

# Indian Institute of Information Technology, Sonepat



## Application Programming Lab File

Submitted By:  
Pulkit Dhirana  
Roll no - 11911052  
Branch - CSE

Submitted to:  
MD Arquam Sir

# 1.Creating an HTML web page form

## Procedure:-

- 1.Make an html file and create a <form> tag in it.
- 2.Specify action attribute where the data has to be sent.
- 3.Use <input> tag to take data from user. Such as name ,parent's name,age etc.
- 4.Use <textarea> tag for address input.
- 5.Make radio button for Gender input and checkbox for selecting the courses.
- 6.Use <select> tag to select any of the cities.
- 7.Take input type file for uploading photo.
- 8.Take <input> type date for DOB (date of birth).
- 9.Make Submit and Reset buttons.

Code:

```
<html>

<head>

<title>Registration Form</title>

<center bgcolor=blue><h1><font color="blue">Registration
Form</font></h1></center>

</head>

<body bgcolor=red>

<form>

<p>First name:<input type="text" name="first_name"></p>

<p>Last name:<input type="text" name="father_name"></p>

<label>Age:</label>
```

**<select><option value="1">1</option><option value="2">2</option><option value="3">3</option><option value="4">4</option><option value="5">5</option><option value="6">6</option><option value="7">7</option><option value="8">8</option><option value="9">9</option><option value="10">10</option><option value="11">11</option><option value="12">12</option><option value="13">13</option><option value="14">14</option><option value="15">15</option><option value="16">16</option><option value="17">17</option><option value="18">18</option><option value="19">19</option><option value="20">20</option><option value="21">21</option><option value="22">22</option><option value="23">23</option><option value="24">24</option><option value="25">25</option><option value="26">26</option><option value="27">27</option><option value="28">28</option><option value="29">29</option><option value="30">30</option><option value="31">31</option><option value="32">32</option><option value="33">33</option><option value="34">34</option><option value="35">35</option><option value="36">36</option><option value="37">37</option><option value="38">38</option><option value="39">39</option><option value="40">40</option><option value="41">41</option><option value="42">42</option><option value="43">43</option><option value="44">44</option><option value="45">45</option><option value="46">46</option><option value="47">47</option><option value="48">48</option><option value="49">49</option><option value="50">50</option><option value="51">51</option><option value="52">52</option><option value="53">53</option><option value="54">54</option><option value="55">55</option><option value="56">56</option><option value="57">57</option><option value="58">58</option><option value="59">59</option><option value="60">60</option><option value="61">61</option><option value="62">62</option><option value="63">63</option><option value="64">64</option><option value="65">65</option><option**

value="66">66</option><option value="67">67</option><option value="68">68</option><option value="69">69</option><option value="70">70</option><option value="71">71</option><option value="72">72</option><option value="73">73</option><option value="74">74</option><option value="75">75</option><option value="76">76</option><option value="77">77</option><option value="78">78</option><option value="79">79</option><option value="80">80</option><option value="81">81</option><option value="82">82</option><option value="83">83</option><option value="84">84</option><option value="85">85</option><option value="86">86</option><option value="87">87</option><option value="88">88</option><option value="89">89</option><option value="90">90</option><option value="91">91</option><option value="92">92</option><option value="93">93</option><option value="94">94</option><option value="95">95</option><option value="96">96</option><option value="97">97</option><option value="98">98</option><option value="99">99</option><option value="100">100</option></select>

<p>Mother's name:<input type="text" name="mother\_name"></p>

<p>Father's name:&nbsp;<input type="text" name="last\_name"></p>

Address:<br>

<textarea rows="4" cols="30" name="address" placeholder="Enter address"></textarea>

<p>Gender:<input type="radio" name="gender" value="male">Male

<input type="radio" name="gender" value="male">Female</p>

<p>Subjects: Biology<input type="checkbox" name="Biology">

Physics<input type="checkbox" name="physics">

```

Chemistry<input type="checkbox" name="Chemistry">
Maths<input type="checkbox" name="Maths">
English<input type="checkbox" name="English">
Computer Science<input type="checkbox" name="CSE"></p>
<p>Date of Birth:<input type="date" placeholder="date"></p>
<input type="submit" value="Submit">
<input type="reset" value="Reset">
</form>
</body>
</html>

