

Getting Started with



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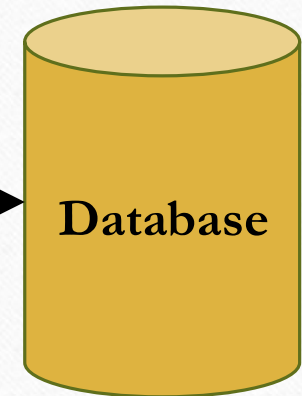
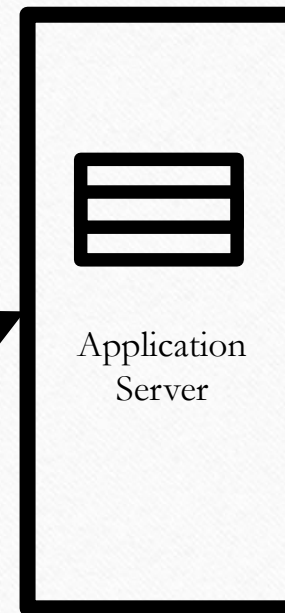
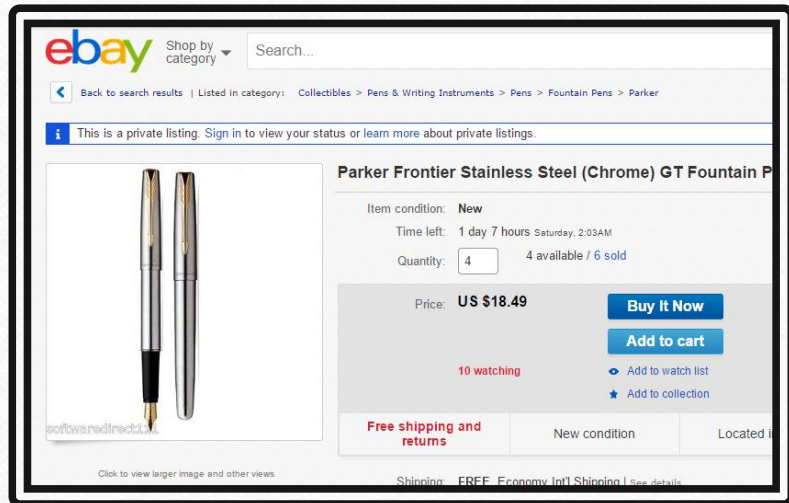
www.NetComLearning.com

Agenda

- How websites work – 5 Mins
- Introduction to JavaScript – 10 Mins
- JavaScript Frameworks – 5 Mins
- Getting Started : **Angular JS** – 35 Mins
- Q&A – 5 Mins

How Websites work?

