

Vue Tools

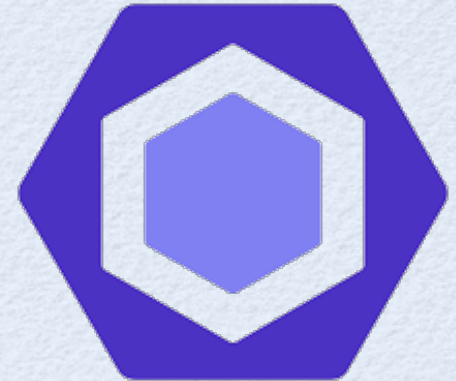
Tools Commonly Used

- Software tools commonly used with Vue projects include
 - **ESLint** for linting JavaScript, HTML, and CSS
 - **Prettier** for formatting JavaScript, HTML, and CSS
 - **VS Code**

ESLint Overview

<http://eslint.org/>

- “The pluggable linting utility for JavaScript and JSX”
- Can report many syntax errors and potential run-time errors
- Can report deviations from specified coding guidelines
- Error messages identify violated rules, making it easy to adjust them if you disagree
- Has `--fix` mode that can fix violations of many rules
 - modifies source files
- Many ways to configure
 - `.eslintrc.json` file
 - `.eslintrc.js` file
 - allows conditionally setting options based on `NODE_ENV` environment variable
 - `"eslint"` key in `package.json`



ESLint Details

- To install, **`npm install -D eslint`**

- Vue CLI projects already have this installed

- Additional recommended installs

- `npm install -D *` where `*` is
 - `eslint-config-prettier`
 - `eslint-plugin-html`
 - `eslint-plugin-import`
 - `eslint-plugin-prettier`
 - `@vue/eslint-config-prettier`

- To use from an npm script, add following to `package.json`

```
"lint": "eslint --fix --quiet src --ext .js,.vue",
```

`--quiet` only
reports errors

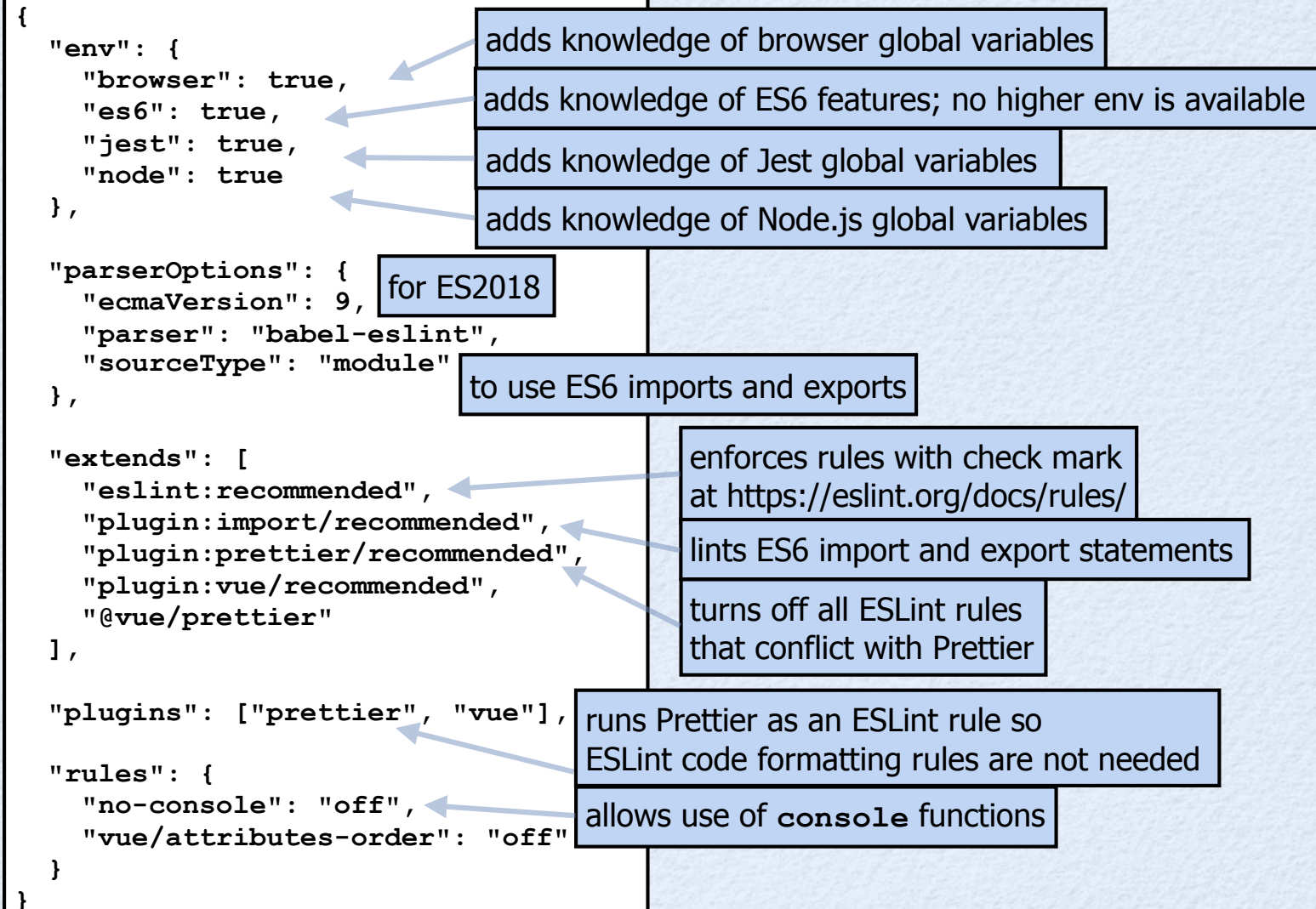
- Vue CLI projects use this instead `"lint": "vue-cli-service lint",`

