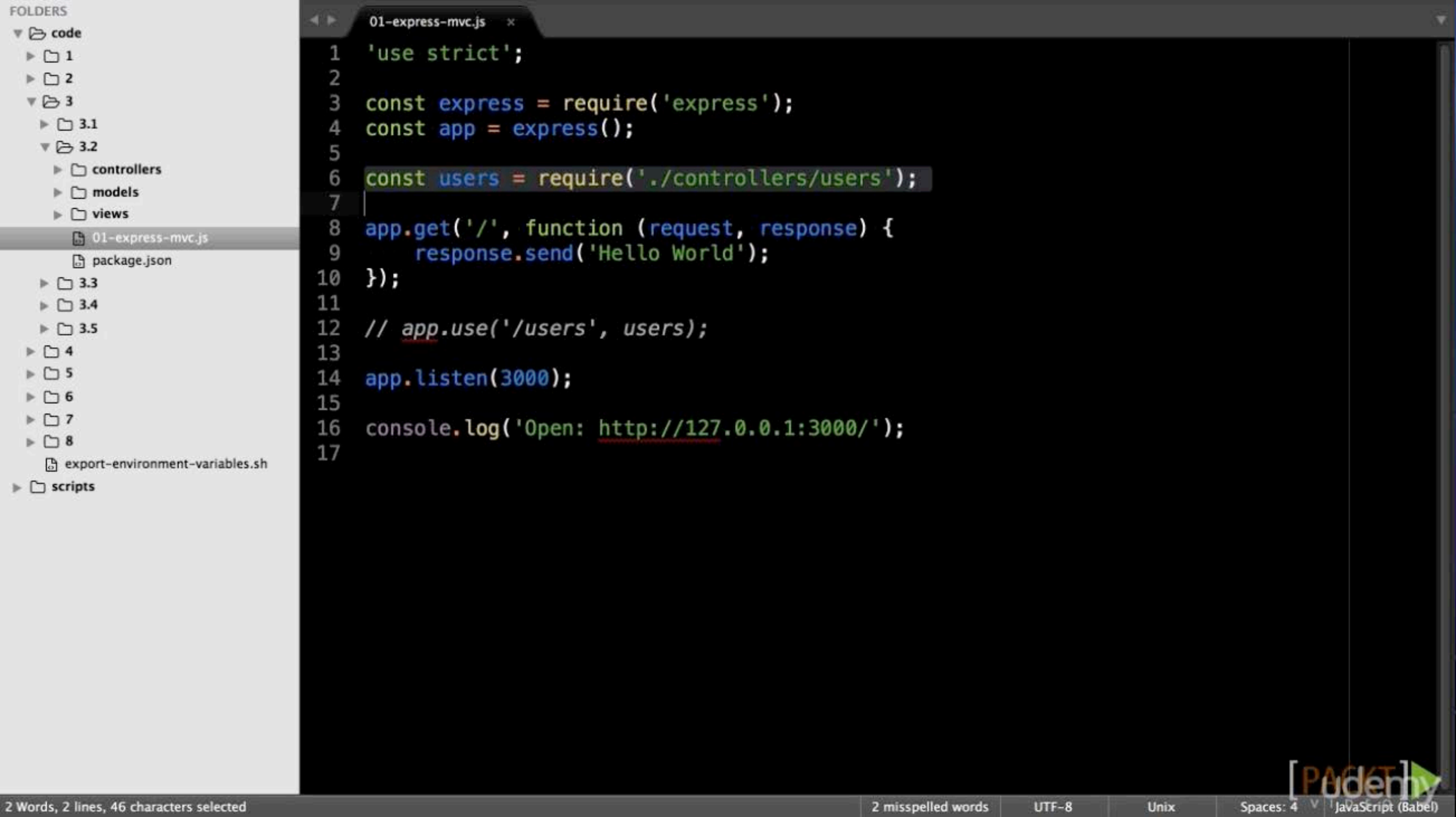
FOLDERS
code
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3.1
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controllers
models
views
01-express-mvc.js
package.json
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3.4
3.5
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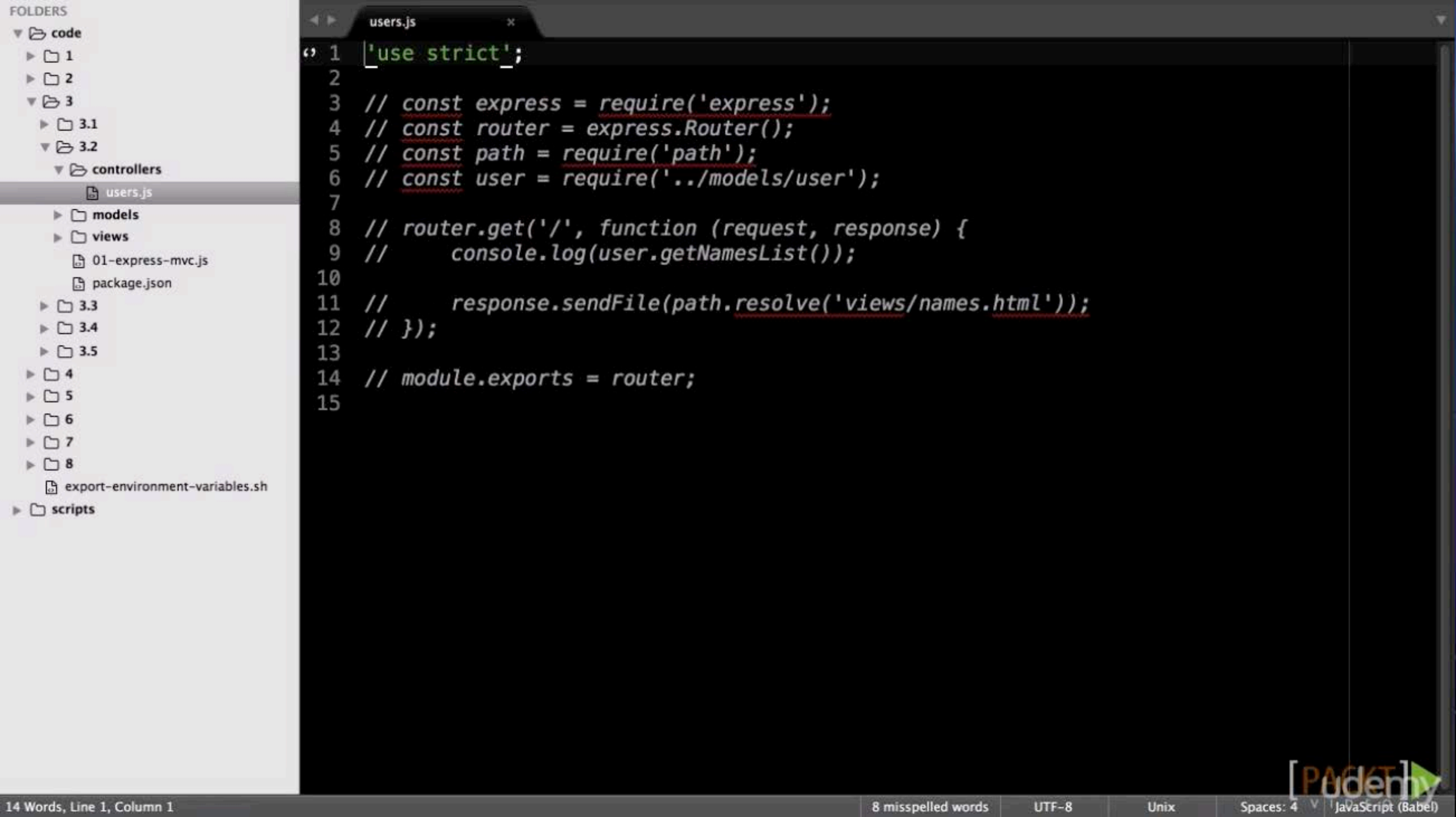
export-environment-variables.sh
scripts
01-express-mvc.js
'use strict';
const express = require('express');
const app = express();
const users = require('./controllers/users');
