



# WFDD WEEK 5

Google Camp of Tongji University

By Breezewish

# WEEK4

## REVIEW

### JSLANG

- `Math.PI`
  - `Math.random()`
  - `Math.round()`
  - `Math.floor()`
  - `Math.ceil()`
  - `Math.abs()`
- 
- `parseInt(string, radix)`
  - `parseFloat()`
  - `Number.toString([radix])`
  - `String(object)`
- 
- `var tid = setTimeout(func, delay);`
  - `clearTimeout(tid);`
  - `var iid = setInterval(func, delay);`
  - `clearInterval(iid);`

# WEEK4

## REVIEW

### DOM

### JQUERY

traditional (*DOM*)

- `document.getElementById()`
- `document.getElementsByName()`
- `document.getElementsByTagName()`

HTML5 (*DOM*)

- `document.querySelector(selector)`
- `document.querySelectorAll(selector)`

jQuery (*jQuery Model*)

- `$(selector)`
- `jQuery(selector)`

# WEEK4

## REVIEW

### DOM

### JQUERY

- parentNode.appendChild(node)  
*\$node.appendTo(\$parent)*  
*\$parent.append(\$node)*
- element.innerHTML  
*\$element.html([value])*
- element.style  
*\$element.css(name, value)*
- element.setAttribute(name, value)  
*\$element.attr(name, value)*
- element.getAttribute(name)  
*\$element.attr(name)*

# WEEK4

## REVIEW

### BIND EVENTS

- Inline (*not recommended*):  
`<p onclick="....."></p>`
- DOM  
`element.addEventListener  
(type, listener[, useCapture])`
- jQuery  
`$element.on(type, listener)`  
`$element.type(listener)`

# WEEK4

## REVIEW

### TRY

Change page color to red when user clicks.

```
element.style.backgroundColor  
$element.css('background-color', ..)
```

# WEEK4

## REVIEW

### XSS

A SERIOUS attack usually caused by improperly escaping HTML characters.

```
<div>{ user input here }</div>  

```

Real world examples:

<http://ceonline.tongji.edu.cn>

<http://sse.tongji.edu.cn/icss>

<http://4m3.tongji.edu.cn>

# OUTLINE

## JavaScript

- Regular Expression

## CSS Layout

- *display* Property
- *position* Property



# REGEXP

Mainly for use in pattern matching with strings, or string matching.

Example1: extract the charset of an HTML document.

```
<!DOCTYPE html>  
<html>  
<head>  
<meta charset="UTF-8" />  
...
```

# REGEXP

```
<meta charset="UTF-8" />
```

Without regexp:

```
pos1 = src.indexOf('charset="');  
pos2 = src.indexOf('"', pos1+9);  
src.substring(pos1+9, pos2)
```

With regexp:

```
src.match(/charset=\"([^\"]*)\"/)[1]
```

## First Law of Software Quality

*errors = more code<sup>2</sup>*

*$e=mc^2$*

# REGEXP

Example2: Template rendering.

Bad way:

```
name + ": posted at " + time
```

Good way:

```
"{name}": posted at {time}".substitute(..)
```

# REGEXP

Example3: Email validation/extraction.

Valid:

hello@world.com

10000@qq.com

winterdaynevercome@gmail.com

mr.right+mytag@gmail.com

Invalid:

call me @ tomorrow

@company.com

blabla @\_@ blabla

# REGEXP

## REFERENCE

<正则表达式30分钟入门教程>

<http://deerchao.net/tutorials/regex/regex.htm>

# REGEXP

ab

Match(First): abc   aabc   <ab>   abab

Not match: axb

# REGEXP

$a^*b$

Match(First): daaaaabc    acab    acb



# REGEXP

**a+b**

Match(First): daaaaabc    acab

Not match: acb

# REGEXP

[ab]

Match(First): xa bc aab

Not match: cd

# REGEXP

`[a-z] = [abcdefghijklmnopqrstuvwxyz]`

Match(First): 010a \$(var)

# REGEXP

`[a-z]+`

Match(First): `$(helloWorld)`

# REGEXP

`[a-zA-Z]+`

Match(First): \$(helloWorld)

