Guru Nanak Dev Engg College Practical File

Web Technologies lab

Subject code :- LPCIT- 107



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1-Create a simple web page by writing HTML using a simple text editor, Notepad.

Demonstrate the following components of the web page:

Page titles and Headings

Paragraphs and Inline images

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>this is the page title.</title>
  <style>
    img{
       height: 350px;
background-color: red;
border-radius: 5px;
    }
    p{
       font-size: 20px;
    }
  </style>
</head>
```

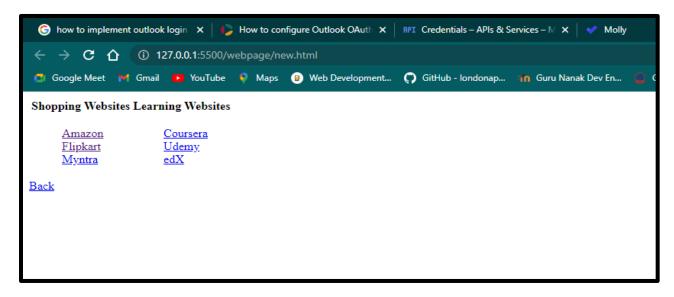


2 – Demonstrate the use of Links, Lists and Tables in HTML. You should be able to link separate pages and create named links within a document, using them to build a "table of contents".

```
Code –
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Document</title>
  <style>
   ul {
     list-style: none;
  </style>
</head>
<body>
  Shopping Websites
     Learning Websites
   \langle ul \rangle
         <a href="https://www.amazon.in/">Amazon</a>
         <a href="https://www.flipkart.com/">Flipkart</a>
         <a href="https://www.myntra.com/">Myntra</a> 
       \langle ul \rangle
         <a href="https://www.coursera.org/">Coursera</a>
         <a href="https://www.udemy.com/">Udemy</a>
         <a href="https://www.edx.org/">edX</a>
         <a href="p1.html">Back</a>
```

</body>

</html>

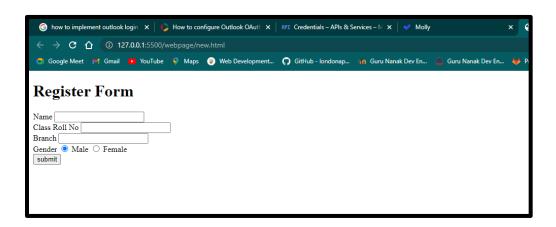


3 – Create simple Forms in HTML and demonstrate the use of various form elements like input box, textarea, submit and radio buttons etc.

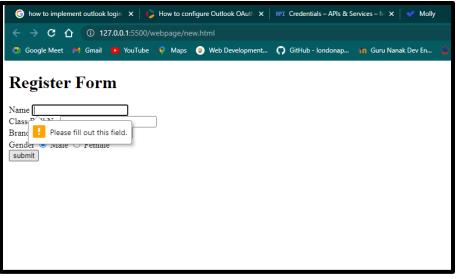
Code -

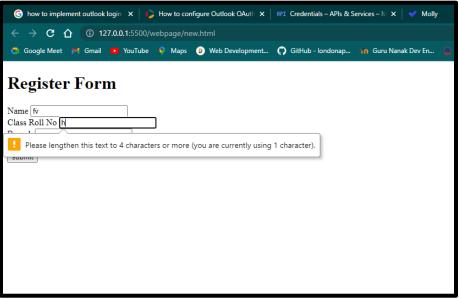
```
<!DOCTYPE html>
<html lang="en">
<head>
<title>forms</title>
</head>
<body>
<h1> Register Form</h1>
<form>
<label> Name </label>
<input type="text" name="name" required minlength="1" maxlength="30"><br>
<label> Class Roll No </label>
<input type="text" name="Roll" required minlength="4" maxlength="8"><br>
<label> Branch </label>
<input type="text" name="Branch" required><br>
<label>Gender</label>
<input type="radio" value="male" name="gender">
<label>Male</label>
<input type="radio" value="female" name="gender">
<label>Female</label><br>
<input type="submit" value="submit">
</form>
</body>
</html>
```

Output –



Validation:



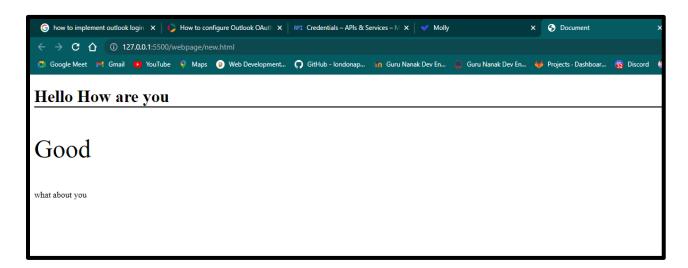


4 – Demonstrate the use of cascading style sheets (CSS) (inline, internal and external) to specify various aspects of style, such as colours and text fonts and sizes, in HTML document.

Program -

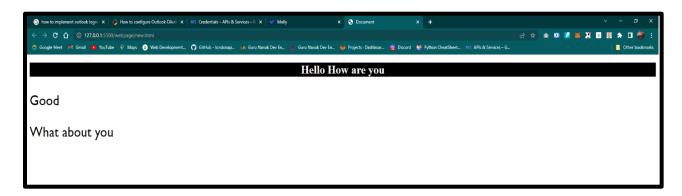
Inline css:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Document</title>
</head>
<body>
<h1 style="border-bottom: 2px solid;">Hello How are you </h1>
Good
what about you
</body>
</html>
```



Internal css:

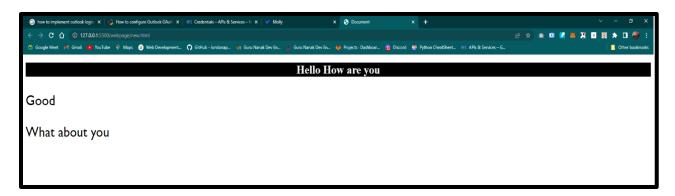
```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Document</title>
<style> h1 {
font-size: xx-large;
text-align: center;
color:whitesmoke;
background-color: black;
p{
font-size: 2vw;
font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
</style>
</head>
<body>
<h1>Hello How are you </h1>
Good
What about you
</body>
</html>
```



External css:-

-Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Document</title>
</head>
<body>
<h1>Hello How are you </h1>
 Good 
What about you
</body>
</html>
-Style.css
h1{
font-size: xx-large;
text-align: center;
 color:whitesmoke;
 background-color: black;
p{
font-size: 2vw;
font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
}
```



5 – Create an html file to implement the concept of document object model, different operations and event handling using JavaScript.

Code -

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h1 style="font-weight: 700;">Click Button to Change Text inside the paragraph</h1>
Going To change
<button onclick="change()">TO CHANGE</button><hr>
<!-->
<button onclick="dat()">TO SEE DATE</button>
<script>
 function change(){
 cj=document.getElementById("change");
 cj.innerHTML="Click button to change color";
 cj.style.color="blue";
function dat(){
  kj=document.getElementById("date");
  kj.innerHTML=Date();
  kj.style.fontSize="2vw";
</script>
</body>
</html>
```

<u>Output</u> –

Before:

Click Button to Change Text inside the paragraph
Going To change
TO CHANGE
TO SEE DATE

After:

Click Button to Change Text inside the paragraph
Click button to change color
TO CHANGE
Sun Apr 03 2022 01:24:41 GMT-0400 (Eastern Daylight Time)

6 – Demonstrate the use of various selectors, filters and event handling in jQuery.