app.get('/', function (request, response) {
response.send('Hello World');
});
// app.use('/users', users);
app.listen(3000);
console.log('Open: http://127.0.0.1:3000/');
2 Words, 2 lines, 46 characters selected
2 misspelled words
UTF-8
Unix
Spaces: 4
JavaScript (Babel)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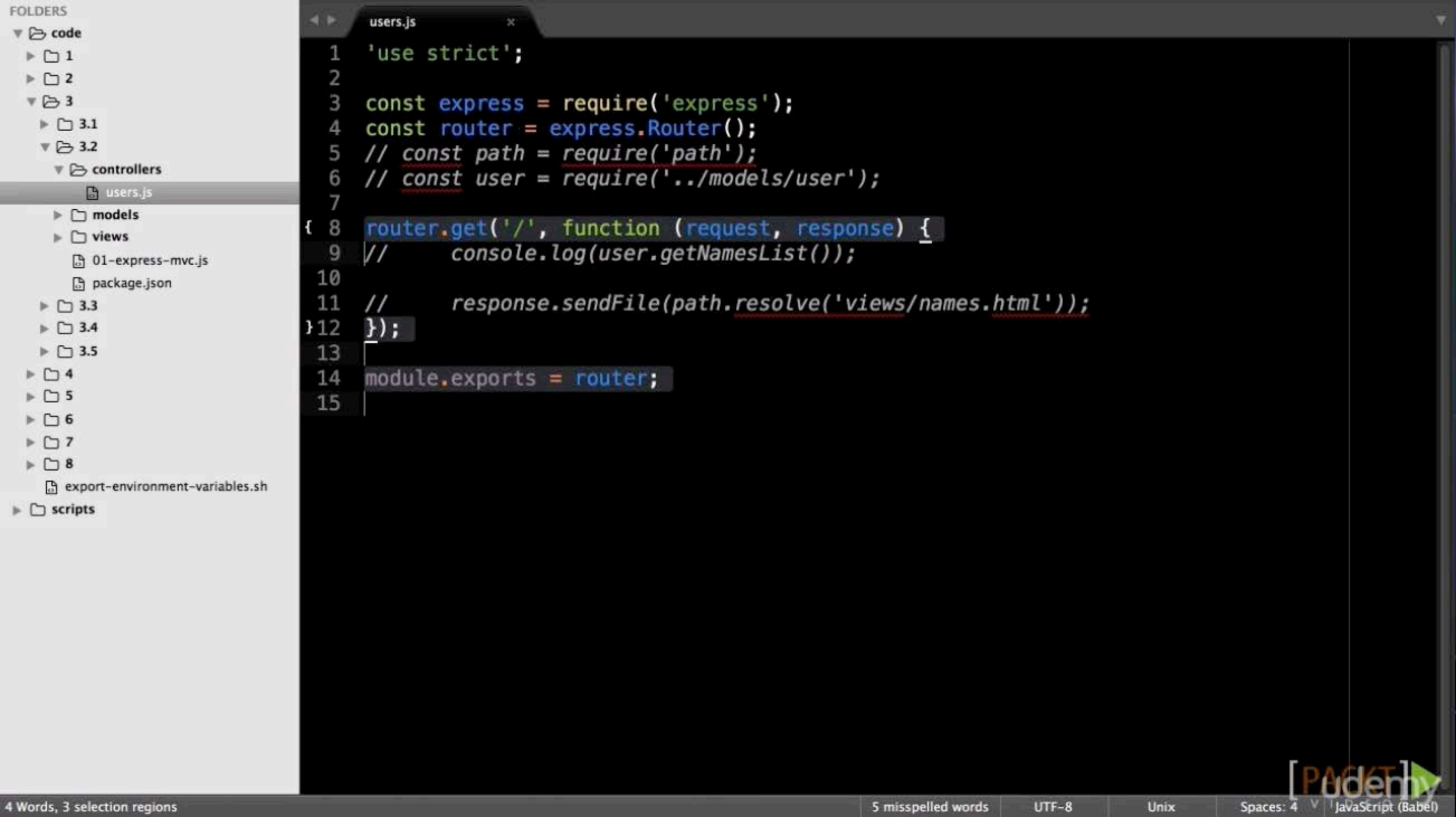
// const express = require('express');
// const router = express.Router();
// const path = require('path');
// const user = require('../models/user');