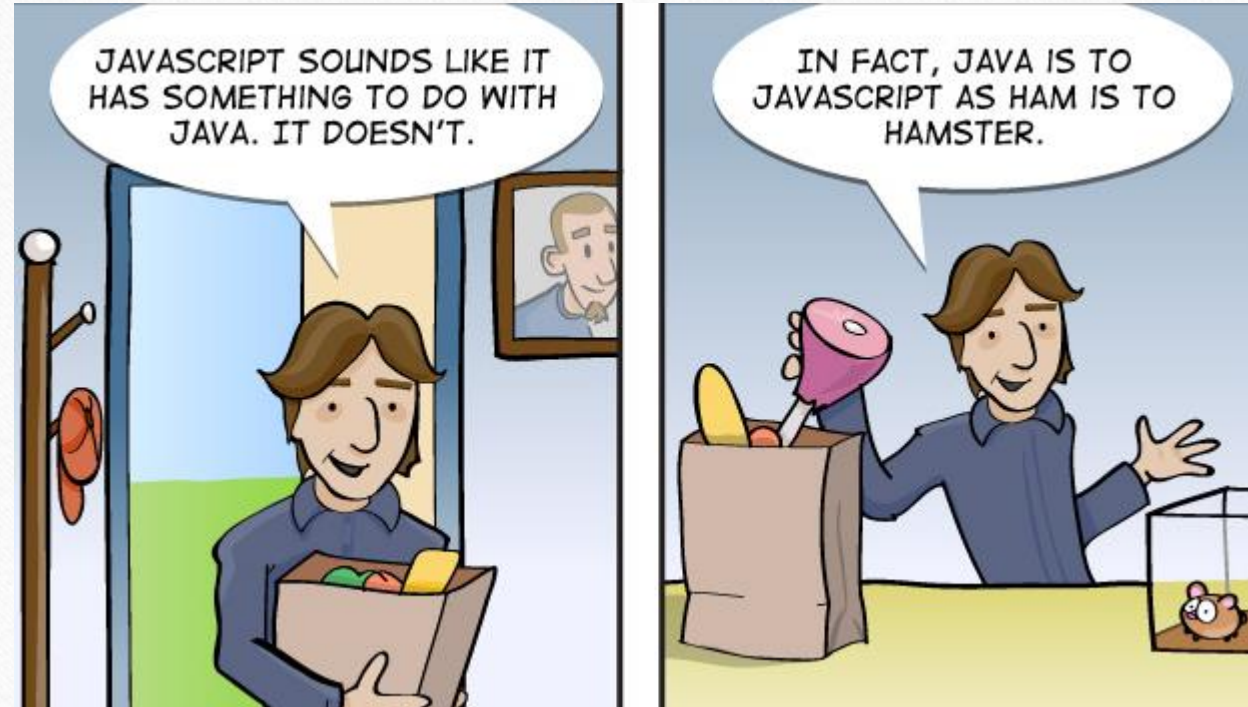
HTML, CSS etc., for UI



Oracle / SQL Server etc.,
for Database

Java / C# / VB or any programming
language for Business Logic

JavaScript vs Java??



Can you guess the answer?? 😊



What is JavaScript? (1 of 3)

- ❖ **JavaScript** is client site scripting language.
- ❖ It is most commonly used as a part of Web Browsers



Using JavaScript, we can:

- Alter the document content that is displayed
- Interact with user using controls like alert, prompt, confirm.
- And lot more...

What is JavaScript? (2 of 3)

- Written in a separate scripting language
- Embedded in HTML of web page

```
<script type="text/javascript">
```

```
.....
```

```
</script>
```

- Can be used for validating user's input as well.

What is JavaScript? (3 of 3)

- **Simpler Execution Model:**
 - Doesn't require compiler or development environment.
- **Saves Bandwidth:**
 - Source code is downloaded, not compiled executable
- **Platform independence:**
 - Code is interpreted by any scrip-enabled browser

Lets get started with JavaScript

- C- Language : `printf("Hello, World");`
- C++ : `cout<<"Hello, World";`
- C# : `Console.WriteLine("Hello, World");`
- SQL Server : `PRINT 'Hello, World'`
- Java : `System.out.println("Hello, World");`
- JavaScript : `document.write("<p>Welcome to JavaScript Webinar</p>");`

JavaScript – Data Types (1 of 3)

- Everything here is : **var**
- Can hold many data types
 - `var age=30;` //Number
 - `var name="Meganadh";` //String
 - `var experience=["Deloitte", "Cognizant", "Accenture"];` //Array
 - `var family={wife:"Anu", kid="Dhanush", passion="Teaching"};` //Object

JavaScript Frameworks



Guess this is an APT depiction ☺



Goal of web developer

Display the data in the required format

For

Customer delight

To

Get more profits and sustain in competitive market

What is **AngularJS** ?

- It is a JavaScript library.
- It extends HTML DOM with additional attributes and makes it more responsive to user actions.
- It is OPEN SOURCE. Available for **FREE**
- It was originally developed in 2009 by Misko Hevery and Adam Abrons.
- Now it is maintained by **Google**

Getting “Angular JS”

- Don't need to install any software to work with Angular JS.
- Get the library file from :
- <https://angularjs.org/>

Download AngularJS

Branch 1.4.x (stable) 1.2.x (legacy) ?

Build Minified Uncompressed Zip ?

CDN ?