```

**Output:**

## 2. Creating Home Page using HTML.

### Procedure:-

1. Creating a home page for a website of E-Learning.
2. Create a Heading for a website.

3. Make few tab buttons like home, about, downloads.  
Etc .

4. Write few contents in a paragraph tab <p>.

Code:

```
<html>
```

```
<head>
```

```
<title>Home Page</title>
```

```
</head>
```

```
<body bgcolor="lightgreen">
```

```
<div style=background-color:lightgreen>
```

```
<p><center><marquee><h1><font color=blue>FutureLearn:  
ELearning</font></h1></marquee></center></p>
```

```
</div>
```

```
<div><center><h1>Internet</h1></center></div>
```

```
<p style="color: yellow">What is Internet??</p>
```

```
<p>The Internet is the global system of interconnected computer  
networks that uses the Internet protocol suite (TCP/IP) to  
communicate between networks and devices. It is a network of  
networks that consists of private, public, academic, business, and  
government networks of local to global scope, linked by a broad  
array of electronic, wireless, and optical networking technologies.  
The Internet carries a vast range of information resources and  
services, such as the inter-linked hypertext documents and  
applications of the World Wide Web (WWW), electronic mail,  
telephony, and file sharing.</p>
```

```
<p>The Internet is essentially a global network of computing<br>
```

```
You can think of the Internet as a physical collection
```

*of routers and circuits as a set of shared resources.<br/>*

*Some common definitions given in the past include –<br/>*

*A network of networks based on the TCP/IP communications  
protocol.<br/></p>*

*<p style="color: red">What is eLearning?</p>*

*<p>Understanding eLearning is simple. eLearning is learning  
utilizing electronic technologies to access educational curriculum  
outside of a traditional classroom. In most cases, it refers to a  
course, program or degree delivered completely online.*

*There are many terms used to describe learning that is delivered  
online, via the internet, ranging from Distance Education, to  
computerized electronic learning, online learning, internet learning  
and many others. We define eLearning as courses that are  
specifically delivered via the internet to somewhere other than the  
classroom where the professor is teaching. It is not a course  
delivered via a DVD or CD-ROM, video tape or over a television  
channel. It is interactive in that you can also communicate with  
your teachers, professors or other students in your class. Sometimes  
it is delivered live, where you can “electronically” raise your hand  
and interact in real time and sometimes it is a lecture that has been  
prerecorded. There is always a teacher or professor interacting  
/communicating with you and grading your participation, your  
assignments and your tests. eLearning has been proven to be a  
successful method of training and education is becoming a way of  
life for many citizens in North Carolina.</p>*

*<br>*

*<b>Internet Services</b><br/>*

*Some of the basic services available to Internet users are*

*–<br/>*

*Email – A fast, easy, and inexpensive way to communicate with other Internet users around the world.<br/>*

*Telnet –It allows a user to log into a remote computer as though it was a local system.<br/>*

*Skype- It allows us to chat and we can do video calls to anyone from every part of the world where there is network.*

*FTP – It allows a user to transfer virtually every kind of file that can be stored on a computer from one Internet-connected computer to another.Softwares like FileZilla,WinSCP,etc.<br/>*

*UseNet news – A distributed bulletin board that offers a combination news and discussion service on thousands of topics.<br/>*

*The World Wide Web (WWW), commonly known as the Web, is an information system where documents and other web resources are identified by Uniform Resource Locators (URLs, such as <https://www.example.com/>), which may be interlinked by hypertext, and are accessible over the Internet.[1][2] The resources of the WWW are transferred via the Hypertext Transfer Protocol (HTTP) and may be accessed by users by a software application called a web browser and are published by a software application called a web server.*

*</p>*

*<p style="color: red">FutureLearn-ELearning</p>*

*<p>In future we will be not studying on the physical board but on the internet through virtual classroom environment.A virtual*



*classroom provides an opportunity for students to receive direct instruction from a qualified teacher in an interactive environment. Learners can have direct and immediate access to their instructor for instant feedback and direction. The virtual classroom provides a structured schedule of classes, which can be helpful for students who may find the freedom of asynchronous learning to be overwhelming. In addition, the virtual classroom provides a social learning environment that replicates the traditional "brick and mortar" classroom. Most virtual classroom applications provide a recording feature. Each class is recorded and stored on a server, which allows for instant playback of any class over the course of the school year. This can be extremely useful for students to retrieve missed material or review concepts for an upcoming exam. Parents and auditors have the conceptual ability to monitor any classroom to ensure that they are satisfied with the education the learner is receiving.*

*In higher education especially, a virtual learning environment (VLE) is sometimes combined with a management information system (MIS) to create a managed learning environment, in which all aspects of a course are handled through a consistent user interface throughout the institution. Physical universities and newer online-only colleges offer select academic degrees and certificate programs via the Internet. Some programs require students to attend some campus classes or orientations, but many are delivered completely online. Several universities offer online student support services, such as online advising and registration, e-counseling, online textbook purchases, student governments and student newspapers.*

*</p>*

**

</body>

</html>

**Output:**

## FutureLearn: ELearning

### Internet

**What is Internet??**

The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries a vast range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony, and file sharing.

The Internet is essentially a global network of computing  
You can think of the Internet as a physical collection of routers and circuits as a set of shared resources.  
Some common definitions given in the past include –  
A network of networks based on the TCP/IP communications protocol.