// router.get('/', function (request, response) {
//   console.log(user.getNamesList());
//   response.sendFile(path.resolve('views/names.html'));
// });
// module.exports = router;
14 Words, Line 1, Column 1
8 misspelled words
UTF-8
Unix
Spaces: 4
JavaScript (Babel)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4 Words, 3 selection regions
5 misspelled words
UTF-8
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Spaces: 4
JavaScript (Babel)

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users.js

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4  const router = express.Router();
5  // const path = require('path');
6  const user = require('../models/user');
7
8  router.get('/', function (request, response) {
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10
11 //      response.sendFile(path.resolve('views/names.html'));
12 });
13
14 module.exports = router;
15
```

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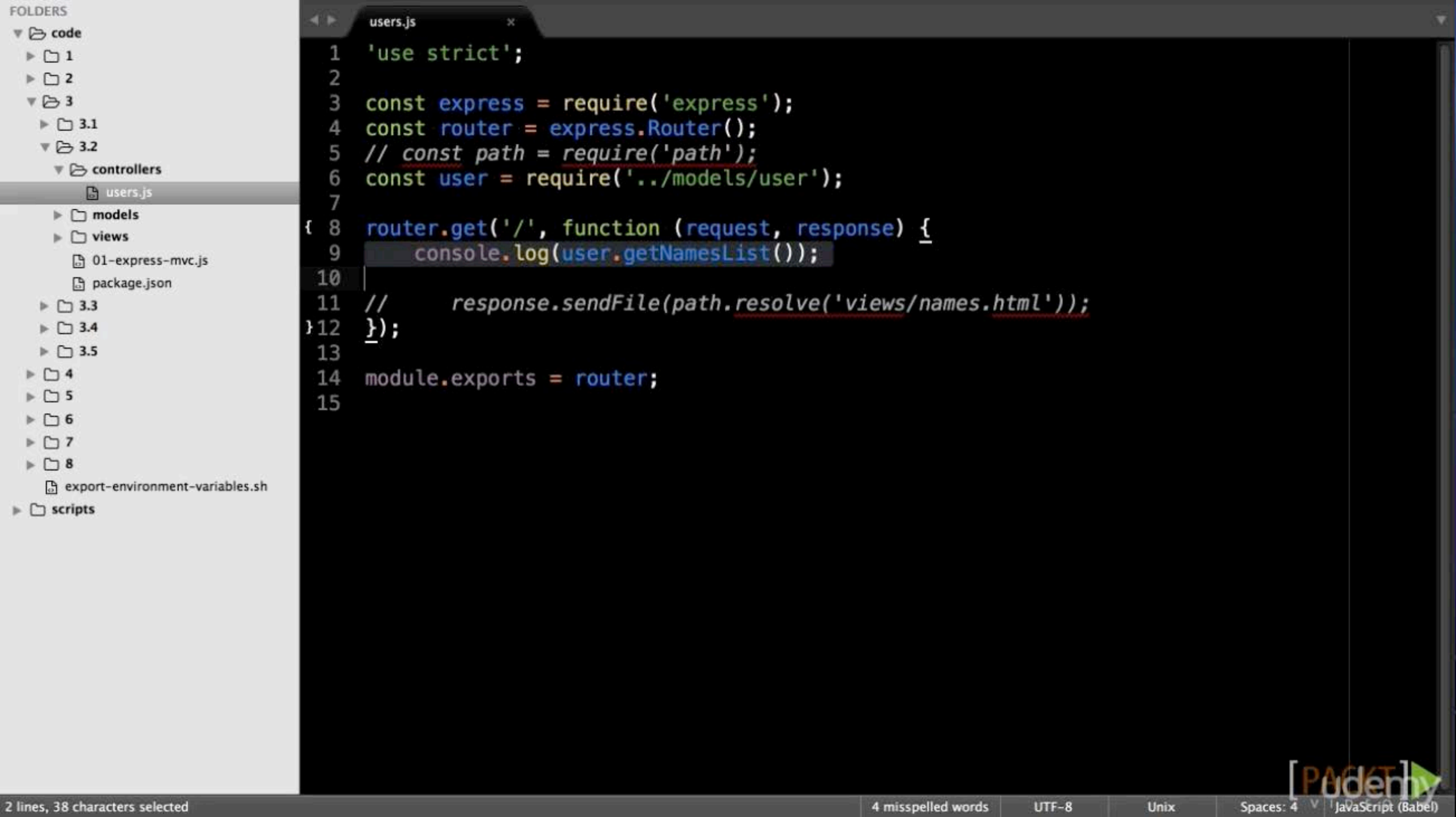
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const user = require('../models/user');