Code -

• Selectors :-

```
<!DOCTYPE html>
<html>
<head>
<title>First jQuery Example</title>
<script type="text/javascript"</pre>
src="https://ajax.googleapis.com/ajax/libs/jquery/2.1.3/jquery.min.js">
</script>
<script type="text/javascript" language="javascript">
$(document).ready(function() {
$("p").css("background-color", "pink");
});
$(document).ready(function() {
$(".pink-class").css("background-color", "red");
});
$(document).ready(function() {
$("#pink-id").css("background-color", "yellow");
});
</script>
</head>
<body>
This is first paragraph.
This is second paragraph.
This is third paragraph.
</body>
</html>
```

```
This is first paragraph.

This is second paragraph.

This is third paragraph.
```

• Filters :-

```
<!DOCTYPE html>
<html>
<head>
<style>
div{
font-size: 20px;
font-weight: bold;
}
</style>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script>
function fun(){
$(document).ready(function(){
 $("p").filter(".para").css({"background": "yellow"});
});
</script>
</head>
<body>
<h2>Hello everyone</h2>
<h4>In this code i implemented the filter method to filter the paragraphs</h4>
<div id = "div1"> This is a div element.</div>
 This is first paragraph element 
<div id = "div2"> This is a div element. </div>
```

```
 This is second paragraph element 
 This is third paragraph element 
On clicking this button the paraghraphs will be highlighted
<br/>
<br/>
<br/>
<br/>
/body>
</html>
```

Hello everyone

In this code i implemented the filter method to filter the paragraphs

This is a div element.

This is first paragraph element

This is a div element.

This is second paragraph element

This is third paragraph element

On clicking this button the paraghraphs will be highlighted

click me

Hello everyone

In this code i implemented the filter method to filter the paragraphs

This is a div element.

This is first paragraph element

This is a div element.

This is second paragraph element

This is third paragraph element

On clicking this button the paraghraphs will be highlighted

click me

• Event handling :-

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script>
$(document).ready(function(){
 $(".click").click(function(){
  $(this).hide();
 });
 $(".dbclick").dblclick(function(){
 $(this).hide();
});
 $(".menter").mouseenter(function(){
 $(this).css("background-color", "red");
});
 $(".mleave").mouseleave(function(){
 $(this).css("background-color", "orange");
});
 $(".hover").hover(function(){
 $(this).hide();
},
function(){
 alert("Bye! You now leave p1!");
});
  $(".on").on({
  mouseenter: function(){
   $(this).css("background-color", "lightgray");
  },
  mouseleave: function(){
   $(this).css("background-color", "lightblue");
  },
  click: function(){
   $(this).css("background-color", "yellow");
```

```
}
});
});

</script>
</head>
<body>

Click event will happen on this paragraph
Double Click event will happen on this paragraph
Mouse enter event will happen on this paragraph
Mouse leave event will happen on this paragraph
Hover event will happen on this paragraph
Hover event will happen on this paragraph
On this paragraph multiple events are assigned at a time using the on function
</body>
</html>
```

Click event will happen on this paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

• Click event happened on first paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

On this paragraph multiple events are assigned at a time using the on function

• Double click event happened on first paragraph

Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

On this paragraph multiple events are assigned at a time using the on function

• Mouse enter event happened on first paragraph

Click event will happen on this paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

• Mouse leave event happened on first paragraph

Click event will happen on this paragraph

Double Click event will happen on this paragraph

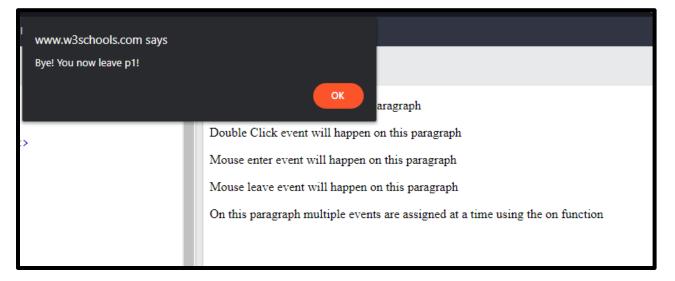
Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

On this paragraph multiple events are assigned at a time using the on function

• Hover event happened on first paragraph



> On event happened on first paragraph

Click event will happen on this paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

Click event will happen on this paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

On this paragraph multiple events are assigned at a time using the on function

Click event will happen on this paragraph

Double Click event will happen on this paragraph

Mouse enter event will happen on this paragraph

Mouse leave event will happen on this paragraph

Hover event will happen on this paragraph

7 – Demonstrate the use of AJAX to retrieve and manipulate the web page content.

Code -

> Index.html:-

```
<!DOCTYPE html>
 <html>
 <body>
 <div id="demo">
 <h1>On clicking this button the document conetnt will be changed using AJAX</h1>
 <button type="button" onclick="loadDoc()">Change Content</button>
 </div>
 <script>
 function loadDoc() {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function() {
   if (this.readyState == 4 && this.status == 200) {
    document.getElementById("demo").innerHTML =
    this.responseText;
   }
  };
  xhttp.open("GET", "ajax-info.txt", true);
  xhttp.send();
 }
 </script>
 </body>
</html>_
```

> Ajax-info.txt :-

<h1>AJAX</h1>

AJAX is not a programming language.

AJAX is a technique for accessing web servers from a web page.

AJAX stands for Asynchronous JavaScript And XML.

Output -

On clicking this button the document conetnt will be changed using AJAX

Change Content

Output after we clicked the button

AJAX

AJAX is not a programming language.

AJAX is a technique for accessing web servers from a web page.

AJAX stands for Asynchronous JavaScript And XML.

8 – Demonstrate the use of GET and POST methods of AJAX.

Get Method

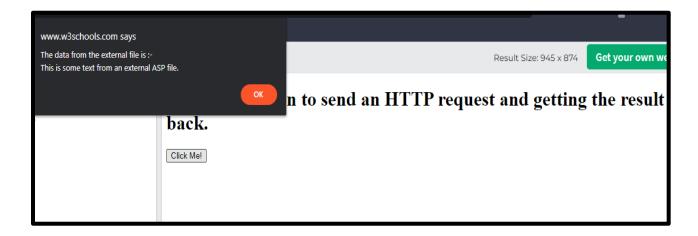
Code -

➤ Index.html:-

