



# Introduction to AJAX



# Agenda

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## **Introduction to Ajax**

# Objectives

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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 ?

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- 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 ?

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- 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

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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

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- 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 controls
- 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

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

# Summary

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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**