Bower ?

npm

Extras [Browse additional modules](#)

[Previous Versions](#)

[Download](#)

Including “Angular JS”

- We can download and refer to the .js file. [From <https://angularjs.org/>]

[OR]

- We can refer to the CDN link:

<https://ajax.googleapis.com/ajax/libs/angularjs/1.4.7/angular.min.js>

Info on Angular JS

- Angular JS is JavaScript Framework Library
- Developers can write client side application in clean MVC way
- Angular JS is cross browser compliant
- Provides lot of reusable components, developer can write less code and get more functionality
- Last but not least it is FREE

AngularJS – 3 Main Components

ng-app

ng-model

ng-bind

[Lets see some example]

Code Sample – 1

[ng-app, ng-model]

```
<!doctype html>
<html ng-app>

  <head>
    <script src = "https://ajax.googleapis.com/ajax/libs/angularjs/1.3.3/angular.min.js"></script>
  </head>

  <body>
    <div>
      <label>Name:</label>
      <input type = "text" ng-model = "myName" placeholder = "Enter a name here">
      <hr />

      <h1>Hello {{myName}}!</h1>
    </div>

  </body>
</html>
```

Code Sample – 2

[ng-bind]

```
<!DOCTYPE html>
<html>
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>

<div ng-app="">
  <p>Name: <input type="text" ng-model="name"></p>
  <p ng-bind="name"></p>
</div>

</body>
</html>
```

Code Sample-3

[ng-init]

```
<!DOCTYPE html>
<html>
<script src= "http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="" ng-init="firstName='John'">
<p>The name is <span ng-bind="firstName"></span></p>
</div>
</body>
</html>
```

Code Sample – 4

[Expressions with values]

```
<!DOCTYPE html>
<html>
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="">
  <p>My first expression: {{ 1 + 2 }}</p>
</div>
</body>
</html>
```

Code Sample-5

[Expressions with model data]

```
<!DOCTYPE html>
<html>
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="">
  <p>Name: <input type="text" ng-model="name"></p>
  <p>{{name}}</p>
</div>
</body>
</html>
```

Code Sample-6

[Expressions with object and arrays]

```
<div ng-app="" ng-init="person={firstName:'Meganadh',lastName:'Reddy'}">  
  
<p>The name is {{ person.lastName }}</p>  
  
</div>
```

```
<div ng-app="" ng-init="points=[12,19,13,26,33]">  
  
<p>The third result is {{ points[3] }}</p>  
  
</div>
```

Code Sample – 7

[ng-repeat]

```
<!DOCTYPE html>
<html>
<script src= "http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="" ng-init=" names=['Meganadh','Trainer','NetcomLearning']">
  <p>Looping with ng-repeat:</p>
  <ul>
    <li ng-repeat="x in names">
      {{ x }}
    </li>
  </ul>
</div>
</body>
</html>
```

Code Sample – 8

[ng-repeat] – with filters

```
<!DOCTYPE html>
<html>
<script src= "http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="" ng-init=" names=['Meganadh','Trainer','NetcomLearning']">
  <p>Looping with ng-repeat:</p>
  <ul>
    <li ng-repeat="x in names | orderBy:x">
      {{ x }}
    </li>
  </ul>
</div>
</body>
</html>
```

Code Sample – 9

[uppercase]

```
<!DOCTYPE html>
<html>
<script src= "http://ajax.googleapis.com/ajax/libs/angularjs/1.3.14/angular.min.js"></script>
<body>
<div ng-app="" ng-init=" names=['Meganadh','Trainer','NetcomLearning']">
  <p>Looping with ng-repeat:</p>
  <ul>
    <li ng-repeat="x in names">
      {{ x | uppercase }}
    </li>
  </ul>
</div>
</body>
</html>
```

Additional Points [1 of 2]

[To get data from web server]

-
- Angular JS has service to call data from web server.
 - Uses `$http.get(url)` function
 - Once we get the data, we can use it to display the way we want in UI.
 - `$http` is an **XMLHttpRequest object** for requesting external data.
 - Now-a-days, JSON format is getting used more than XML for data transfer mechanism.

Additional Points [2 of 2]

[To get data from web server]

- What we learnt in this 40 mins about Angular JS is just **5%** of Angular JS
- There are lot more things which we can do using **Angular JS**

Angular JS

- Further to Study:
- Connect to database
- ng-show
- Angular Modules
- Angular Forms
- Angular API

Summary

What we discussed in this session:

- How normal websites work
- Introduction to JavaScript
- JavaScript Frameworks List
- Angular JS website
- Demos on AngularJS to get started

Hope the session is useful. Thank you for Joining.

References

- <https://angularjs.org/>
- <https://docs.angularjs.org/api>
- W3schools

Thank you

Q & A