```
<!DOCTYPE html>
 <html>
 <head>
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
 <script>
 $(document).ready(function(){
  $("button").click(function(){
   $.get("demo-test.asp", function(data, status){
    alert("The data from the external file is :-\n'' + data);
   });
  });
 });
 </script>
 </head>
 <body>
 <h1>Click this button to send an HTTP request and getting the result back.</h1>
 <button>Click Me!</button>
 </body>
</html>
   > demo-test.asp :-
 <%
 response.write("This is some text from an external ASP file.")
 %>
```

Click this button to send an HTTP request and getting the result back.

Click Me!



POST Method

Code -

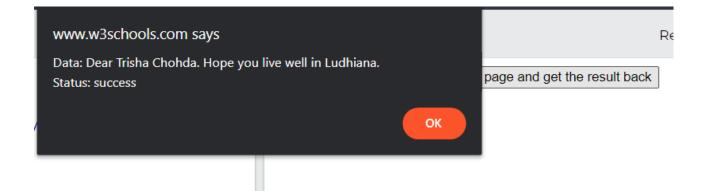
> Index.html:-

```
<!DOCTYPE html>
 <html>
 <head>
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
 <script>
 $(document).ready(function(){
  $("button").click(function(){
   $.post("demo_test_post.asp",
   {
    name: "Himanshu Mahajan",
    city: "Ludhiana"
   },
   function(data,status){
    alert("The data from the external file with data given by the user :- \n'' + data);
   });
  });
 });
 </script>
 </head>
 <body>
 <h1>Click this button to send an HTTP request and getting the result back.</h1>
 <button>Click Me!</button>
 </body>
</html>
   > demo-test.asp:-
 <%
 dim fname, city
 fname=Request.Form("name")
 city=Request.Form("city")
```

```
Response.Write("Dear " & fname & ". ")
Response.Write("Hope you live well in " & city & ".")
%>
```

Click this button to send an HTTP request and getting the result back.

Click Me!



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9 - Creation of Web pages using HTML5 and CSS3.

Code -

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple web Development Template</title>
  <style>
     * {
       margin: 0;
       padding: 0;
     .navbar {
       display: flex;
       align-items: center;
       justify-content: center;
       position: sticky;
       top: 0;
       cursor: pointer;
     .background {
       background: black;
       background-blend-mode: darken;
       background-size: cover;
     }
     .nav-list {
       width: 70%;
       display: flex;
       align-items: center;
     .logo {
       display: flex;
       justify-content: center;
       align-items: center;
     .logo img {
       width: 180px;
       border-radius: 50px;
     .nav-list li {
       list-style: none;
       padding: 26px 30px;
```

```
.nav-list li a {
  text-decoration: none;
 color: white;
.nav-list li a:hover {
  color: grey;
.rightnav {
  width: 30%;
  text-align: right;
#search {
  padding: 5px;
  font-size: 17px;
  border: 2px solid grey;
  border-radius: 9px;
}
.firstsection {
  background-color: #fff;
  height: 400px;
.secondsection {
  background-color: #000;
  color: #fff;
  height: 400px;
.box-main {
  display: flex;
  justify-content: center;
  align-items: center;
  max-width: 80%;
  margin: auto;
  height: 80%;
.firsthalf {
  width: 100%;
  display: flex;
  flex-direction: column;
  justify-content: center;
}
.secondhalf {
  width: 30%;
.secondhalf img {
  width: 70%;
  border: 4px solid white;
  border-radius: 150px;
```

```
display: block;
   margin: auto;
.text-big {
   font-family: 'Piazzolla', serif;
   font-weight: bold;
   font-size: 35px;
.text-small {
   font-size: 18px;
.btn {
   padding: 8px 20px;
   margin: 7px 0;
   border: 2px solid white;
   border-radius: 8px;
   background: none;
   color: white;
   cursor: pointer;
.btn-sm {
   padding: 6px 10px;
   vertical-align: middle;
}
.section {
   height: 400px;
   display: flex;
   align-items: center;
   justify-content: center;
   max-width: 90%;
   margin: auto;
.section-Left {
   flex-direction: row-reverse;
}
.paras {
   padding: 0px 65px;
.thumbnail img {
   width: 250px;
   border: 2px solid black;
   border-radius: 26px;
   margin-top: 19px;
}
.center {
   text-align: center;
```

```
.text-footer {
      text-align: center;
      padding: 30px 0;
      font-family: 'Ubuntu', sans-serif;
      display: flex;
      justify-content: center;
      color: white;
  </style>
</head>
<body>
  <nav class="navbar background">
    <div class="logo">
        <img src= "istockphot.jpg">
      </div>
      <a href="#web">Web Technology</a>
      <a href="#program">C Programming</a>
      <a href="#course">Courses</a>
    <div class="rightNav">
      <input type="text" name="search" id="search">
      <button class="btn btn-sm">Search</button>
    </div>
  </nav>
  <section class="firstsection">
    <div class="box-main">
      <div class="firstHalf">
        <h1 class="text-big" id="web">Web Technology</h1>
```

HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages. HTML is a markup language that is used by the browser to manipulate text, images, and other content to display it in the required format.

```
</div>
</div>
</section>
<section class="secondsection">
<div class="box-main">
<div class="firstHalf">
<h1 class="text-big" id="program">
C Programming
</h1>
<pc class="text-small">
```

C is a procedural programming language. It initially developed by Dennis Ritchie as a system programming language to write operating system. The main features of C language include low-level access to memory, simple set of keywords, and clean style, these features make C language suitable for system programming like operating system or compiler development.

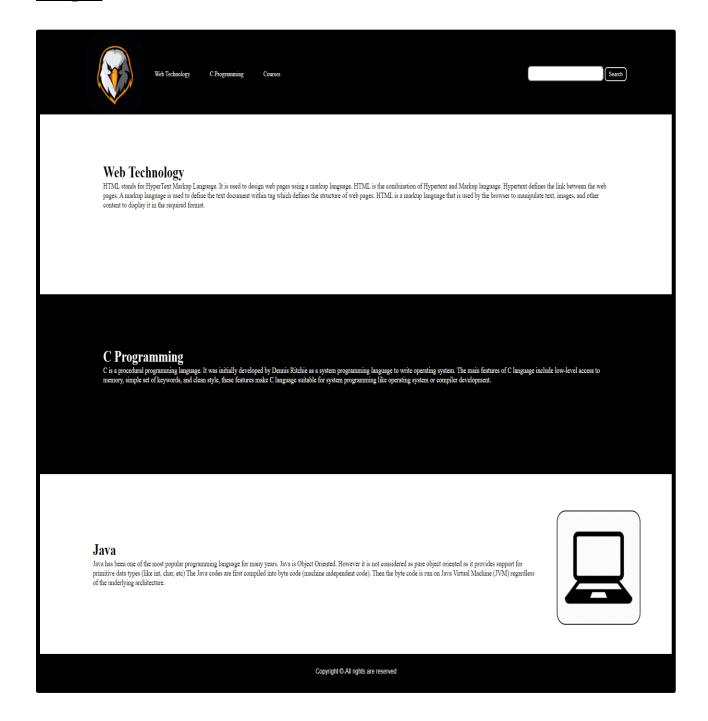
```
</div>
</div>
</section>
<section class="section">
<div class="paras">
<h1 class="sectionTag text-big">Java</h1>
```