**What is eLearning?**

Understanding eLearning is simple. eLearning is learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom. In most cases, it refers to a course, program or degree delivered completely online. There are many terms used to describe learning that is delivered online, via the internet, ranging from Distance Education, to computerized electronic learning, online learning, internet learning and many others. We define eLearning as courses that are specifically delivered via the internet to somewhere other than the classroom where the professor is teaching. It is not a course delivered via a DVD or CD-ROM, video tape or over a television channel. It is interactive in that you can also communicate with your teachers, professors or other students in your class. Sometimes it is delivered live, where you can “electronically” raise your hand and interact in real time and sometimes it is a lecture that has been prerecorded. There is always a teacher or professor interacting /communicating with you and grading your participation, your assignments and your tests. eLearning has been proven to be a successful method of training and education is becoming a way of life for many citizens in North Carolina.

A person in a dark suit is holding a white tablet horizontally. Above the tablet, five circular icons are displayed: a bar chart with an upward arrow, a head with gears, an open book, a group of people with a play button, and a magnifying glass. Below these icons, the text "E-LEARNING" is written in white capital letters. The background of the image is dark and blurred.

#### Internet Services

Some of the basic services available to Internet users are –

Email – A fast, easy, and inexpensive way to communicate with other Internet users around the world.

Telnet – It allows a user to log into a remote computer as though it was a local system.

Skype- It allows us to chat and we can do video calls to anyone from every part of the world where there is network. FTP – It allows a user to transfer virtually every kind of file that can be stored on a computer from one Internet-connected computer to another. Softwares like FileZilla, WinSCP, etc.

UseNet news – A distributed bulletin board that offers a combination news and discussion service on thousands of topics.

The World Wide Web (WWW), commonly known as the Web, is an information system where documents and other web resources are identified by Uniform Resource Locators (URLs, such as <https://www.example.com/>), which may be interlinked by hypertext, and are accessible over the Internet.[1][2] The resources of the WWW are transferred via the Hypertext Transfer Protocol (HTTP) and may be accessed by users by a software application called a web browser and are published by a software application called a web server.

#### FutureLearn-ELearning

In future we will be not studying on the physical board but on the internet through virtual classroom environment. A virtual classroom provides an opportunity for students to receive direct instruction from a qualified teacher in an interactive environment. Learners can have direct and immediate access to their instructor for instant feedback and direction. The virtual classroom provides a structured schedule of classes, which can be helpful for students who may find the freedom of asynchronous learning to be overwhelming. In addition, the virtual classroom provides a social learning environment that replicates the traditional "brick and mortar" classroom. Most virtual classroom applications provide a recording feature. Each class is recorded and stored on a server, which allows for instant playback of any class over the course of the school year. This can be extremely useful for students to retrieve missed material or review concepts for an upcoming exam. Parents and auditors have the conceptual ability to monitor any classroom to ensure that they are satisfied with the education the learner is receiving. In higher education especially, a virtual learning environment (VLE) is sometimes combined with a management information system (MIS) to create a managed learning environment, in which all aspects of a course are handled through a consistent user interface throughout the institution. Physical universities and newer online-only colleges offer select academic degrees and certificate programs via the Internet. Some programs require students to attend some campus classes or orientations, but many are delivered completely online. Several universities offer online student support services, such as online advising and registration, e-counseling, online textbook purchases, student governments and student newspapers.



programs require students to attend some campus classes or orientations, but many are delivered completely online. Several universities offer online student support services, such as online advising and registration, e-counseling, online textbook purchases, student governments and student newspapers.



### 3 .Creating XHTML and CSS and understanding its use in creating web pages.

#### Procedure:-

1. We can make our website look more stylish and good using CSS.
2. Create a simple website about Ancient India write its contents in a different div tag and a photo.
3. Create and internal CSS code using <style> tag in the <head>

Tag of HTML file.

4. Use **float** and **display** properties on div tags to make a

three column view for our website.

5. Use **hover** property to change the style of paragraph when mouse is hovered.

6 . Use CSS properties to set font size, color, background image.