- Editor/IDE integrations available

- Atom, Eclipse, emacs, IntelliJ IDEA, Sublime, VS Code, Vim, WebStorm

Recommended ESLint Config

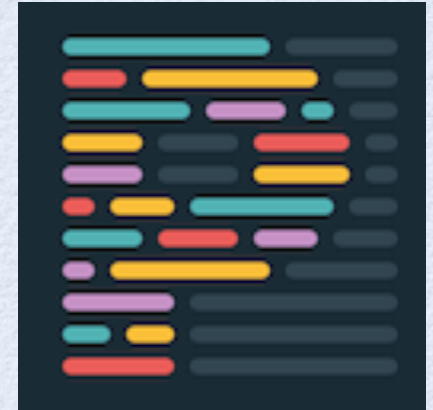
for Vue projects



Prettier Overview

<https://github.com/prettier/prettier>

- “An opinionated JavaScript formatter ... with advanced support for language features from ES2017, JSX, Flow, TypeScript, CSS, LESS, and SCSS”
- “Parses your JavaScript into an AST and pretty-prints the AST, completely ignoring **any** of the original formatting”
 - “Well actually, **some original styling is preserved** when practical - see empty lines and multi-line objects.”
- Can also format JSON, Markdown, and more



Prettier Details

- To install, `npm install -D prettier`
- To use from an npm script, add following to `package.json`

```
"format": "prettier --no-bracket-spacing --single-quote --write 'src/**/*.{js,vue}'",
```

Must have quotes around glob path!
(see <https://prettier.io/docs/en/cli.html>)

in Windows use escaped double-quotes

```
--write \"src/**/*.{css,js}\"
```

- to format all matching files under `src` directory, enter `npm run format`
- `--write` option overwrites existing files with formatted versions
- Can also configure in `.prettierrc` file

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

- Doesn't run on files under `node_modules` by default
- Editor/IDE integrations available
 - Atom, Emacs, JetBrains, Sublime, Vim, VS Code

Prettier Options



- **--jsx-bracket-same-line**

- puts closing > of JSX start tags on last line instead of on new line

```
<something
  prop1="value1"
  prop2="value1"
  prop3="value1"
  prop4="value1"
>
  content
</something>
```

VS.

```
<something
  prop1="value1"
  prop2="value1"
  prop3="value1"
  prop4="value1">
  content
</something>
```

- ★ ● **--no-bracket-spacing**

- omits spaces between brackets in object literals

```
{ foo='1' bar=true }
```

VS.

```
{foo='1' bar=true}
```

- **--no-semi** - omits semicolons

- **--parser** - for use with TypeScript, set to "typescript"

- **--print-width n** - defaults to 80

- ★ ● **--single-quote**

This may become the default. See <https://github.com/prettier/prettier/issues/4102>

- uses single quotes instead of double quotes for string delimiters

- **--tab-width n** - defaults to 2

- **--trailing-comma**

- adds trailing commas wherever possible; defaults to none

- **--use-tabs** - uses tabs instead of spaces for indentation

VS Code Recommended Extensions

- **ESLint**
- **Prettier**
- **Vetur** for VS Code
 - adds syntax highlighting, snippets, Emmet support, auto-completion, debugging, and more
 - currently uses too much CPU, at least in macOS
 - change `vetur.validation.template` setting to `false` to rely on ESLint and Prettier
 - change `eslint.autoFixOnSave` setting to `true` to run ESLint
 - change `editor.formatOnSave` setting to `true` to run Prettier
- **Vue.js Extension Pack** for VS Code
 - includes several other extensions including Vetur, Vue Peek, ESLint, Prettier, and more

VS Code User Settings

- To auto-fix ESLint issues in `.html`, `.js`, and `.vue` files

```
"eslint.validate": [  
  {  
    "language": "html",  
    "autoFix": true  
  },  
  {  
    "language": "javascript",  
    "autoFix": true  
  },  
  {  
    "language": "vue",  
    "autoFix": true  
  }  
],
```


Review

- Install some npm modules
 - `npm install -D eslint-config-prettier`
 - `npm install -D eslint-plugin-html`
 - `npm install -D eslint-plugin-import`
 - `npm install -D eslint-plugin-prettier`
 - `npm install -D @vue/eslint-config-prettier`
 - `npm install -D prettier`
- Create `.eslintrc.json` file with content on slide 5
- Create `.prettierrc` file with content on slide 7
- Add following script to `package.json`
 - `"format": "prettier --write 'src/**/*.{js,vue}'",`
- To lint all `.js` and `.vue` files in project
 - `npm run lint`
- To format all `.js` and `.vue` files in project
 - `npm run format`