

# JavaScript JS301

Week 3: Practical JavaScript

# Where does my JavaScript go?

Popular convention says the HTML head:

```
<!DOCTYPE html>
<html><head>
<title>JS301</title>
<script type="text/javascript">
    document.write('Hello World! ');
</script>
</head>
<body></body>
</html>
```

# Where does my JavaScript go?

For best performance, put it as close to the bottom of the document as you can:

```
<!DOCTYPE html>
<html>
<head><title>JS301</title></head>
<body>
...
<script type="text/javascript">
    document.write('Hello World!');
</script>
</body>
</html>
```

# Where does my JavaScript go?

If you want to share JavaScript between HTML documents, include it from an external file:

```
<script src="myscript.js" type="text/  
javascript">  
</script>
```

# Form Validation

- Alert users to problems before submitting to the server
- Make sure to also validate on the server - never trust the client!
- <http://jsfiddle.net/zmysys/enDzA/>

# AJAX

- Interact with the server without page loads
- Asynchronous JavaScript and XML
- XHR: XMLHttpRequest
- Not limited to XML - I prefer JSON
- <http://jsfiddle.net/zymsys/sHhsf/>

# Rich User Interfaces

- Dialogs: <http://jsfiddle.net/zymsys/HcnRd/>
- Tabs: <http://jsfiddle.net/zymsys/AcUqr/>
- Input Controls:
  - Autocomplete: <http://jsfiddle.net/zymsys/eZNQk/>
  - Buttons: <http://jsfiddle.net/zymsys/HqEng/>
  - Dates: <http://jsfiddle.net/zymsys/vgzGU/>
  - More: <http://jqueryui.com/demos/>

# Next Week

- Knockout?
- OOP?
- Patterns?
- Something else?