router.get('/', function (request, response) {
console.log(user.getNamesList());
// response.sendFile(path.resolve('views/names.html'));
});
module.exports = router;
2 lines, 38 characters selected
4 misspelled words
UTF-8
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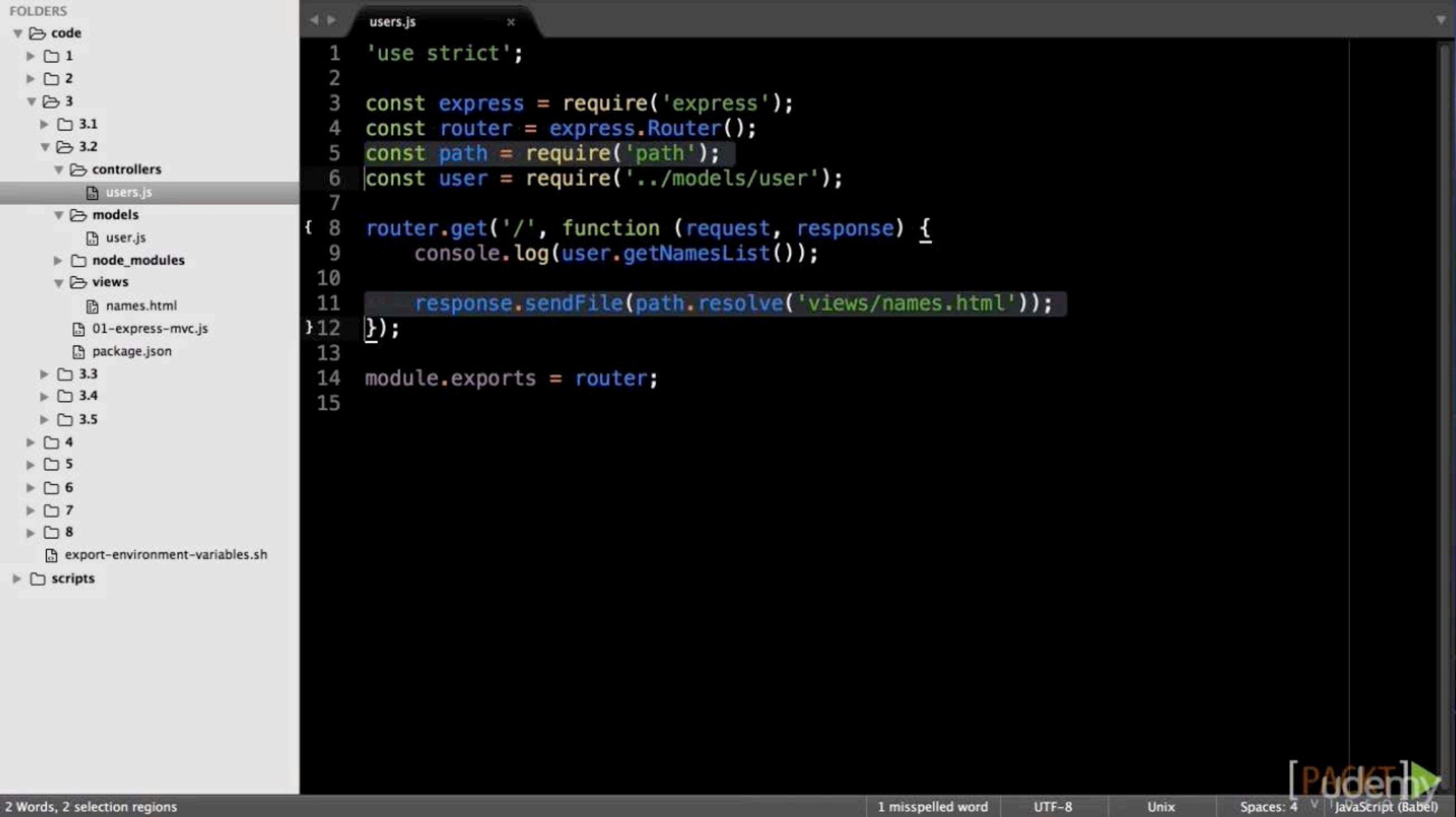
JavaScript (Babel)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console.log(user.getNamesList());
response.sendFile(path.resolve('views/names.html'));
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2 Words, 2 selection regions
