# Introduction to AJAX

# Agenda

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| 1 | **Introduction to Ajax** |

# Objectives

At the end of this module, you will be able to:

- Know what is AJAX ?

- Understand web standards used in AJAX

- Understand advantages of AJAX

# Introduction to Ajax

# What is AJAX ?

- AJAX stands for *Asynchronous JavaScript And XML*

- AJAX is a new way to use existing technologies to generate dynamic web applications

- AJAX is based on JavaScript and HTTP Requests

- With AJAX, your JavaScript can communicate directly with the server, using the JavaScript *XMLHttpRequest object*. With this object, your JavaScript can trade data with a web server without reloading the page.

- With AJAX you can create better, faster and more user friendly web applications.

- Through AJAX both request and response are carried out simultaneously.

- AJAX is a client side technology.

# Why AJAX ? (Contd.).

- Ajax is not a new technology, it's an amalgamation of several existing technologies coming together in powerful new ways.

- Ajax Incorporates :

  - Standards based presentation using XHTML and CSS
  - Dynamic display and interaction using DOM.
  - Data Interchange and manipulation using XML and XSLT
  - Asynchronous data retrieval using XMLHttpRequest
  - JavaScript binding everything together

# Web Standards used in AJAX

AJAX is based on the following Web Standards:

- JavaScript (For event action)
- XML (for information exchange)
- HTML (for formatted display)
- CSS (for formatting template)

This is also compatible with server-side technologies like-

- JSP/Servlet
- ASP/ASP.NET
- PHP etc

# AJAX- for better Internet Applications

- Web applications cater to larger audience over extensive geographical regions

- Sometimes synchronous request processing may lead to performance issues

- Refreshing a page will entail in loss of information fed by the user

- AJAX makes internet applications much more user friendly

- Internet applications efficient and faster – data can be validated before the form is submitted

- Gives rich UI contols

- Frameworks can work seamlessly if AJAX is incorporated

- AJAX does not require API overhead like other technologies

- Nowadays, AJAX is supported by almost all browsers

# AJAX - Advantages

- Real-time form data validation
- Autocompletion
- Load on demand
- Sophisticated user interface controls and effects
- Refreshing data and server push
- Partial submit
- Mashups

# Summary

In this module, you were able to:

- Know what is AJAX ?

- Understand web standards used in AJAX

- Understand advantages of AJAX

# References

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**Thank You**