# REGEXP

## REPEAT

*	重复零次或更多次
+	重复一次或更多次
?	重复零次或一次
{n}	重复n次
{n,}	重复n次或更多次
{n,m}	重复n到m次

# REGEXP

`[0-9]{3}-[0-9]{8}`

`\d{3}-\d{8}`

Match: 021-66101010

Not match: 02166101010

# REGEXP

`\d{3}-\d{8}`

Match: 0021-66101010000



# REGEXP

`^\d{3}-\d{8}$`

Match: 021-66101010

Not match: 0021-66101010000

# REGEXP

## META

.	匹配除换行符以外的任意字符
\w	匹配字母或数字或下划线或汉字
\s	匹配任意的空白符
\d	匹配数字
\b	匹配单词的开始或结束
^	匹配字符串的开始
\$	匹配字符串的结束

# REGEXP

## REVERSE

\W	匹配任意不是字母，数字，下划线，汉字的字符
\S	匹配任意不是空白符的字符
\D	匹配任意非数字的字符
\B	匹配不是单词开头或结束的位置
[^x]	匹配除了x以外的任意字符
[^aeiou]	匹配除了aeiou字母以外的任意字符

# REGEXP

## TRY

Match:

he-llo\_world@world.com

10000@qq.com

admin@新闻.中国

winterdaynevercome@gmail.com

mr.right+mytag@gmail.com

Should not match:

callme@tomorrow

@company.com

blabla @\_@ blabla

admin@新 闻.中国

# REGEXP

## TRY

```
^[a-zA-Z0-9\.\+\_\-]+\@[^\.\s]+\.\S+$
```

he-llo\_world@world.com

10000@qq.com

admin@新闻.中国

winterdaynevercome@gmail.com

mr.right+mytag@gmail.com

callme@tomorrow

@company.com

blabla @\_@ blabla

admin@新 闻.中国

# REGEXP

## IN JAVASCRIPT

RegExp Object

`/pattern/attributes`

Attributes:

i	执行对大小写不敏感的匹配
g	执行全局匹配
m	执行多行匹配

# REGEXP

## IN JAVASCRIPT

```
(RegExp).exec(string)
```

```
(RegExp).test(string)
```

```
(String).match(regex)
```

```
(String).search(regex)
```

```
(String).replace(regex, ..)
```

```
(String).split(regex)
```

# REGEXP

## TRY

```
foo("ab  ab \t  c  \n dde")  
// => ["ab", "ab", "c", "dde"]
```



# REGEXP

## TRY

```
foo("ab  ab \t c \n dde")  
// => ["ab", "ab", "c", "dde"]
```

```
function foo(str) {  
    return str.split(/\s+/);  
}
```

# CSS LAYOUT

## DISPLAY INLINE

display: inline

Pellentesque *inline element* morbi tristique senectus  
Donec eu libero sit amet quam egestas semper. Aenean

Example: <span>, <b>

# CSS LAYOUT

## DISPLAY INLINE

display: inline

Pellentesque *inline element* morbi tristique senectus et netus et  
malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,  
ultrices eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas  
semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo.

~~width, height~~

# CSS LAYOUT

## DISPLAY INLINE-BLOCK

display: inline-block

Pellentesque

*inline  
block*

*inline  
block*

*inline  
block*

morbi tristique

senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo.

# CSS LAYOUT

## DISPLAY BLOCK

display: block

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo.

*hi*

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo.

Example: <div>, <section>, <p>, <h1>

# CSS LAYOUT

## DISPLAY BLOCK

`display: block`

Horizontal Center Align in parent:  
`margin: x auto`

`margin: vertical horizontal`  
`margin: top horizontal bottom`  
`margin: top right bottom left`

# CSS LAYOUT

DISPLAY  
NONE

display: none

Hide





# WFDD Course

## Seen you eyes son show

May musical arrival beloved luckily adapted him. Shyness mention married son she his started now. Rose if as past near were. To graceful he elegance oh moderate attended entrance pleasure. Vulgar saw fat sudden edward way played either. Thoughts smallest at or peculiar relation breeding produced an. At depart spirit on stairs. She the either are wisdom praise things she before. Be mother itself vanity favour do me of. Begin sex was power joy after had walls miles.

Uneasy barton seeing remark happen his has. Am possible offering at contempt mr distance stronger an. Attachment excellence announcing or reasonable am on if indulgence. Exeter talked in agreed spirit no he unable do. Betrayed shutters in vicinity it unpacked in. In so impossible appearance considered mr. Mrs him left find are good.

