JavaScript

for the

Client

W3D2

Overview

The Browser
The DOM
DOM + JS
Events

JavaScript

SpiderMonkey

V8

Chakra

JavaScriptCore

JavaScript | Layout

SpiderMonkey | Gecko

V8 | Blink

Chakra | EdgeHTML

JavaScriptCore | WebKit

Document

Object

Model

```html
<html>
  <head>
    <title>JavaScript for the Client</title>
  </head>
  <body>
    <ul>
      <li>Item 1</li>
      <li>Item 2</li>
      <li>Item 3</li>
      <li>Item 4</li>
    </ul>
  </body>
</html>
```
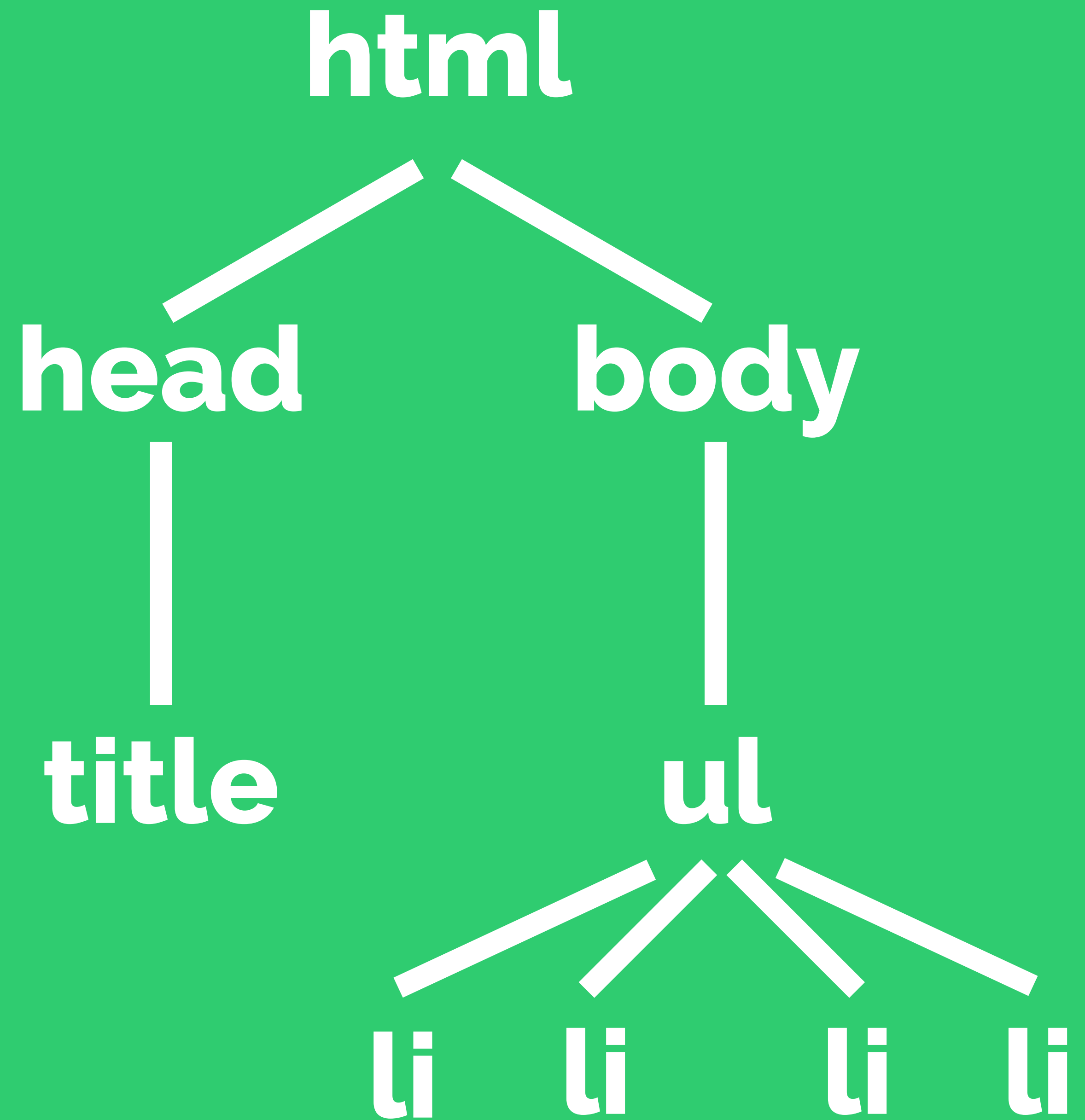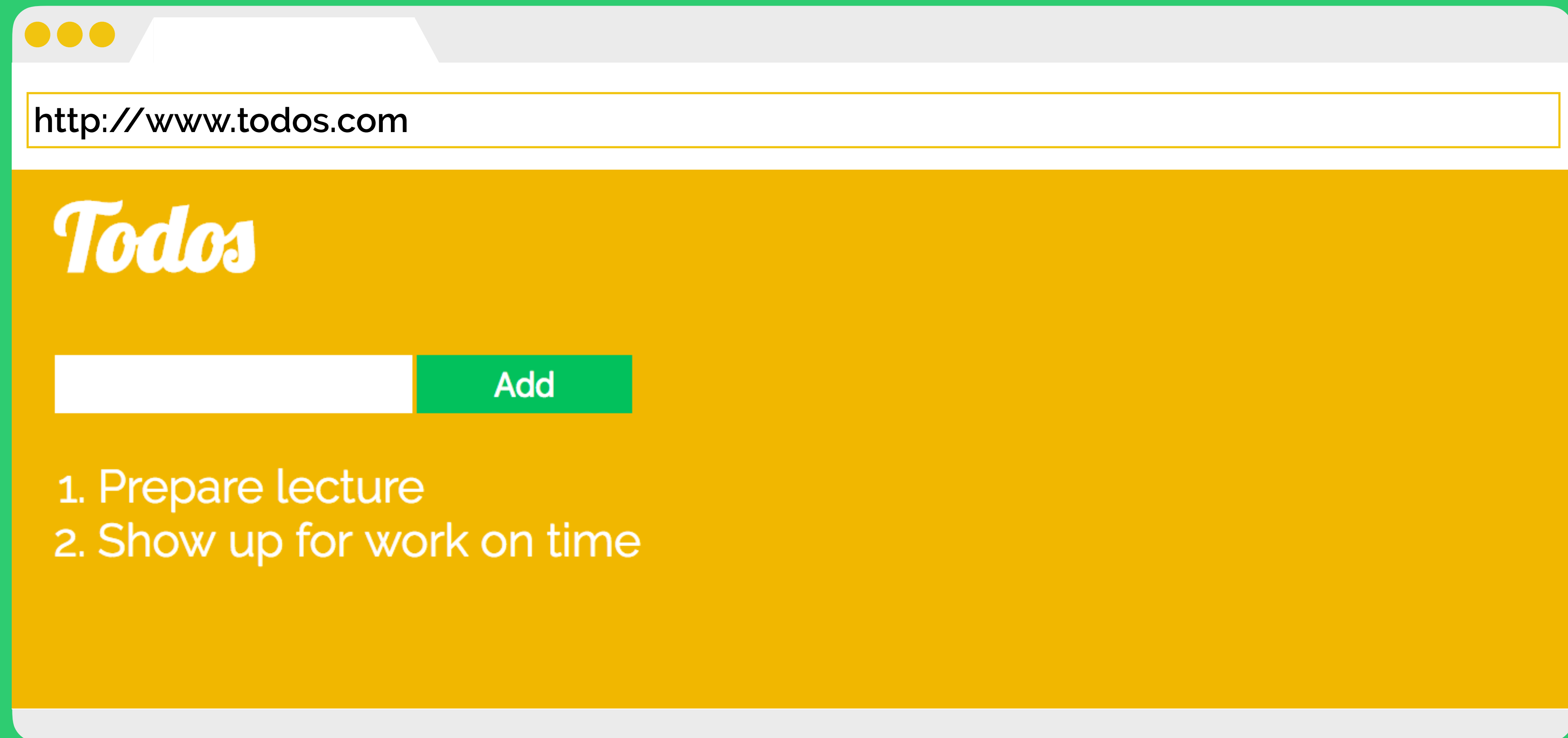
html

body

ul

li

li

li

li

The **DOM**
uses a tree
structure.

html

head

body

title

ul

li   li   li   li

DOM + JS

navigator, window, document

Selecting DOM Elements

```
Document.getElementById()
Document.getElementsByClassName()
Document.getElementsByName()
Document.getElementsByTagName()

Document.querySelector()
Document.querySelectorAll()
```

Adding DOM Elements

```
Document.createElement()
Document.createTextNode()

Node.appendChild()
```

EVENTS

Events are triggered when interesting things happen.

blur
click
dblclick
focus
input
keydown
keypress
keyup

mousedown
mouseenter
mouseleave
mousemove
mouseout
mouseover
mouseup

resize
scroll
select
unload
wheel

Adding Events

```javascript
var button = document.querySelector('button');
button.addEventListener('click', function(event) {
  console.log('Clicked ' + event.detail + ' times.');
});
```

Questions?