7. Use position property to set the image to the right bottom.

### **Code:**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
```

```
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head>
```

```
<title>World of Waffles</title>
```

```
<style type="text/css">
```

```
body{
```

```
background-color: yellow;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Waffles!</h1>
```

******

***<p style="color:blue">***

***A waffle is a dish made from leavened batter or dough that is cooked between two plates that are patterned to give a characteristic size, shape, and surface impression. There are many variations based on the type of waffle iron and recipe used. Waffles are eaten throughout the world, particularly in Belgium, which has over a dozen regional varieties.Waffles may be made fresh or simply heated after having been commercially cooked and frozen.</p>***

***<h3 style="color: red"&gtVarieties</h3>***

***<p style="color: green">***

***Varieties of waffles***

***Waffles are usually made with a waffle iron. In this image the heart-shaped iron is for Scandinavian style waffles***

***American waffles are often made from a batter leavened with baking powder and may be round, square, or rectangular in shape. They are usually served as a sweet breakfast food, topped with butter and maple syrup, bacon, and other fruit syrups, honey, or powdered sugar. They are also found in many different savory dishes, such as fried chicken and waffles or topped with kidney stew. Waffles were first introduced to North America in 1620 by Pilgrims who brought the method from Holland.***

***Belgian waffles, or Brussels waffles, are made with a yeast-leavened batter. It is generally, but not always, lighter, thicker, and crispier and has larger pockets compared to other waffle varieties. They are easy to tell the difference from Liège Waffles by their***

*rectangular sides. In Belgium, most waffles are served warm by street vendors and dusted with confectioner's sugar. In tourist areas they might be topped with whipped cream, soft fruit or chocolate spread. Despite their name, 'Brussels waffles' were actually invented in Ghent in 1839. They were introduced to America by restaurateur Maurice Vermeersch. He sold Brussels waffles under the name "Bel-Gem Waffles" at the New York's 1964 World's Fair.*

*The Liège waffle (from the city of Liège, in eastern Belgium) is a richer, denser, sweeter, and chewier waffle. It was invented by the chef of the prince-bishop of Liège in the 18th century. It has chunks of pearl sugar which caramelize on the outside of the waffle when baked. It is the most common type of waffle in Belgium. It is made in plain, vanilla and cinnamon varieties by street vendors across the nation.*

*Bergische waffles, or Waffles from Berg county, are a specialty of the German region of Bergisches Land. The waffles are crisp and less dense than Belgian waffles. They are always heart shaped. They are served with cherries, cream and sometimes rice pudding as part of the traditional afternoon feast on Sundays in the region.*

*Hong Kong style waffle, in Hong Kong called a "grid cake" or "grid biscuits" (格仔餅), is a waffle usually made and sold by street hawkers and eaten warm on the street. It is similar to a traditional waffle but larger, round in shape and divided into four quarters. It is usually served as a snack. Butter, peanut butter and sugar are spread on one side of the cooked waffle. Then it is folded into a semicircle to eat. Eggs, sugar and evaporated milk are used in the waffle recipes, giving them a sweet flavor. They are generally soft and not dense. Traditional Hong Kong style waffles are full of the flavor of yolk. Sometimes different flavors, such as chocolate and honey melon, are used in the recipe and create various colors.*

***Another style of Hong Kong waffle is the eggette or gai daan jai (雞蛋仔), which have a ball-shaped pattern.***

**</p>**

**</body>**

**</html>**

**Output:**

**Waffles!**



A waffle is a dish made from leavened batter or dough that is cooked between two plates that are patterned to give a characteristic size, shape, and surface impression. There are many variations based on the type of waffle iron and recipe used. Waffles are eaten throughout the world, particularly in Belgium, which has over a dozen regional varieties. Waffles may be made fresh or simply heated after having been commercially cooked and frozen.

**Varieties**

Varieties of waffles Waffles are usually made with a waffle iron. In this image the heart-shaped iron is for Scandinavian style waffles American waffles are often made from a batter leavened with baking powder and may be round, square, or rectangular in shape. They are usually served as a sweet breakfast food, topped with butter and maple syrup, bacon, and other fruit syrups, honey, or powdered sugar. They are also found in many different savory dishes, such as fried chicken and waffles or topped with kidney stew. Waffles were first introduced to North America in 1620 by Pilgrims who brought the method from Holland. Belgian waffles, or Brussels waffles, are made with a yeast-leavened batter. It is generally, but not always, lighter, thicker, and crispier and has larger pockets compared to other waffle varieties. They are easy to tell the difference from Liège Waffles by their rectangular sides. In Belgium, most waffles are served warm by street vendors

## **4. Setting up and understanding of Apache Tomcat server.**

### **Procedure:-**

#### **Step 1**

##### **Download and Install Tomcat**

1. Go to <http://tomcat.apache.org/download-70.cgi> then go to the Binary Distribution/Core/ and download the "zip" package (for example "apache-tomcat-7.0.40.zip")
2. Now **unzip** the downloaded file into a directory of our choice.

#### **Step 2**

Check the installed directory to ensure it contains the following sub-directories:

a.bin folder



- b. logs folder
- c. webapps folder
- d. work folder
- e. temp folder
- f. conf folder
- g. lib folder

### Step 3

Create Environment variable JAVA\_HOME.

Configure Tomcat Server

The configuration files of the Apache Tomcat Server are located in the "conf" sub-directory of our

Tomcat installed directory, for example "E:\myserver\tomcat7.0.40\conf".

There are 4 configuration

XML files:

1. context.xml file
2. tomcat-users.xml file
3. server.xml file
4. web.xml file

Before proceeding, make a BACKUP of the configuration files.

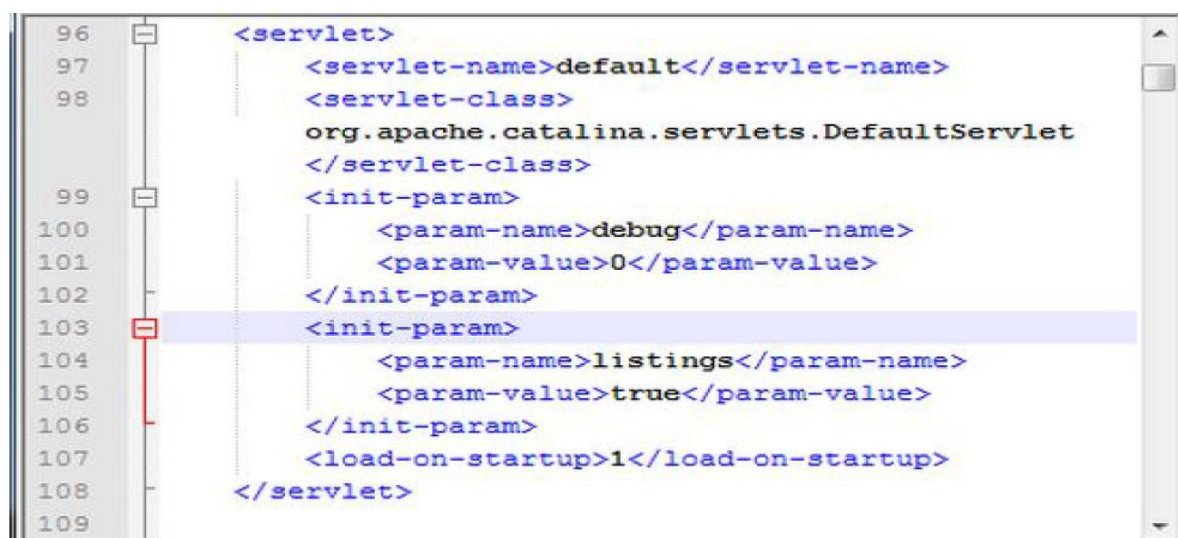
### Step 4(a) "conf\web.xml"; Enabling a Directory Listing

Open the configuration file "web.xml". We shall enable the directory listing by changing

"listings" from

"false" to "true" for the "default" servlet.

<param-value>**true**</param-value> like:



