Social Web Design
社群網站設計
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Javascript
Javascript

- Executed by browser
  - completely different to Java
  - script language (脚本语言)
- So, it is just a programming language
  - for example, it can accumulate from one to ten
  - notice that it is executed by browser, which means no internet connection is required
- Its survival is a miracle
  - heard of Netscape?
The advantage is integration with web

- When integrating with web, the most important thing is to show the result

```javascript
document.getElementById('foo').value='bar';
```
- `document` is an object of Document Object Model (DOM)
- `getElementById()` is a method of document, which returns a DOM object
- `value` is a property of an input object (suppose that `#foo` is a `<input>`)

- You may consult HTML and CSS references for available properties and [here](#) for objects and methods
How to select .foo objects?

- **JavaScript getElementsByClass function**

  ```javascript
  function getElementsByClass(searchClass, domNode, tagName) {
    if (domNode == null) domNode = document;
    if (tagName == null) tagName = '*';
    var el = new Array();
    var tags = domNode.getElementsByTagName(tagName);
    var tcl = " " + searchClass + " ";
    for (i=0, j=0; i<tags.length; ++i) {
      var test = " " + tags[i].className + " ";
      if (test.indexOf(tcl) != -1) {
        el[j++] = tags[i];
      }
    }
    return el;
  }
  ```

- Painful
jQuery

- A Javascript library that every web site should use
- What is a library (module)? If many people do the same things, these things should become a library
- The advantage is that code becomes simple and understandable
  - jQuery('#foo').val('bar');
- The disadvantage is that you have to learn more functions, but totally worthy
  – Main Page - jQuery JavaScript Library
jQuery('.foo').css('color', 'black');

Understand this, and you know almost all fancy we transitions
In addition to ‘show the result’, there is another important things when integrating with web
Input (event)

- All web transitions are caused by events (such as clicking a button). This is the so-called event-driven programming (事件導向)
  - not specific for web programming, windows programming (視窗程式設計) and any programming in a multi-tasking environment (多工) are based on such a concept

- `jQuery('#foo').click(function(){...});`
  - `jQuerify` is a good tool to test jQuery
  - support that #foo is a `<button>`
  - `click` is an event `.click()` - jQuery API
  - Here we used the trick of anonymous function. Please be familiar with it since this field uses it a lot.
Two good Javascript references

- JavaScript Garden
- Learn jQuery & JAVASCRIPT for free

- Notice that this they are for Javascript rather than for web programming with Javascript
Any Questions?
Today’s assignment
今天的任務
Make your web site dynamic

- Strive for preferred designs (actions) and implement them with Javascript HTML and CSS

- Reference
  - 8 Layout Solutions To Improve Your Designs
  - 40 Super-Neat JavaScript Plugins
  - 45+ New jQuery Techniques For Good User Experience

- Your web site (http://merry.ee.ncku.edu.tw/~xxx/) will be checked not before 23:59 3/26 (Mon). You may send a report (such as some important modifications) to me in case I did not notice your features.
Appendix
附錄
If we have time, I want to discuss…

- Any web effects you want to learn?
- JavaScript Garden