



WEBINAR

ESLint and Prettier in 2019

Mark Volkmann, Partner and Principal Software Engineer
mark@objectcomputing.com

© 2019, Object Computing, Inc. (OCI). All rights reserved. No part of these notes may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior, written permission of Object Computing, Inc. (OCI)

objectcomputing.com

ESLint



- Popular tool for finding and fixing JavaScript issues
- Soon will be preferred linter for TypeScript
- Can also use with JSX
- Doesn't enforce any rules by default
- Many editor/IDE integrations



Prettier



- Code formatter for many languages
- Opinionated with small set of options
- Many editor/IDE integrations



package.json



- If project doesn't have **package.json** file
 - **npm init**



Installing



- `npm install --save-dev *`

where * is

`babel-eslint`

`eslint`

`prettier`

`eslint-config-prettier`

`eslint-plugin-html`

`eslint-plugin-import`

`eslint-plugin-prettier`

already installed in
create-react-app projects



npm Scripts



- In scripts section of `package.json`

```
"format": "prettier --write src/**/*.{js,scss}",  
"lint": "eslint --cache src/**/*.js",
```

`--cache` option makes it faster
because it only runs on files that
have been modified since last run



ESLint Configuration ... (in `.eslintrc.json`)



```
{  
  "env": {  
    "browser": true,  
    "es6": true,  
    "jest": true,  
    "node": true  
  },  
  "parser": "babel-eslint",  
  "parserOptions": {  
    "ecmaVersion": 9, for ES2018  
    "sourceType": "module" to use ES6 imports and exports  
  },  
}
```

adds knowledge of browser global variables

adds knowledge of ES6 features; no higher env is available

adds knowledge of Jest global variables

adds knowledge of Node.js global variables

adds support for experimental JS features
ex. public class fields



... ESLint Configuration



```
"extends": [  
    "eslint:recommended",  
    "plugin:import/recommended",  
    "plugin:prettier/recommended"  
],  
  
"plugins": [  
    "html",  
    "prettier"  
],  
  
"rules": {  
    "no-console": "off" // allows use of console functions  
}
```

enforces rules with check mark at <https://eslint.org/docs/rules/>

lints ES6 import and export statements

turns off all ESLint rules that conflict with Prettier

lints JavaScript HTML <script> tags

runs Prettier as an ESLint rule so ESLint code formatting rules are not needed

allows use of `console` functions

Prettier Configuration



- In `.prettierrc`

```
{  
  "bracketSpacing": false,  
  "singleQuote": true  
}
```

- Or in `package.json`

```
prettier: {  
  "bracketSpacing": false,  
  "singleQuote": true  
}
```

{**foo: 1, bar: 2**}
instead of
{ **foo: 1, bar: 2** }
matches typical
array literal formatting
[**1, 2**]
not
[**1, 2**]

Running Tools



- Run ESLint with `npm run lint`
- Run Prettier with `npm run format`



React Specifics ...



- No additional Prettier configuration needed
- Install more ESLint plugins
 - `npm install --save-dev *`
where * is
`eslint-plugin-jsx-a11y`
`eslint-plugin-react`



... React Specifics



- Update sections of `.eslintrc.json`

```
"parserOptions": {  
    "ecmaFeatures": {  
        "jsx": true  
    }  
},  
"extends": [  
    "plugin:jsx-ally/recommended", enforces accessibility rules on JSX code  
    "plugin:react/recommended" enforces React-specific rules  
],  
"plugins": ["jsx-ally", "react"],  
"settings": {  
    "react": {  
        "version": "detect"  
    }  
}
```

Vue Specifics ...



- No additional Prettier configuration needed
- Install more ESLint plugins
 - `npm install --save-dev *`
where * is
`eslint-plugin-jsx-ally`
`eslint-plugin-vue`



... Vue Specifics



- Update sections of `.eslintrc.json`

```
"parserOptions": {  
    "ecmaFeatures": {  
        "jsx": true  
    }  
},  
"extends": [  
    "plugin:jsx-ally/recommended", to lint JSX code  
    "plugin:vue/recommended", enforces accessibility rules on JSX code  
    "@vue:prettier", enforces Vue-specific rules  
],  
"plugins": ["jsx-ally"], provided by Vue CLI
```

Wrap Up



- That's it!
- You now know everything needed to configure ESLint and Prettier in projects that
 - use no web framework
 - use React
 - use Vue



LEARN MORE ABOUT OCI EVENTS AND TRAINING



Events:

- objectcomputing.com/events

Training:

- objectcomputing.com/training
- grailstraining.com
- micronauttraining.com

Or email info@ocitraining.com to schedule a custom training program for your team online, on site, or in our state-of-the-art, Midwest training lab.



OBJECT
COMPUTING

CONNECT WITH US

- 1+ (314) 579-0066
- @objectcomputing
- objectcomputing.com