```
96 <servlet>
97     <servlet-name>default</servlet-name>
98     <servlet-class>
99         org.apache.catalina.servlets.DefaultServlet
100     </servlet-class>
101     <init-param>
102         <param-name>debug</param-name>
103         <param-value>0</param-value>
104     </init-param>
105     <init-param>
106         <param-name>listings</param-name>
107         <param-value>true</param-value>
108     </init-param>
109     <load-on-startup>1</load-on-startup>
110 </servlet>
```

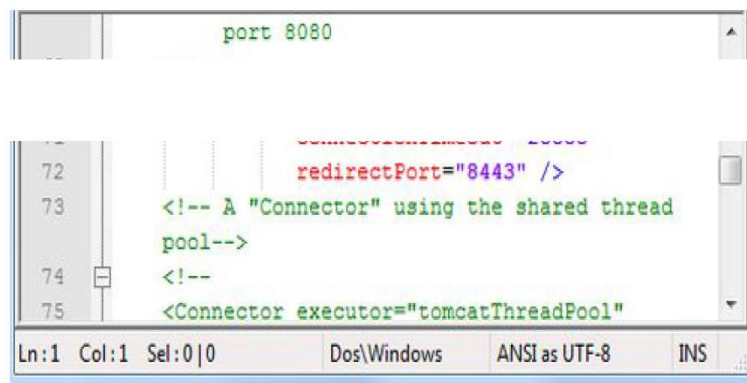
### Step 4(b) "conf\server.xml file"; set the TCP Port Number



Open the file "server.xml" in a text editor.

The default port number of Tomcat is 8080. We can change it according to our need.

<Connector port="9999" protocol="HTTP/1.1" Like



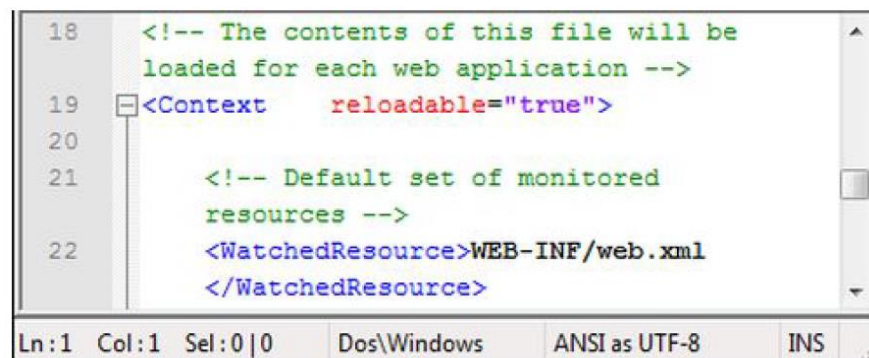
```
port 8080

