

Bootstrap



Remember a MERN stack?

- [MongoDB](#) as the database
- [Express](#) as the web framework
- ~~[AngularJS](#) as the frontend framework,~~
- ReactJS as the frontend framework
- [Node.js](#) as the server platform

Review JQuery?

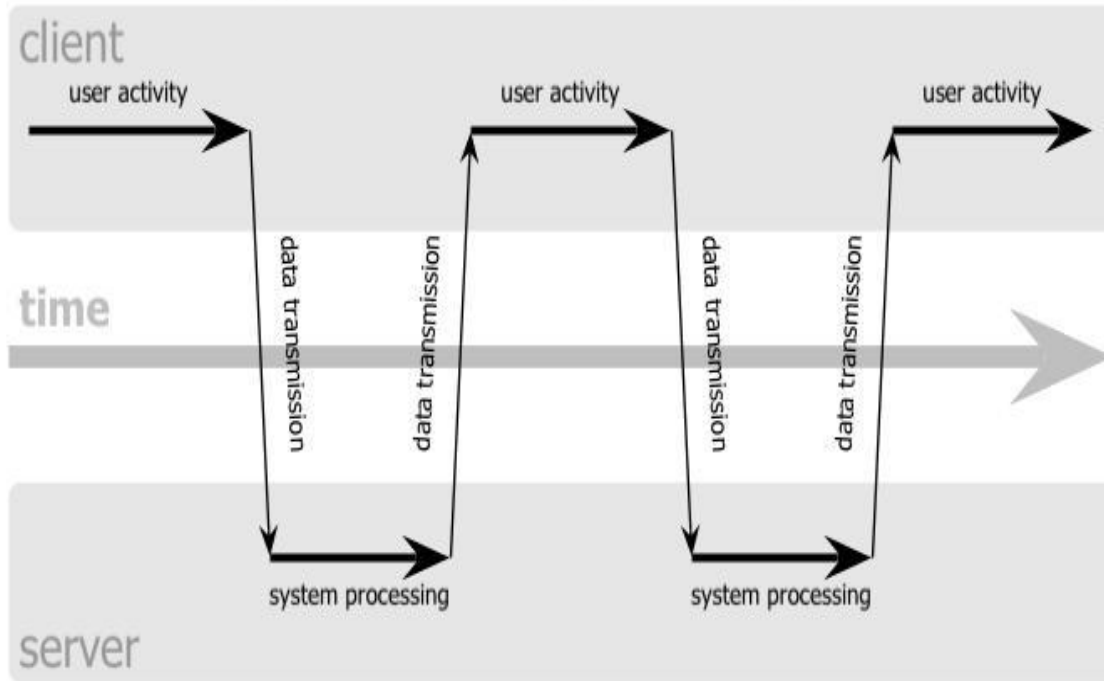
- **JQuery** is a “write less, do more”, JavaScript library
- Purpose of JQuery is to make it much easier to use JavaScript
- Many common tasks in JavaScript are made into functions in JQuery
- Syntax contains selecting HTML elements and performing some action on them
 - `$(selector).action()`
 - \$ sign to define access to JQuery
 - selector to query or find HTML elements
 - action() – jQuery action to be performed
- E.g.: `$("button").click();`

Review AJAX ?

