

software studio

where to put Javascript

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execute now

```
<!DOCTYPE html>
<body>
Hello!
  <script>
    alert( 'Goodbye!' )
  </script>
</body>
</html>
```

now? Goodbye before Hello

script element

- › usually in head, but in body allowed too
- › executes when encountered, but...

generally not good

- › page content has not been fully loaded
- › DOM incomplete, manipulations unpredictable

embedding Javascript

```
<!DOCTYPE html>
<body>
  <button onclick="alert('Pressed')">
    Press me!
  </button>
</body>
</html>
```

embed listener code in HTML

- › a code string, not a function

code executes in element's namespace

- › so shadowing of function & var names

javascript and HTML jumbled together

- › makes a horrible mess

a better separation

strategy

- › declare functions, usually in head
- › register a main function against page being loaded
- › this function registers other functions...

“unobtrusive Javascript”

- › separate JS from HTML markup
- › degrade gracefully, and accessibly

unobtrusive javascript

```
<!DOCTYPE html>

<head>
  <title>unobtrusive JS example</title>
  <script>
    function setup() {
      var inputs = document.getElementsByTagName('input');
      for (var i = 0; i < inputs.length; i++) {
        inputs[i].addEventListener('mouseover',
          function (evt) {evt.target.focus();});
      };
      window.onload = setup;
    }
  </script>
</head>

<body>
  name:<input></input><br>
  email:<input></input>
</body>
</html>
```

what it does

- › when mouse hovers over input element, gives it focus

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