Java has been one of the most popular programming language for many years. Java is Object Oriented. However it is not considered as pure object oriented as it provides support for primitive data types (like int, char, etc) The Java codes are first compiled into byte (machine independent code). Then the byte code is run on Java Virtual Machine (JVM) regardless of the underlying architecture.

```
</div>
</div>
<div class="thumbnail">
<img src= "laptop-icon-29.png" alt="laptop image">
</div>
</section>
<footer class="background">

Copyright @-All rights are reserved

</footer>
</body>
</html>
```

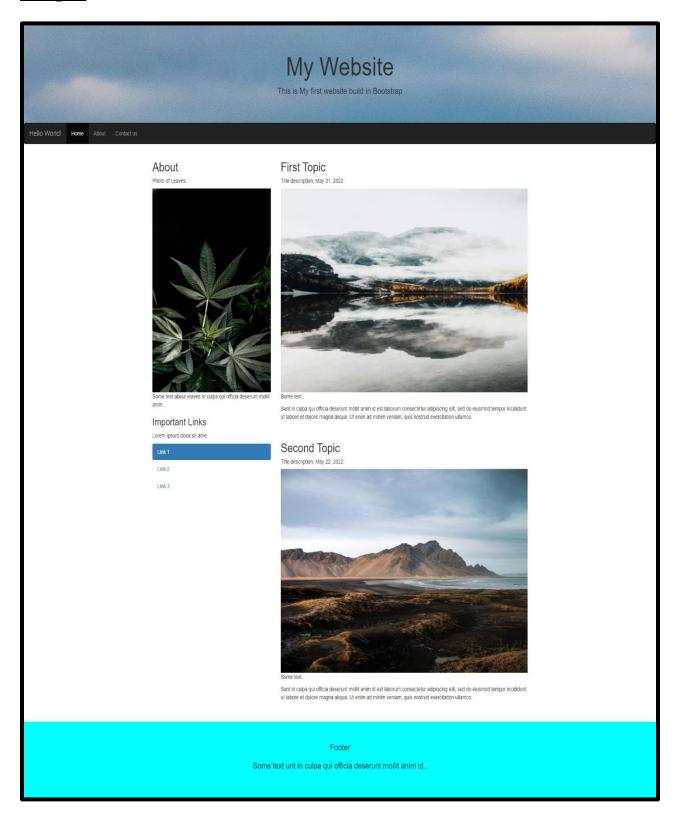


10 – Demonstrate the use of Bootstrap Framework.

Code -

```
<!DOCTYPE html>
<html lang="en">
<head>
 <title>Bootstrap Website</title>
 <meta charset="utf-8">
 <meta name="viewport" content="width=device-width, initial-scale=1">
 <link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
 <style>
 .fakeimg {
background-image: url("nadiia-ploshchenko-54nrlqy3zoI-unsplash.jpg");
 </style>
</head>
<body>
<div class="jumbotron text-center fakeimg" style="margin-bottom:0">
 <h1>My Website </h1>
 This is My first website build in Bootstrap
</div>
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#myNavbar">
    <span class="icon-bar"></span>
    <span class="icon-bar"></span>
    <span class="icon-bar"></span>
   </button>
   <a class="navbar-brand" href="#">Hello World!</a>
  <div class="collapse navbar-collapse" id="myNavbar">
   cli class="active"><a href="#">Home</a>
    <a href="#">About</a>
    <a href="#">Contact us</a>
   </div>
 </div>
```

```
</nav>
<div class="container">
 <div class="row">
  <div class="col-sm-4">
   <h2>About</h2>
   <h5>Photo of Leaves:</h5>
   <div class="" ><img src="2h-media-XVdFUMFqCF8-unsplash.jpg" height="500px"</pre>
width="100%"></div>
   Some text about leaves in culpa qui officia deserunt mollit anim..
   <h3>Important Links</h3>
   Lorem ipsum dolor sit ame.
   <a href="#">Link 1</a>
    <a href="#">Link 2</a>
    <a href="#">Link 3</a>
   <hr class="hidden-sm hidden-md hidden-lg">
  </div>
  <div class="col-sm-8">
   <h2>First Topic</h2>
   <h5>Title description, May 21, 2022</h5>
   <div class=""><img src="eberhard-grossgasteiger-xVLAN_0SX0s-unsplash.jpg"</pre>
height="500px" width="100%"></div>
   Some text..
   Sunt in culpa qui officia deserunt mollit anim id est laborum consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis
nostrud exercitation ullamco.
   <br>
   <h2>Second Topic</h2>
   <h5>Title description, May 22, 2022</h5>
   <div class=""><img src="parsa-mahmoudi-nfi-TXXzwjI-unsplash.jpg" height="500px"</pre>
width="100%"></div>
   Some text..
   Sunt in culpa qui officia deserunt mollit anim id est laborum consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis
nostrud exercitation ullamco.
  </div>
 </div>
</div>
<br>
<br>
<div class="jumbotron text-center" style="margin-bottom:0; background-color: aqua;">
 Footer
 Some text unt in culpa qui officia deserunt mollit anim id..
 </div>
</body>
```



11 – Setup of development server like XAMPP in Windows.

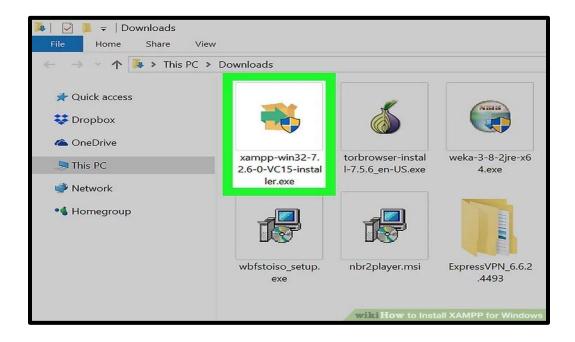
- → Steps to setup the development sever like XAMPP in windows:-
 - 1) Open the XAMPP website.Go to https://www.apachefriends.org/index.html in your computer's web browser.