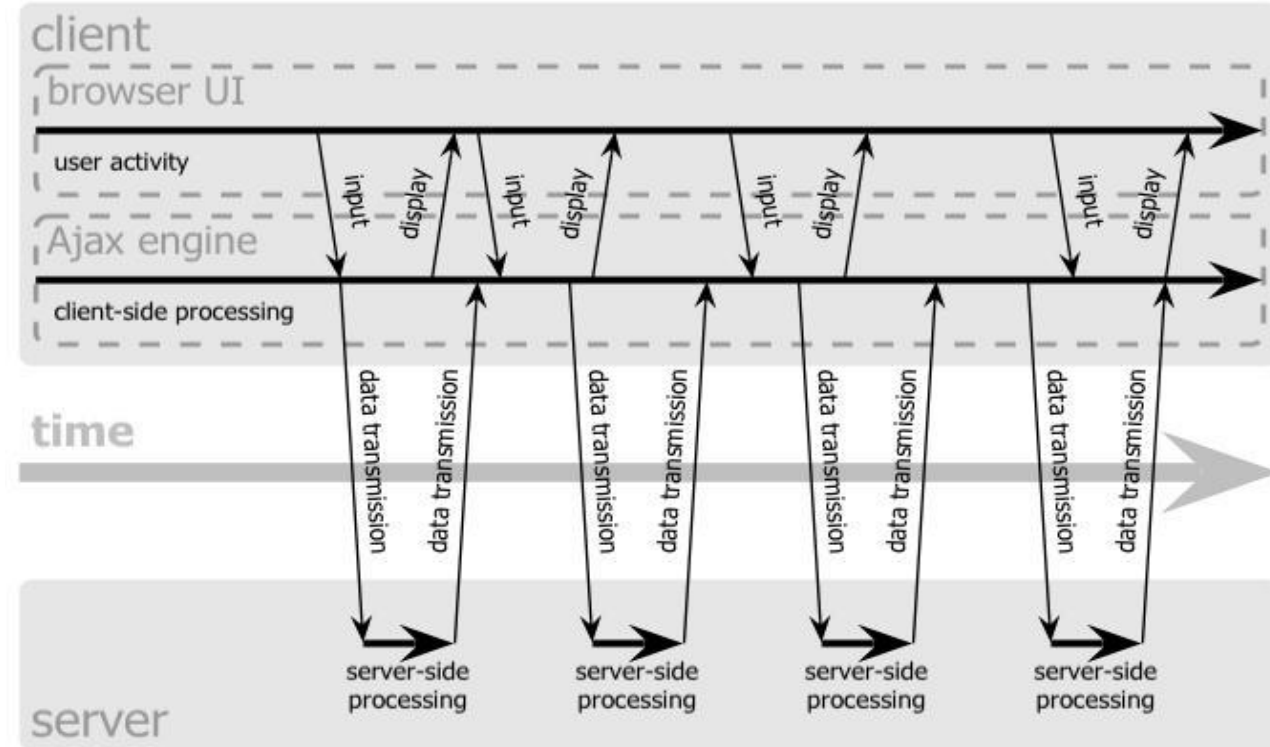
- **AJAX** – Asynchronous JavaScript and XML
- Main purpose is to exchange data with a server and updating the web page without reloading the whole page
- Allows web pages to update asynchronously by exchanging data with server in the background
- This enables parts of the page to update without a complete page reload
- AJAX uses different technologies for implementation
 - XMLHttpRequest object – to exchange data asynchronously
 - JavaScript – to interact with the information
 - CSS – to style the data
 - XML – used as the format for data transfer

Classic Model vs Ajax Model

classic web application model (synchronous)



Ajax web application model (asynchronous)



Twitter Bootstrap

- Popular HTML, CSS and JavaScript framework for developing responsive applications
- Free framework designed to make web application faster and easier
- Includes HTML, CSS based templates for typography, forms, buttons, tables, navigation, images
- Enables application to be more responsive
- Responsive design makes web applications automatically adjust to different devices, resolutions and screens

<http://www.w3schools.com/bootstrap/default.asp>

Why use Twitter Bootstrap?

State of Today's Web



Why use Twitter Bootstrap ?

- Easy to use:
 - Uses HTML, CSS and JavaScript
 - Anybody with basic knowledge of HTML, CSS can develop Bootstrap applications
- Responsive features:
 - Responsive CSS adjust automatically to phones, tablets, desktops
- Mobile first approach:
 - Mobile first styles part of core bootstrap framework
- Browser compatibility:
 - Compatible with all major browsers – Chrome, Firefox, Internet Explorer, Safari

How to use Twitter Bootstrap ?

- Download Bootstrap:
 - Download and host yourself
 - Get bootstrap from getbootstrap.com
- Install Bootstrap from CDN:
 - Include bootstrap from CDN(Content Delivery Network)

```
<!-- Latest compiled and minified CSS -->  
<link rel="stylesheet" href="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/css/bootstrap.min.css">
```

```
<!-- jQuery library -->  
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
```

```
<!-- Latest compiled JavaScript -->  
<script src="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
```

Example 1

- Use bootstrap to design the sign-in application

Example 1 – User Interface

Login

Enter your Email id

Email Id

Password

Password

Sign in

References

- Bootstrap - getbootstrap.com
- Bootstrap W3Schools - w3schools.com/bootstrap