



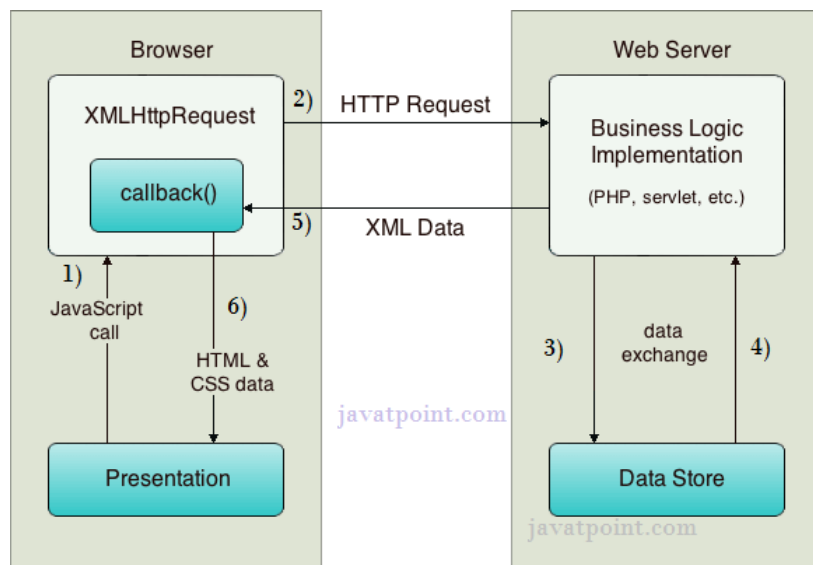
UNIT – V

AJAX and Web Services

AJAX is an acronym for **Asynchronous JavaScript and XML**. It is a group of inter-related technologies like JavaScript, DOM, XML, HTML/XHTML, CSS, XMLHttpRequest etc.

AJAX allows you to send and receive data asynchronously without reloading the web page.

AJAX communicates with the server using XMLHttpRequest object.



1. User sends a request from the UI and a javascript call goes to XMLHttpRequest object.
2. HTTP Request is sent to the server by XMLHttpRequest object.
3. Server interacts with the database using JSP, PHP, Servlet, ASP.net etc.
4. Data is retrieved.
5. Server sends XML data or JSON data to the XMLHttpRequest callback function.
6. HTML and CSS data is displayed on the browser.

```

<html>
<head>
<script>
var request;
function sendInfo()
{
var v=document.vinform.t1.value;
var url="index.jsp?val="+v;

if(window.XMLHttpRequest){
request=new XMLHttpRequest();
}
else if(window.ActiveXObject){
request=new ActiveXObject("Microsoft.XMLHTTP");
}

try{
request.onreadystatechange=getInfo;
request.open("GET",url,true);
request.send();
}catch(e){alert("Unable to connect to server");}
}

function getInfo(){
if(request.readyState==4){
var val=request.responseText;
document.getElementById('amit').innerHTML=val;
}
}

</script>
</head>
<body>
<marquee><h1>This is an example of ajax</h1></marquee>
<form name="vinform">
Enter id:<input type="text" name="t1" onkeyup="sendInfo()">
</form>

<span id="amit"> </span>

</body>
</html>

```

create server side page to process the request

```

<% @ page import="java.sql.*"%>

<%

```

```
String s=request.getParameter("val");
if(s==null || s.trim().equals("")){
out.print("Please enter id");
}else{
int id=Integer.parseInt(s);
out.print(id);
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mdb","r
oot","root");
PreparedStatement ps=con.prepareStatement("select * from emp where id=?");
ps.setInt(1,id);
ResultSet rs=ps.executeQuery();
while(rs.next()){
out.print(rs.getInt(1)+" "+rs.getString(2));
}
con.close();
}catch(Exception e){e.printStackTrace();}
}
%>
```