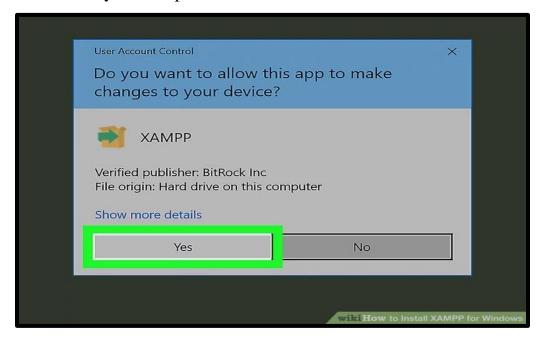
2) Click XAMPP for Windows. It's a grey button near the bottom of the page. Depending on your browser, you may first have to select a save location or verify the download.



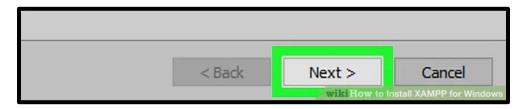
3) Double-click the downloaded file. This file should be named something like **xampp-win32-7.2.4-0-VC15-installer**, and you'll find it in the default downloads location (e.g., the "Downloads" folder or the desktop).



4) Click Yes when prompted. This will open the XAMPP setup window. You may have to click OK on a warning if you have User Account Control (UAC) activated on your computer.

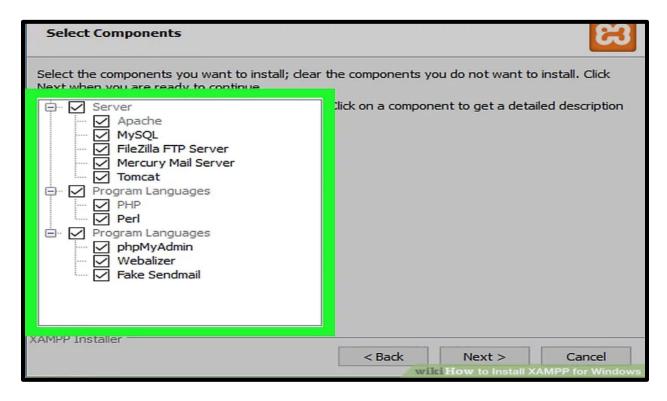


5) Click Next. It's at the bottom of the setup window.



6) Select aspects of XAMPP to install. Review the list of XAMPP attributes on the left side of the window; if you see an attribute that you don't want to install as part of XAMPP, uncheck its box.

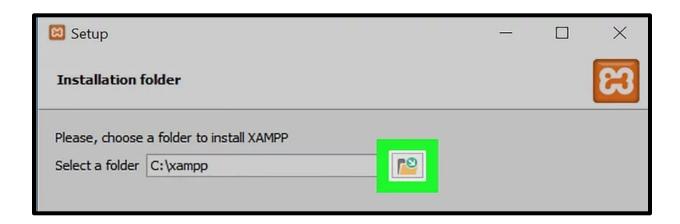
By default, all attributes are included in your XAMPP installation.



7) Click Next. It's at the bottom of the window.



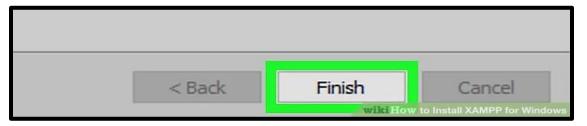
8) Select an installation location. Click the folder-shaped icon to the right of the current installation destination, then click a folder on your computer.



9) Begin installing XAMPP. Click Next at the bottom of the window to do so. XAMPP will begin installing its files into the folder that you selected.



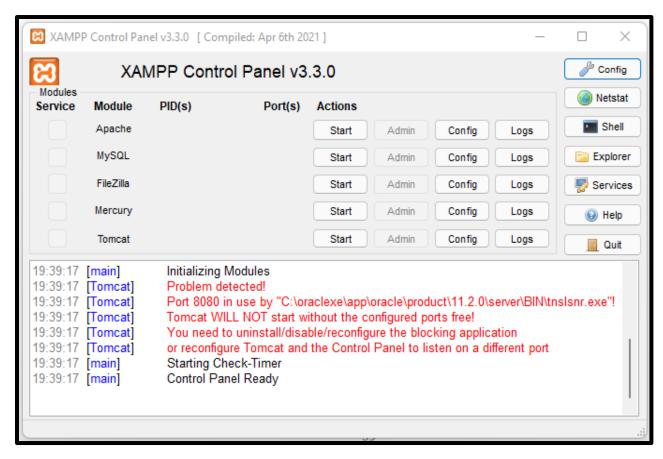
10) Click Finish when prompted. It's at the bottom of the XAMPP window. Doing so will close the window and open the XAMPP Control Panel, which is where you'll access your servers.



11) Select a language. Check the box next to the American flag for English, or check the box next to the German flag for German. Click Save. Doing so opens the main Control Panel page.



12) Start XAMPP from its installation point. If you need to open the XAMPP Control Panel in the future, you can do so by opening the folder in which you installed XAMPP, right-clicking the orange-and-white xampp-control icon, clicking Run as administrator, and clicking Yes when prompted.



12 – Creating web page using PHP.

> INDEX.PHP

```
Code -
<!DOCTYPE html>
<html>
 <head>
  <title>PHP page</title>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  k rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat">
  k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  <style>
  body, h1,h2,h3,h4,h5,h6 {font-family: "Montserrat", sans-serif}
  .w3-row-padding img {margin-bottom: 12px}
  .bgimg {
   background-position: center;
   background-repeat: no-repeat;
   background-size: cover;
   background-image: url('eberhard-grossgasteiger-xVLAN 0SX0s-unsplash.jpg');
   min-height: 100%;
  </style>
 </head>
<body>
<nav class="w3-sidebar w3-hide-medium w3-hide-small" style="width:40%">
 <div class="bgimg"></div>
</nav>
<!-- Page Content -->
<div class="w3-main w3-padding-large" style="margin-left:40%">
 <header class="w3-container w3-center" style="padding:128px 16px" id="home">
  <h1 class="w3-jumbo"><b>Contact Me</b></h1>
  This is my Php page fill details in this form and they will reflect in the next page.
  <img src="eberhard-grossgasteiger-xVLAN_0SX0s-unsplash.jpg" class="w3-image w3-</p>
hide-large w3-hide-small w3-round" style="display:block;width:60%;margin:auto;">
  <img src="eberhard-grossgasteiger-xVLAN_0SX0s-unsplash.jpg" class="w3-image w3-</pre>
hide-large w3-hide-medium w3-round" width="1000" height="1333">
 </header>
```

```
Lets get in touch. Send me a message:
  <form action="action.php" target="_blank" method = "post">
   <input class="w3-input w3-padding-16 w3-border" type="text" placeholder="Name"</p>
required name="Name">
   <input class="w3-input w3-padding-16 w3-border" type="text" placeholder="Email"</p>
required name="Email">
   <input class="w3-input w3-padding-16 w3-border" type="text" placeholder="Subject"</p>
required name="Subject">
   <input class="w3-input w3-padding-16 w3-border" type="text" placeholder="Message"</p>
required name="Message">
   >
    <button class="w3-button w3-black w3-padding-large" type="submit">
     <i class="fa fa-paper-plane"></i> SEND MESSAGE
    </button>
   </form>
 </div>
</div>
</body>
</html>
```

