STEP 6. Data visualization

March 29, 2020

1 STEP 6. Visualization data based on most common words in source files React and Vue JS Libraries

1.1 The comparison was made between package.json files.

Source links: - https://github.com/vuejs/vue/blob/dev/package.json - https://github.com/reactjs/reactjs.org/blob/master/package.json

[63]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

[87]:
```
def top_15_words(db_name, filter):
    '''Reading and sort function, which returns top most common 15 words'''
    db = pd.read_csv(db_name)
    db = db.sort_values(by=[filter],ascending=False)
    return db[1:15]
```

[73]:
```
react_words = top_10_words('react.csv', 'numbers')
react_words.head()
```

[73]:

	words	numbers
20	plugin	16
17	eslint	12
25	prettier	11
80	yarn	9
42	remark	9

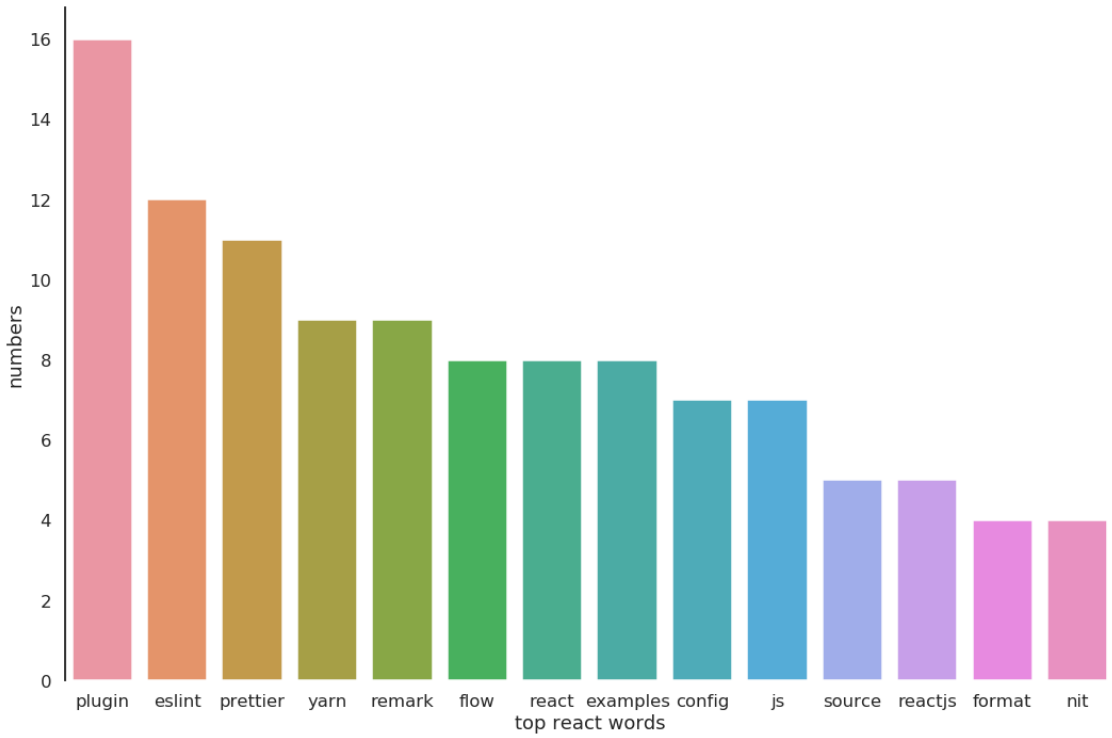
[74]:
```
vue_words = top_10_words('vue.csv', 'numbers')
vue_words.head()
```

[74]:

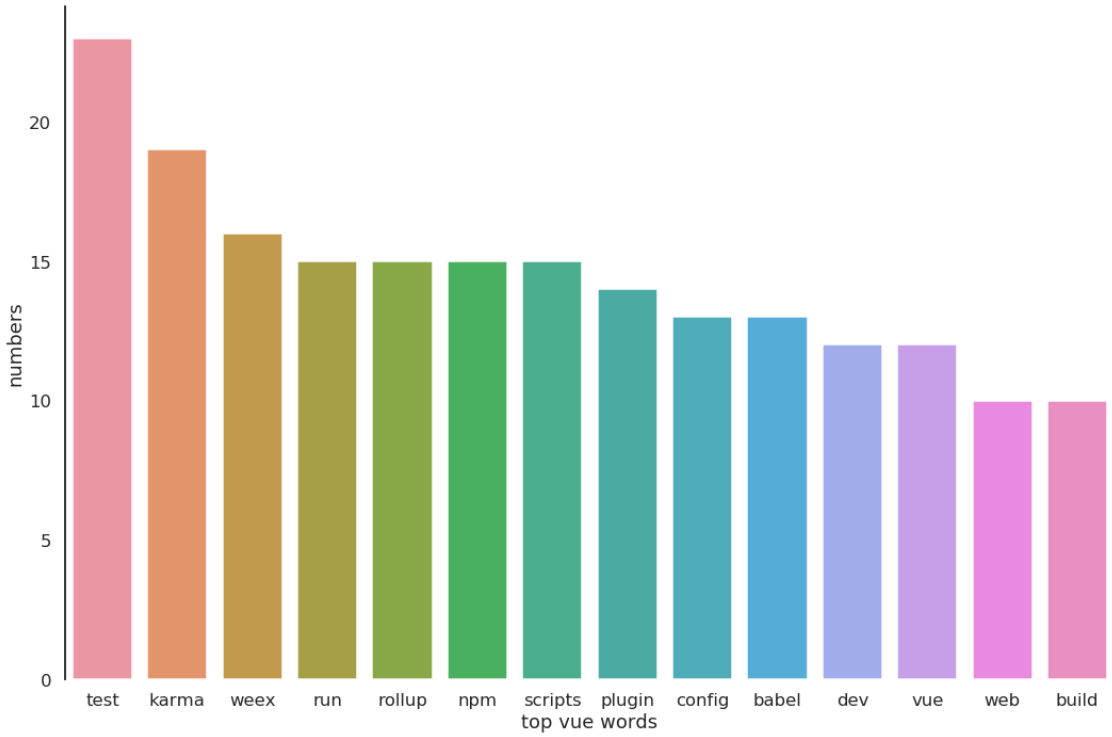
	words	numbers
41	test	23
42	karma	19
49	weex	16
55	run	15
33	rollup	15

[88]:
```
def simple_boxplot(db, xlabel, ylabel):
    '''Simple boxplot fuction which generate plot using seaborn lib'''
    plt.figure(figsize=(15,10))

    sns.set(style="white", context="talk", font_scale=1)
    plot = sns.barplot(x=db['words'], y=db['numbers'])
    sns.despine(bottom=True)

    plt.tight_layout(h_pad=2)
    plot.set(xlabel=xlabel, ylabel=ylabel)
```

[91]:
```
simple_boxplot(react_words, 'top react words', 'numbers')
```



[92]:
```
simple_boxplot(vue_words, 'top vue words', 'numbers')
```



1.2 Conclusion: graphs haven't strong relations and only the word "plugin" has, so probably it depends on the general code structure. Actually core meaning was about similarities these files and maybe research was too narrow or these web libs really have absolutely different dependencies