1 misspelled word
UTF-8
Unix
Spaces: 4
JavaScript (Babel)

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names.html

```
<p>Put the list of names below!</p>
```

6 Words, Line 1, Column 1 | 0 misspelled words | UTF-8 | Unix | Spaces: 4 | HTML

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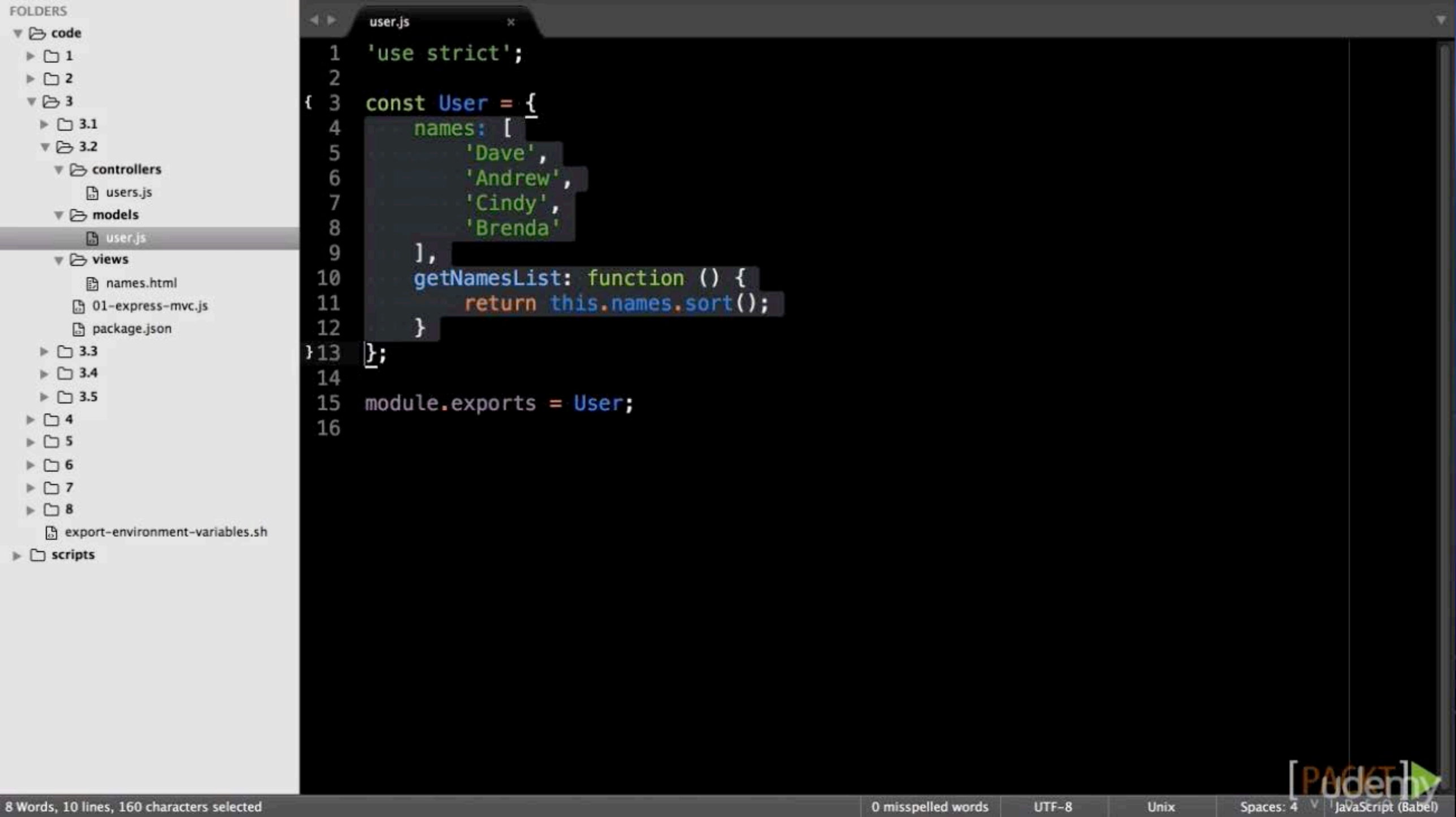
scripts
user.js
'use strict';
const User = {
// names: [
// 'Dave',
// 'Andrew',
// 'Cindy',
// 'Brenda'
//],
// getNamesList: function () {
// return this.names.sort();
// }
};
module.exports = User;
13 Words, Line 1, Column 1
0 misspelled words
UTF-8
Unix
Spaces: 4
JavaScript (Babel)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'use strict';
const User = {
names: [
'Dave',
'Andrew',
'Cindy',
'Brenda'
],
getNamesList: function () {
return this.names.sort();
}
};
module.exports = User;
8 Words, 10 lines, 160 characters selected
0 misspelled words
UTF-8
Unix
Spaces: 4
JavaScript (Babel)

```
ifdattic at ifdattic-mbp13 in ~/projects/nodejs-mongodb-video-course/code/3/3.2 on master [!]