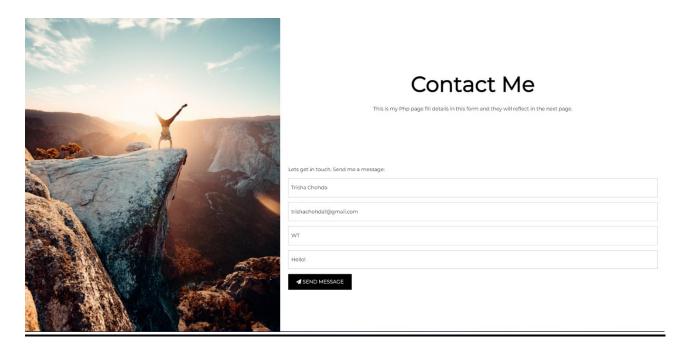
> ACTION.PHP

Code -

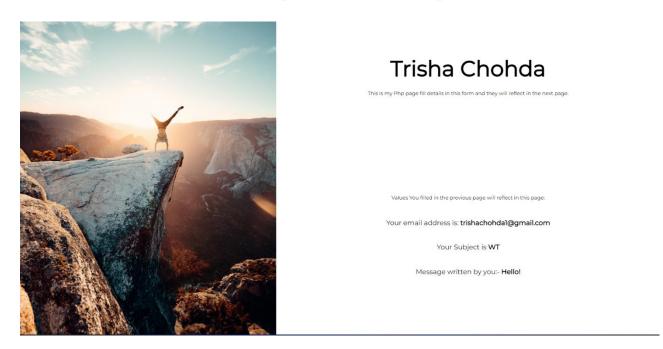
```
<!DOCTYPE html>
<html>
 <head>
  <title>PHP page</title>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  k rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">
  k rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat">
  k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  <style>
  body, h1,h2,h3,h4,h5,h6 {font-family: "Montserrat", sans-serif}
  .w3-row-padding img {margin-bottom: 12px}
  .bgimg {
   background-position: center;
   background-repeat: no-repeat;
   background-size: cover;
```

```
background-image: url('2h-media-XVdFUMFqCF8-unsplash.jpg');
   min-height: 100%;
  </style>
 </head>
<body>
<nav class="w3-sidebar w3-hide-medium w3-hide-small" style="width:40%">
 <div class="bgimg"></div>
</nav>
<!-- Page Content -->
<div class="w3-main w3-padding-large" style="margin-left:40%">
 <header class="w3-container w3-center" style="padding:128px 16px" id="home">
  <h1 class="w3-jumbo"><b><?php echo $ POST["Name"]; ?></b></h1>
  This is my Php page fill details in this form and they will reflect in the next page.
 </header>
 <div class="w3-container w3-center" style="padding:128px 16px">
  Values You filled in the previous page will reflect in this page:<br>
 <h4> Your email address is: <b><?php echo $_POST["Email"]; ?></b></h4><br>
 <h4> Your Subject is <b><?php echo $ POST["Subject"]; ?></b></h4><br>
 <h4> Message written by you:- <b><?php echo $_POST["Message"]; ?></b></h4><br>
 </div>
</div>
</body>
</html>
```

OUTPUT:-



On the **index.php** page the user fills the form with their information and click on the Send Message button which redirects the user to the **action.php** where the information filled by the user is displayed on the action page.



13 - Handling Database Queries with PHP.

> INDEX.PHP

Code -

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset+"UTF-8">
    <title>Admission Form
    </title>
    <link rel="stylesheet " href="style.css">
    </head>
    <body>
<div class="wrapper">
  <div class="title">
   Admission Form<br>
  </div>
  <div class="wrapper1">
    <div class="title1">
      Signup For GNDEC Annual Sports Meet 2022
    </div>
  </div>
  <form action="data.php" method="post">
  <div class="form" >
   <div class="inputfield">
     <label>First Name</label>
     <input type="text" name="first_name" class="input">
   </div>
    <div class="inputfield">
     <label>Email</label>
     <input type="text" name="email" class="input">
   </div>
   <div class="inputfield">
     <label>Password</label>
     <input type="password" name="password" class="input">
    </div>
   <div class="inputfield">
     <label>Phone Number</label>
     <input type="text" name="number" class="input">
```

```
</div>
   <div class="inputfield terms">
      <label class="check">
       <input type="checkbox">
       <span class="checkmark"></span>
      </label>
      I have verified my information and I acknowledge that I won't be able to change my
information later on by myself.
    </div>
   <div class="inputfield">
     <input type="submit" value="Signup" name="save" class="btn">
   </div>
  </div>
</div>
</form>
</body>
</html>
> INSERT.PHP
Code –
    <?php
   $first_name = $_POST['first_name'];
  $email = $_POST['email'];
  $password = $_POST['password'];
  $number = $_POST['number'];
   // Database connection
   $conn = new mysqli('localhost','root',",'database1');
   if($conn->connect error){
          echo "$conn->connect_error";
          die("Connection Failed : ". $conn->connect_error);
   } else {
          $stmt = $conn->prepare("insert into sports(first_name, email, password, number)
values(?, ?, ?, ?)");
          $stmt->bind param("sssi", $first name, $email, $password, $number);
          $execval = $stmt->execute();
          echo $execval;
          echo "Registration successfully...";
          $stmt->close();
          $conn->close();
```

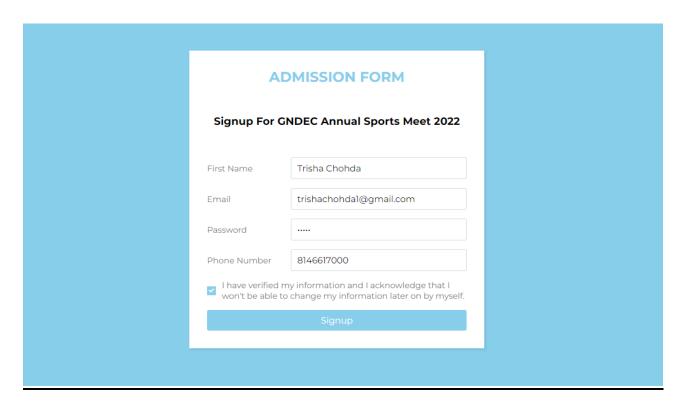
> ACTION.PHP

Code -