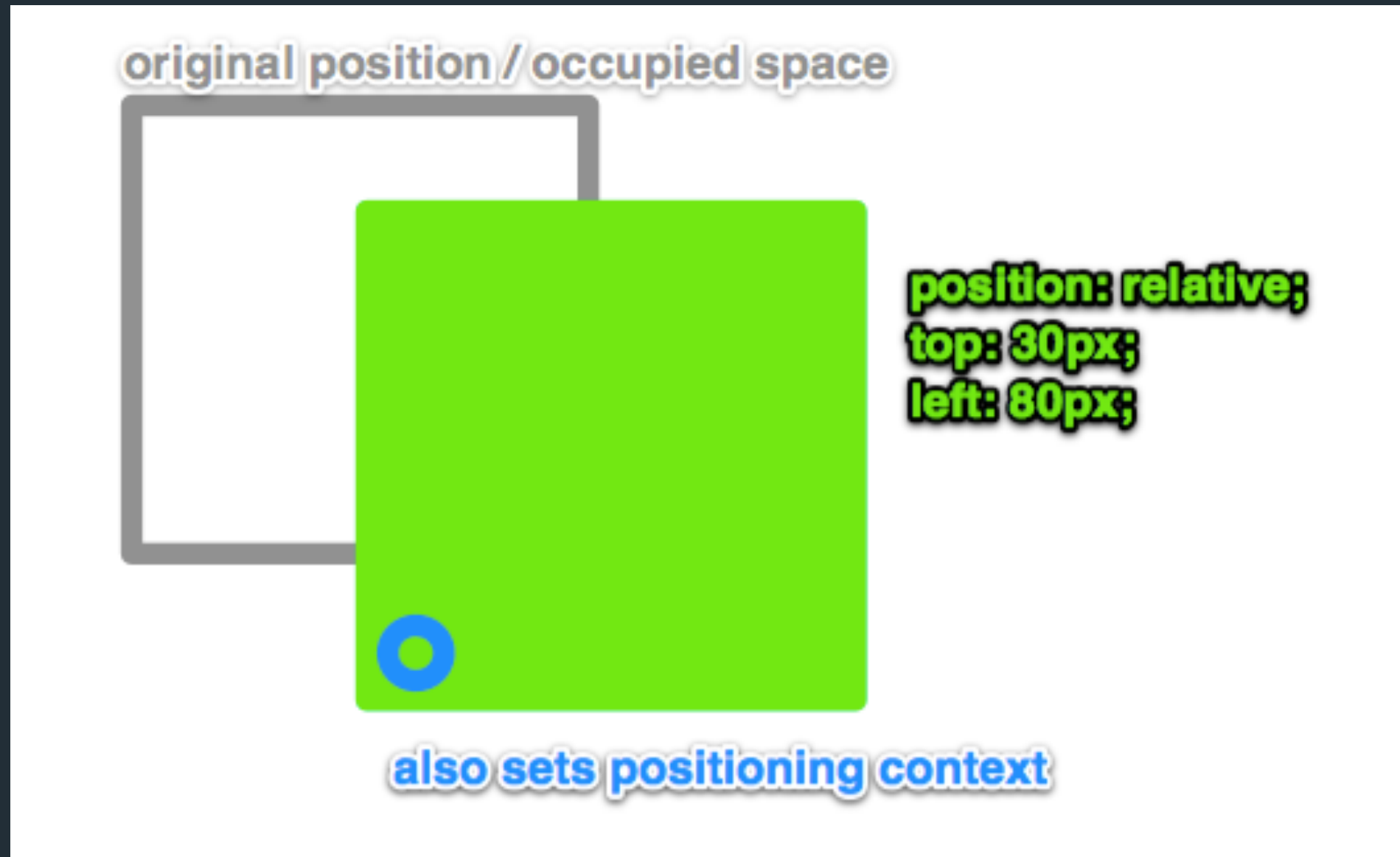
Up branch to easily missed by do. Admiration considered acceptance too led one melancholy expression. Are will took form the nor true. Winding enjoyed minuter her letters evident use eat colonel. He attacks observe mr cottage inquiry am examine gravity. Are dear but near left was. Year kept on over so as this of. She steepest doubtful betrayed formerly him. Active one called uneasy our seeing see cousin tastes its. Ye am it formed indeed agreed relied piqued.

Resources exquisite set arranging moonlight sex him household had. Months had too ham cousin remove far spirit. She procuring the why performed continual improving. Civil songs so

# CSS LAYOUT

## POSITION RELATIVE

position: relative



# CSS LAYOUT

## POSITION ABSOLUTE

position: absolute

parent with some positioning value, or the document



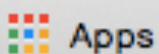
**position: absolute;**  
**bottom: 5px;**  
**left: 5px;**



Display



file:///Users/Breezewish/Documents/WFDD/Week5/display...