$ node 01-express-mvc.js
Open: http://127.0.0.1:3000/
```

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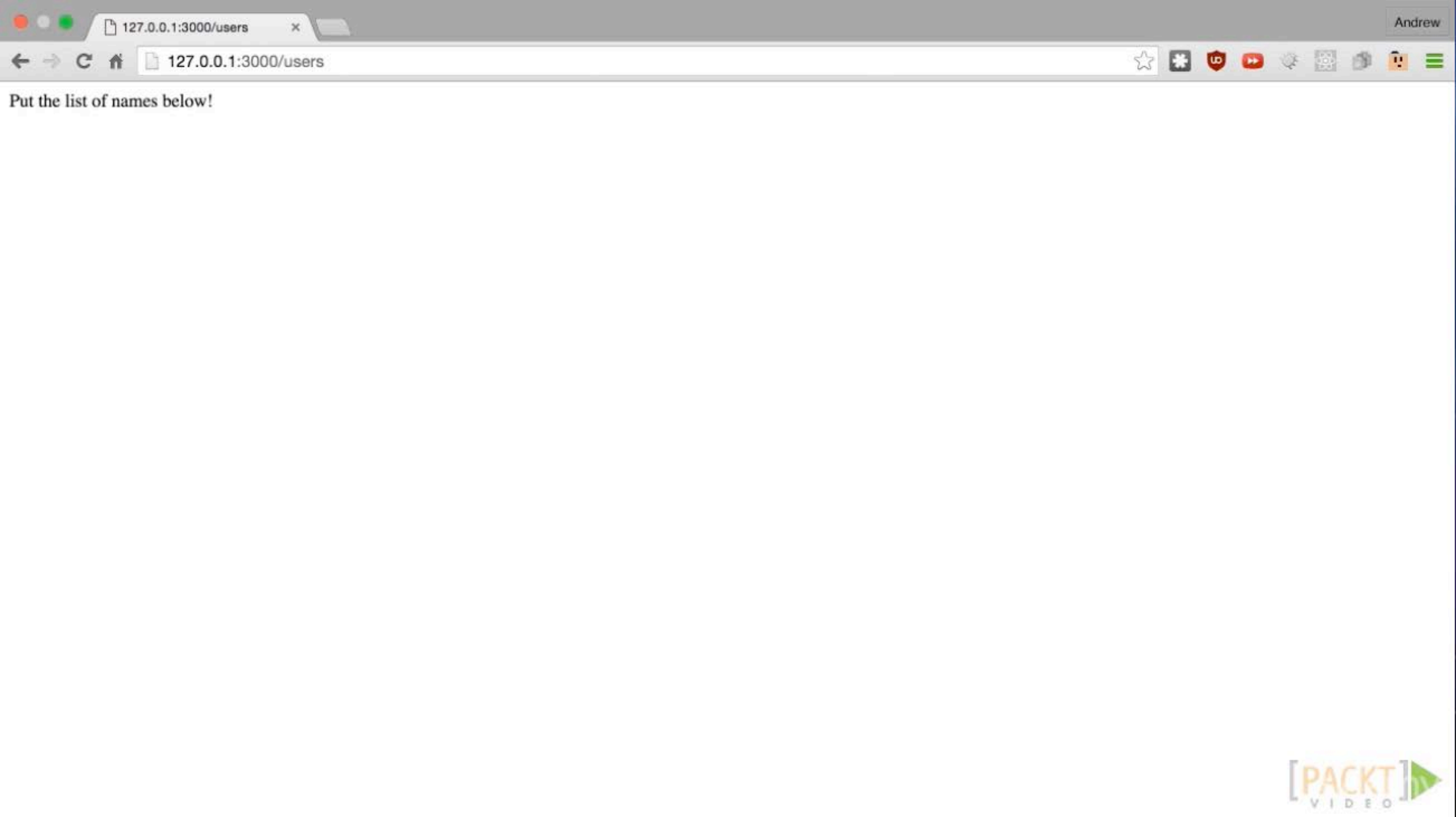
127.0.0.1:3000/users
Andrew
127.0.0.1:3000/users
Put the list of names below!

```
ifdattic at ifdattic-mbp13 in ~/projects/nodejs-mongodb-video-course/code/3/3.2 on master [!]
$ node 01-express-mvc.js
Open: http://127.0.0.1:3000/
[ 'Andrew', 'Brenda', 'Cindy', 'Dave' ]
```

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Next Video

Routing

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