```
<!DOCTYPE html>
<html>
 <head>
  <title>PHP page</title>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  k rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">
  k rel="stylesheet" href="https://fonts.googleapis.com/css?family=Montserrat">
  k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  <style>
  body, h1,h2,h3,h4,h5,h6 {font-family: "Montserrat", sans-serif}
  </style>
 </head>
<body>
<?php
$servername = "localhost";
$username = "root";
password = "";
$dbname = "database1":
// Create connection
$conn = mysqli_connect($servername, $username, $password, $dbname);
// Check connection
if (!$conn) {
 die("Connection failed: " . mysqli_connect_error());
}
$sql = "SELECT first_name, email, password,number FROM sports";
$result = mysqli_query($conn, $sql);
if (mysqli num rows(\$result) > 0) {
 // output data of each row
 while($row = mysqli_fetch_assoc($result)) {
//
echo "<b>" . "first_name: " . $row["first_name"] . " - email: " . $row["email"] . " -password: " .
$row["password"] . " -number " . $row["number"] . "</b>" . "<br/>;
 }
}
else {
 echo "0 results";
```

```
}
mysqli_close($conn);
?>
</body>
</html>
```

OUTPUT:-



On the **index.php** page the user fills the form with their information and click on the Send Message button which redirects the user to the **insert.php** where the information filled by the user is stored in the database "web" in the "data" table and the output on the insert shows that the data is registered successfully and there is a send message button on that page which redirects you to the **action.php** which shows you the data in the database.

1Registration successfully	SEND MESSAGE
Titegistiation successiany	OLIND MILOUMOL

This is the output of the **insert.php** page and when you click on the Send Message button you will be redirected to the **action.php** which shows you the values stored in the database.

first_name: Trisha Chohda - email: trishachohda1@gmail.com -password: 23232 -number 8146617000 first_name: mehmeet kaur - email: mehmeetk@gmail.com -password: 23232 -number 9815877048

14 – Setup of CodeIgniter framework and to study its different components.

The source code for the <u>CodeIgniter Framework</u> is available on the official CodeIgniter website. If you want to download the latest version of the framework, then you should do it from the official web page.

Step 1) Download CodeIgniter Framework.

Open the following URL in your browser https://codeigniter.com/.

The image below shows the download link to the latest version of the framework



Step 2) Unzip CodeIgniter-4.1.4.zip file.

Clicking the above link will download the framework as a zipped folder and Unzip the contents of CodeIgniter-4.1.4.zip

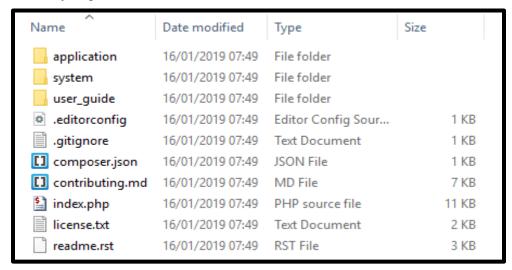
Step 3) Create a new directory.

Let's say you want to create a project called the online store. You can follow the following steps to start your project. Create a new directory on your development drive, e.g, D:\Sites\online-store

Step 4) Open the contents of CodeIgniter-4.1.4.

Now, you should be able to see the following files. Copy the above contents to your project

directory, e.g., D:\Sites\online-store



Step 5) Open the terminal and Run the following command.

Start the built-in PHP server, just to make sure everything is OK.

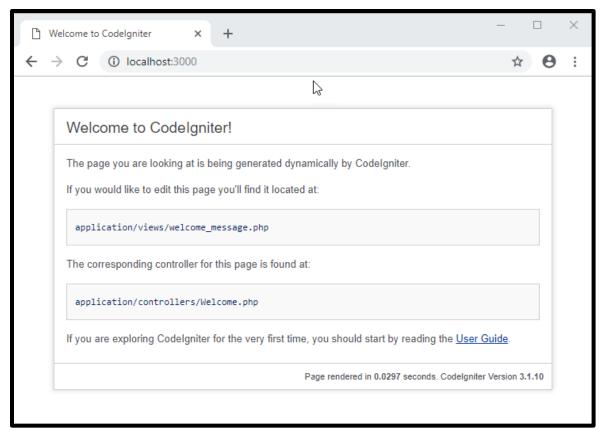
cd D:\Sites\ online-store

Run the following command

php -S localhost:3000

Step 6) Open the below URL.

Load the following URL into your browser. http://localhost:3000/

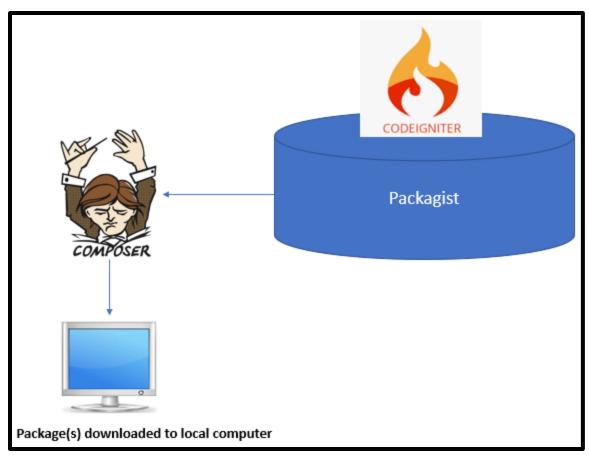


If you see above image, all is working well,

What is Composer in CodeIgniter?

The **Composer** in CodeIgniter is a package management system for PHP. A package is simply a collection of PHP scripts that work together towards a single goal. Based on this definition, CodeIgniter can even though it's a framework, qualifies to be labeled a package in composer terminologies.

The following image shows how the Composer works in CodeIgniter:



Composer in CodeIgniter

The author of CodeIgniter hosts the package at <u>Packagist</u> which is a central repository for PHP packages, etc.

When the developer runs the composer command to download CodeIgniter, Composer communicates with Packagist and downloads the latest release of the package. In addition to installing frameworks such as CodeIgniter, Composer can also be used to;

- Install individual packages such as third-party email or database library
- Update existing packages
- Remove installed packages

How to Download & Install Composer

Here are the steps to download & install Composer in CodeIgniter:

Step 1) Load the following URL in your browser https://getcomposer.org/download/

Download the setup and follow the installation instructions.

Step 2) Open the command prompt/terminal

Run the following command

composer

You will see the following results

```
Command Prompt
                                                                                                                                                 Microsoft Windows [Version 10.0.17134.112]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Users\Swan>composer
           version 1.8.0 2018-12-03 10:31:16
 command [options] [arguments]
                                          Display this help message
                                          Do not output any message
Display this application version
                                          Force ANSI output
                                         Disable ANSI output
                                  Do not ask any interactive question
Display timing and memory usage information
Whether to disable plugins.
        --working-dir=WORKING-DIR If specified, use the given directory as working directory.