FreeBuf

Solidot

USACO

湾区日报

PingWest



Other Bookmarks

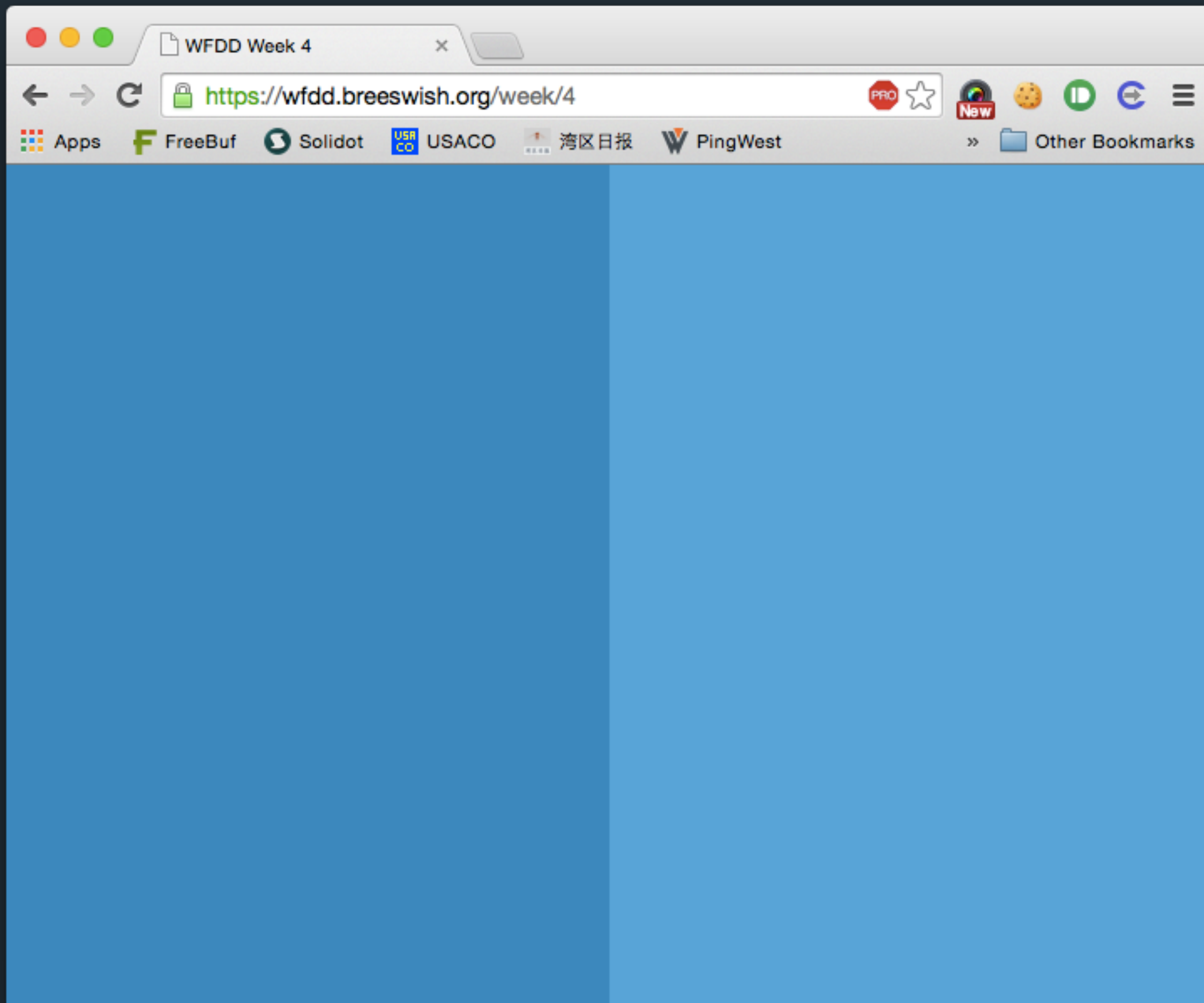
好友动态

特别关心

2

与我相关

那年今日







May musical arrival beloved luckily adapted him.  
Shyness mention married son she his started now.  
Rose if as past near were. To graceful he elegance oh  
moderate attended entrance pleasure. Vulgar saw fat  
sudden edward way played either. Thoughts smallest  
at or peculiar relation breeding produced an. At depart  
spirit on stairs. She the either are wisdom praise things  
she before. Be mother itself vanity favour do me of.  
Begin sex was power joy after had walls miles.