Web Technologies

### 24 Hours

## HTML5 Technologies https://upload.wikimedia.org/wikipedia/commons/thumb/6/61/HTML5_logo_and_wordmark.svg/512px-HTML5_logo_and_wordmark.svg.png

* HTML5 Specification & APIs
* Current State of HTML5
* Semantic Elements
* HTML5 Forms
* Audio & Video
* Inline Editing
* Geo Location
* Web Storage
* Canvas & SVG
* Web Workers
* Drag and Drop API
* Web sockets
* File API
* Web components (html-templates, custom-elements, Shadow-dom, And html imports)
* Validation – input passwords, emails…

## https://lh6.googleusercontent.com/-29KFPdOllA0/U8ZpYgIlkxI/AAAAAAAAACE/e3MDC7xBXiY/w1239-h1749/css3.pngCSS 3

* Bootstrap responsiveness
* 2D Transforms & 3D Transforms
* Transitions & Animations
* Multiple Columns
* UI Features (i.e. Resizing)
* Intro to Sass

## JavaScript

* Variables, data types, Expressions, Functions, Loops, Exceptions
* Objects and Arrays
* Primitive & reference values in variables
* Execution Context & Scope
* Garbage Collection

## JavaScript in the browser

* Running Scripts.
* Browser Limitations.
* Compatibility Issues.
* Accessing & Modifying the DOM.
* Handling Events, Event Flow, The Event Object, Event Types, Memory and Performance, Simulating Events
* Javascript Timers.
* Opening Windows.
* Error Handling & Debugging Techniques

## http://www.pinyourclient.com/wp-content/uploads/2015/01/9455413519_javascript.pngJavaScript and AJAX

* The XMLHTTPRequest.
* Developing powerful AJAX interactions.
* Understand options and limits with AJAX.
* JSON and AJAX.
* Array functions
* CORS

## Advanced JavaScript

* Closures and IIFEs
* Building Classes and Objects.
* Prototypical Inheritance and Polymorphism.
* Promises
* Regular Expressions
* Design Patterns
* Best Practices
* Achieving concurrency
* TypeScript
* Plugins - Writing your own custom jQuery plugins

## Advanced JavaScript: Callbacks

* Scheduling Callbacks
* Writing Async Functions
* Throwing exceptions from Callbacks
* Specify The “this” in Callback
* Nested Callbacks

## Libraries

* Introduction
* JQuery
* Lodash
* animations

## Secure your web application

* Basics of Web Security
* Injections
* Cross-site scripting
* Cookie poisoning
* Brute force
* Insecure direct object reference
* Insecure cryptographic storage
* Failure to restrict URL access
* Insecure communications