//vvv, --verbose Increase the verbosity of messages: 1 for normal output, 2 for more verbose output an
 3 for debug
 vailable commands:
                            Shows the short information about Composer.
                    Creates an archive of this composer package.
                             Opens the package's repository URL or homepage in your browser.
  check-platform-regs Check that platform requirements are satisfied.
                            Clears composer's internal package cache.
Clears composer's internal package cache.
                             Sets config options.
```

If you can see the above results, then congratulations, you have successfully installed the composer.

Let's now create a new project called online-store

Run the following command

composer create-project CodeIgniter/framework online-store

HERE,

• composer create-project CodeIgniter/framework online-store composer invokes the composer program, create-project downloads the specified project framework which is in the namespace CodeIgniter.

You should be able to see results that is similar to the following

```
C:\Users\Swan\Desktop>composer create-project codeigniter/framework dope
Installing codeigniter/framework (3.1.10):
Installing codeigniter/framework (3.1.10):
Loading from cache
Created project in dope
Loading composer repositories with package information
Updating dependencies (including nequire-dev)
Package operations: 27 installs, 0 updates, 0 removals
Installing mikeyl70/ffstream (v1.1.0): Loading from cache
Installing symfony/polyfill-ctype (v1.10.0): Downloading (100%)
Installing symfony/yami (v4.2.2): Downloading (100%)
Installing symfony/yami (v4.2.2): Downloading (100%)
Installing sebastian/resource-operations (1.0.0): Downloading (100%)
Installing sebastian/resource-operations (1.0.0): Downloading (100%)
Installing sebastian/resource-operations (1.0.0): Downloading (100%)
Installing sebastian/plot-chemumerator (2.0.1): Downloading (100%)
Installing sebastian/object-enumerator (2.0.1): Downloading (100%)
Installing sebastian/exporter (2.0.0): Downloading (100%)
Installing sebastian/exporter (2.0.0): Downloading (100%)
Installing sebastian/comparator (1.2.4): Downloading (100%)
Installing sebastian/comparator (1.2.4): Downloading (100%)
Installing sebastian/comparator (1.2.4): Downloading (100%)
Installing phypunit/php-text-template (1.2.1): Downloading (100%)
Installing phypunit/php-text-template (1.2.1): Downloading (100%)
Installing phypunit/php-text-template (1.2.1): Downloading (100%)
Installing phypunit/php-text-emplate (1.2.2): Downloading (100%)
Installing phypunit/php-text-emplate (1.2.2): Downloading (100%)
Installing phypunit/php-text-emplate (1.2.2): Downloading (100%)
Installing phypunit/php-text-encemplate (1.2.3): Downloading (100%)
Installing phypunit/php-text-encemplate (1.2.4): Downloading (100%)
Installing phypunit/php-text-encemplate (1.2.4): Downloading (100%)
Installing phypunit/ph
```

If you are a big fan of commands on the terminal then this is the way to go otherwise you can use the good old fashioned download the zipped file, unzip and happy coding.

CodeIgniter Config Files

Now that we have successfully installed CodeIgniter let's look at the configuration directory. The configuration directory is located in application/config

Name	Date modified	Туре	Size
autoload.php	20/01/2019 16:12	PHP Source File	4 KB
config.php	20/01/2019 16:12	PHP Source File	19 KB
constants.php	20/01/2019 16:12	PHP Source File	5 KB
database.php	20/01/2019 16:12	PHP Source File	5 KB
doctypes.php	20/01/2019 16:12	PHP Source File	3 KB
foreign_chars.php	20/01/2019 16:12	PHP Source File	3 KB
hooks.php	20/01/2019 16:12	PHP Source File	1 KB
index.html	20/01/2019 16:12	Chrome HTML Document	1 KB
memcached.php	20/01/2019 16:12	PHP Source File	1 KB
migration.php	20/01/2019 16:12	PHP Source File	3 KB
mimes.php	20/01/2019 16:12	PHP Source File	10 KB
profiler.php	20/01/2019 16:12	PHP Source File	1 KB
routes.php	20/01/2019 16:12	PHP Source File	2 KB
smileys.php	20/01/2019 16:12	PHP Source File	4 KB
user_agents.php	20/01/2019 16:12	PHP Source File	7 KB

HERE,

- **autoload.php** specifies the helpers, libraries, drivers, packages, etc that should be loaded when the application starts
- **config.php** contains application configurations such as base url, language, query strings, etc.
- **constants.php** as the name suggests, this file I used to define application constants
- **database.php** contains database connection parameters
- **doctypes.php** defines document types i.e. html4, html5, sv10 etc
- **foreign_chars.php** defines foreign characters that are to say characters that are found in languages such as Russian and others
- **hooks.php** allows you to define your own hooks
- **memcached.php** if you are using CodeIgniter together with Memcached then you can use this file for configurations.
- **migration.php** if you want to use database migrations in CodeIgniter then you can use this file to config the settings.
- **mimes.php** contains file mime types
- **profile.php** contains settings that are used by the built-in CodeIgniter compiler
- **routes.php** contains the application routes

- **smileys.php** contains settings for smileys
- **user_agents.php** contains settings for browser user agents, i.e., Chrome, Opera, Firefox, etc.

CodeIgniter Configurations

Let's now make some of the most common settings in CodeIgniter:

Open application/config/config.php

Base URL

```
$config['base url'] = ";
```

Sets the base URL. If its blank then CodeIgniter will set it for you automatically. If you want to be explicit about your base URL, then you can use the something like the following

\$config['base_url'] = 'http://localhost:3000';

HERE,

• \$config['base_url'] = 'http://localhost:3000'; sets the base URL to localhost running on port 3000.

Class Prefix

CodeIgniter uses the prefix CI_Classname. As a best practice and to avoid collisions with internal classes, you can prefix your class, i.e., MY_Classname. The following line is used to set your class prefix

```
$config['subclass_prefix'] = 'MY_';
```

Query Strings

These are parameters that are visited in the URL, i.e., example.com/index.php?q=eggs. If you would like to use such URLs, then you will have to set

```
$config['enable_query_strings'] = FALSE;
```

To

\$config['enable_query_strings'] = TRUE;

Other settings

They are many settings that you can set in config.php including date formats, cache and view paths, etc. much of what you configure depends on your application needs

How to remove index.php in CodeIgniter

CodeIgniter is an MVC framework. This means it has a single entry point into the application which is index.php. It doesn't matter what URL you access. They all go through index.php. by default, index.php is shown in the URL as shown in the example below

```
example.com/index.php?q=eggs
```

The URL looks longer and weird. The good thing is you can configure CodeIgniter to remove that.

```
Open application/config/config.php
```

Locate the following line:

```
$config['index_page'] = 'index.php';
```

Set it to the following

```
$config['index_page'] = ";
```

HERE,

• We are using mod_rewrite to remove the page so as per requirement, this should be set to blank.

Next, we need to create the .htaccess that rewrites the URLs

Add a new file .htacces in the root directory of the application

Add the following code:

RewriteEngine on

RewriteCond \$1 !^(index\.php|resources|robots\.txt)

RewriteCond % {REQUEST_FILENAME} !-f

RewriteCond % {REQUEST_FILENAME} !-d

RewriteRule ^(.*)\$ index.php/\$1 [L,QSA]

HERE,

• The above code is for configuring web servers that run apache server. The above code basically gets the URI parameters and executes them via index.php even if it's not showing in the browser URL.