<!-- Connector port="9999" protocol="HTTP/1.1" -->
<!-- A "Connector" using the shared thread pool -->
<!--
<Connector executor="tomcatThreadPool"
    port="8443" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />
-->
```

#### Step 4(c) "conf/context.xml"; Enabling Automatic Reload

In that we set reloadable="true" to the <Context> element to enable automatic reload after code

</Context> Like



```
<!-- The contents of this file will be
loaded for each web application -->
<Context reloadable="true">
    <!-- Default set of monitored
resources -->
    <WatchedResource>WEB-INF/web.xml
</WatchedResource>
```

#### Step 4(d) (Optional) "conf/tomcat-users.xml"

It is used to manage Tomcat by adding the highlighted lines, inside the <tomcat-users> elements.

In that we can add a password and username as an optional step.

#### Step 5

Now, start the tomcat server

Executable programs and scripts are kept in the "bin" sub-directory of the Tomcat installed

## Directory

The screenshot shows the XAMPP Control Panel v3.2.4 interface. The top section displays a table of services with their status, module, PID(s), Port(s), and available actions. The bottom section shows a log of messages from the main console.

Service	Module	PID(s)	Port(s)	Actions
Apache	Apache	12020 13764	80, 443	Stop Admin Config Logs
MySQL	MySQL	9560	3306	Stop Admin Config Logs
FileZilla	FileZilla			Start Admin Config Logs
Mercury	Mercury			Start Admin Config Logs
Tomcat	Tomcat			Start Admin Config Logs

Log messages (18:46:17):

- [main] Initializing Control Panel
- [main] Windows Version: Home 64-bit
- [main] XAMPP Version: 7.2.29
- [main] Control Panel Version: 3.2.4 [ Compiled: Jun 5th 2019 ]
- [main] You are not running with administrator rights! This will work for most application stuff but whenever you do something with services there will be a security dialogue or things will break! So think about running this application with administrator rights!
- [main] XAMPP Installation Directory: "c:\xampp"
- [main] Checking for prerequisites
- [main] All prerequisites found
- [main] Initializing Modules
- [main] XAMPP Apache is already running on port 80
- [main] XAMPP Apache is already running on port 443
- [main] XAMPP MySQL is already running on port 3306
- [main] Starting Check-Timer
- [main] Control Panel Ready

### Step 5(a) Start Server

### Step 5(b) Access the Server

Open a browser then enter the URL "http://localhost:8080" to access the Tomcat server's welcome page.

To test the Tomcat 9 install and verify it is running on your server, open and point your browser to localhost:8080 (or whatever custom port you put into the configuration).


The screenshot shows the XAMPP Control Panel v3.2.4 interface. The top section displays a table of services with their status, module, PID(s), Port(s), and available actions. The bottom section shows a log of messages from the main console.

Service	Module	PID(s)	Port(s)	Actions
Apache	Apache			Start Admin Config Logs
MySQL	MySQL			Start Admin Config Logs
FileZilla	FileZilla			Start Admin Config Logs
Mercury	Mercury			Start Admin Config Logs
Tomcat	Tomcat	22964	8005, 8080	Stop Admin Config Logs


Log messages (11:17:58 AM):

- [main] Initializing Control Panel
- [main] Windows Version: Home 64-bit
- [main] XAMPP Version: 7.4.4
- [main] Control Panel Version: 3.2.4 [ Compiled: Jun 5th 2019 ]
- [main] You are not running with administrator rights! This will work for most application stuff but whenever you do something with services there will be a security dialogue or things will break! So think about running this application with administrator rights!
- [main] XAMPP Installation Directory: "c:\xampp"
- [main] Checking for prerequisites
- [main] All prerequisites found
- [main] Initializing Modules
- [main] Starting Check-Timer
- [main] Control Panel Ready
- [Tomcat] Attempting to start Tomcat app...
- [Tomcat] Status change detected: running

Home Documentation Configuration Examples Wiki Mailing Lists Find Help

**Apache Tomcat/8.0.8**  **The Apache Software Foundation**  
http://www.apache.org/

If you're seeing this, you've successfully installed Tomcat. Congratulations!

 Recommended Reading:

- [Security Considerations HOW-TO](#)
- [Manager Application HOW-TO](#)
- [Clustering/Session Replication HOW-TO](#)

Server Status  
Manager App  
Host Manager

**Developer Quick Start**

- [Tomcat Setup](#)
- [Realms & AAA](#)
- [Examples](#)
- [Servlet Specifications](#)
- [First Web Application](#)
- [JDBC Data Sources](#)
- [Tomcat Versions](#)

**Managing Tomcat**

For security, access to the [manager webapp](#) is restricted. Users are defined in:

```
$CATALINA_HOME/conf/tomcat-users.xml
```

In Tomcat 8.0 access to the manager application is split between different users.  
[Read more...](#)

- [Release Notes](#)
- [Changelog](#)
- [Migration Guide](#)
- [Security Notices](#)

**Documentation**

- [Tomcat 8.0 Documentation](#)
- [Tomcat 8.0 Configuration](#)
- [Tomcat Wiki](#)

Find additional important configuration information in:

```
$CATALINA_HOME/RUNNING.txt
```

Developers may be interested in:

- [Tomcat 8.0 Bug Database](#)
- [Tomcat 8.0 JavaDocs](#)
- [Tomcat 8.0 SVN Repository](#)

**Getting Help**

**FAQ and Mailing Lists**

The following mailing lists are available:

- [tomcat-announce](#)  
Important announcements, releases, security vulnerability notifications. (Low volume).
- [tomcat-users](#)  
User support and discussion
- [tomcat-dev](#)  
User support and discussion for Apache Tomcat
- [tomcat-dev](#)  
Development mailing list, including commit messages

## 6. Understanding PHP.

### Procedure:-

1. Creating an HTML page.
2. Use <php> tag inside body.
3. Apply simple CSS effects to have a glancing effect on the page.

### Code-

```
<!DOCTYPE html>
<html>
<head>
    <title>Your Info</title>
</head>
<style type="text/css">
body{
    background: #2BC0E4;
```

```
background: -webkit-linear-gradient(to right,
#EAECC6, #2BC0E4);
background: linear-gradient(to right, red,
yellow);
}
</style>
<body>
<?php
$branch="CSE";
$roll=11911052;
echo ("Name - Pulkit Dhirana \n");
echo ("Branch - ".$branch."\n");
echo ("Roll no - ".$roll."\n");
?>
</body>
</html>
Output:
```



Name - Pulkit Dhirana Branch - CSE Roll no - 11911052

## 7. Understanding JavaScript.

### Procedure:

1. Create an html page.
2. Using <script> tag, apply some scripts in the function.
3. If you have external script, link the external script through this:

```
<link rel="stylesheet" type="text/javascript" href="script
name"
```

4. End the script tag using </script>

5. Access the webpage through Chrome or any other browser.

Code:

```
<html>
```

```
<head>
```

```
<title>Multiplication Table</title>
```

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

```
var rows = prompt("How many rows for  
your multiplication table?");
```

```
var cols = prompt("How many columns  
for your multiplication table?");
```

```
if(rows == "" || rows == null)
```

```
rows = 10;
```

```
if(cols == "" || cols == null)
```

```
cols = 10;
```

```
createTable(rows, cols);
```

```
function createTable(rows, cols)
```

```
{
```

```
var j=1;
```

```
var output = "<table border='1'
```

```
width='500'
```

```
cellspacing='0'cellpadding='5'>";
```

```
for(i=1;i<=rows;i++)
```

```
{
```

```
output = output + "<tr>";
```

```
while(j<=cols)
```

```
{
```

```

        output = output + "<td>" + i*j +
"</td>";
        j = j+1;
    }
    output = output + "</tr>";
    j = 1;
}
output = output + "</table>";
document.write(output);
}
</script>
</head>
<body>
</body>
</html>

```

**Output:**

This page says

How many rows for your multiplication table?

This page says

How many columns for your multiplication table?

1	2	3	4
2	4	6	8
3	6	9	12
4	8	12	16

## **8. Create a Web page with back end in PHP and in front end in JavaScript and hosting it on Apache Tomcat Server.**

### **Procedure-**

1. Create a web page for form, which checks the validity of user,password,Roll no,Contact no and email id at front end using JavaScript and at back end through PHP and SQL.
2. Create a web page for form and apply CSS(optional) affects to make it look good.
3. Apply JavaScript to check if user enters correct data .
4. Apply PHP code to check if user data is valid or not , if valid then give the home page otherwise redirect it to the login page.

Code:

```
<!DOCTYPE html>
<html>
<head>
<title>FORM</title>
</head>
```

```
<style type="text/css">  
    body{  
        background-image:  
url(https://www.nasa.gov/sites/default/files/styles/im  
age_card_4x3_ratio/public/thumbnails/image/denman  
20200325-nasa.jpg);  
        background-repeat: no-repeat;  
        background-attachment: fixed;  
        background-size: cover;  
</style>  
<body>  
<marquee behavior="alternate"><h1 style="color:  
blue">Form for Projects</h1></marquee>  
<centre><form name="formtitle" action="61.php"  
method="post">  
<label>Name</label><input type="textbox"  
name="Name" required><br>  
<label>Roll No.</label><input type="text"  
name="rollno" required="please type name"><br>  
<label>Gender: </label>  
<label>Male</label>  
<input type="radio" name="gender" value="Male">  
<label>Female</label>  
<input type="radio" name="gender"  
value="Female"><br>  
<label>Branch&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~</la  
bel>  
<label>CSE</label>
```



```
<input type="radio" name="Branch" value="CSE">
<label>IT</label>
<input type="radio" name="Branch" value="IT"><br>
<label>Contact No.:</label>
<input type="text" name="number" required><br>
<label>E-mail Id:</label><input type="text"
name="E-mail" required><br>
<label>Languages Learnt:</label>
<select name="language"><option
value="0">select</option>
<option value="C">C</option>
<option value="C++">C++</option>
<option value="HTM">HTML & CSS</option>
<option value="JAVA">JAVA</option>
<option value="Javascript">Javascript</option>
<option value="PYTHON">Python</option>
<option value="Ruby">Ruby</option>
<option value="Go">GO</option>
<option value="NONE">None</option></select><br>
<label>Skills:</label>
<select name="Skills"><option>select</option>
  <option value="Artificial Intelligence">A.I.</option>
  <option value="Android Development">Android
Development</option>
  <option value="Cyber Security">Cyber
Security</option>
  <option value="Game Development">Game
Development</option>
```

```

    <option value="Machine learning">Machine
Learning</option>
    <option value="Networkings">Networking</option>
    <option value="Web Designing">Web
Designing</option>
    <option value="None">Not Decided
Yet</option></select><br>
    <label><input type="checkbox" name="offers">Check
this box to ensure that you will receive all offers and
details about all the projects if eligible</label><br>
    <label><input type="checkbox" name="agree"
required="">I hereby declare that all the information
provided by me above are correct</label><br>
    <input type="submit" onclick="validation()">
</form></center>
<script>
    function validation(){
var x = document.forms["formtitle"]["Name"].value;
if (x == "") {
    alert("Name must be correct");
    return false;
}
var regex = /^[a-zA-Z]+$/;
if(regex.test(x)==false){
alert("Enter a valid name ");
return false;
}
x = document.forms["formtitle"]["rollno"].value;

```

```
if (x == "" ) {  
    alert(" Enter roll no");  
    return false;  
}  
var reg=/^[0-9]+$/;  
if(reg.test(x)==false){  
alert("Enter a valid roll no ");  
return false;  
}  
if(x.length!=8)  
{ alert(" Roll no must be of 8 digit");  
    return false;  
}  
x = document.forms["formtitle"]["number"].value;  
if (x == "" ) {  
    alert(" Enter contact number");  
    return false;  
}  
var reg=/^[0-9]+$/;  
if(reg.test(x)==false){  
alert("Enter a valid contact number");  
return false;  
}  
if(x.length!=10)  
{  
    alert(" Contact no. must be of 10 digit");  
    return false;  
}
```

```
var r= /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/;
x = document.forms["formtitle"]["E-mail"].value;
if(r.test(x)==false){
alert("Enter a valid E-mail");
return false;
}
x = document.forms["formtitle"]["Branch"].value;
if(x===0 || x==""){
alert("Select the Branch");
return false;
}
x = document.forms["formtitle"]["gender"].value;
if(x===0 || x==""){
alert("Select the gender");
return false;
}
x = document.forms["formtitle"]["Skills"].value;
if(x===0 || x==""){
alert("Select the state");
return false;
}
x = document.forms["formtitle"]["language"].value;
if(x===0 || x==""){
alert("Select the Languages");
return false;
}
}
```

```
</script>
</body>
</html>
PHP:
<!DOCTYPE html>
<html>
<head>
  <title>Your Info</title>
</head>
<style type="text/css">
body{
  background: #2BC0E4;
font-family: Arial, Helvetica, sans-serif;
}
</style>
<body>
<?php
echo(" Hello ".$_POST["Name"]);
echo ("br");
echo("Your information is successfully submitted");
echo ("br");
echo("Name=".$_POST["Name"]);
echo ("br");
echo(">Roll no=".$_POST["rollno"]);
echo ("br");
echo(">Branch=".$_POST["Branch"]);
echo ("br");
echo("Gender=".$_POST["gender"]);
```

```
echo ("br");
echo("Contact No="."$_POST["number"]);
echo ("br");
echo("E-mail Id="."$_POST["E-mail"]);
echo ("br");
echo("Language learnt="."$_POST["language"]);
echo ("br");
echo("Area of interest="."$_POST["Skills"]);
?></body>
</html>
```

Output:



**Form for Projects**

Name: Pulkit

Roll No.: 11911052

Gender: Male ☐ Female ☒

Branch : CSE ☒ IT ☐

Contact No.: 8445008256

E-mail Id: pulkitdhirana3@gmail.com

Languages Learnt: C

Skills: Not Decided Yet

☒ Check this box to ensure that you will receive all offers and details about all the projects if eligible

☒ I hereby declare that all the information provided by me above are correct

Submit

**Hello Pulkit Dhirana**

**Your information is successfully submitted**

**Name=Pulkit Dhirana**

**Roll no=11911052**

**Branch=CSE**

**Gender=Male**

**Contact No=8445008256**

**E-mail Id=pulkitdhirana3@gmail.com**

**Language learnt=C**