

Full Stack Web Development Lab Experiments Codes

1. Write code in HTML5 to develop simple webpage.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>My Personal website</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
</head>
<body>

<div class="jumbotron text-center">
  <h1>My(Write your Name) First Web Page</h1>
  <p>Your tagline </p>
</div>

<div class="container">
  <div class="row">
    <div class="col-sm-4">
      <h3>Column 1 (Add your content)</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 2 (Add your content)</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 3 (Add your content) </h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit...</p>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris...</p>
    </div>
  </div>
</div>
</body>
</html>
```

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2. Write CSS5 & HTML5 Code to show Dropdown Menu.

```
<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="#">WebSiteName</a>
    </div>
    <div class="collapse navbar-collapse" id="myNavbar">
      <ul class="nav navbar-nav">
        <li class="active"><a routerLink="/Home">Home</a></li>
        <li class="dropdown">
          <a class="dropdown-toggle" data-toggle="dropdown" href="#">Page 1 <span
class="caret"></span></a>
          <ul class="dropdown-menu">
            <li><a href="#">Page 1-1</a></li>
            <li><a href="#">Page 1-2</a></li>
            <li><a href="#">Page 1-3</a></li>
          </ul>
        </li>
        <li><a href="#">Page 2</a></li>
        <li><a routerLink="/About" >About</a></li>
      </ul>
      <ul class="nav navbar-nav navbar-right">
        <li><a href="#"><span class="glyphicon glyphicon-user"></span> Sign Up</a></li>
        <li><a href="#"><span class="glyphicon glyphicon-log-in"></span> Login</a></li>
      </ul>
    </div>
  </div>
</nav>
```

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3. Write HTML5, CSS and Javascript code to Create one-page website having different menu items.

- npm install -g @angular/cli
- ng new my-app
- cd my-app
- ng serve --open

Opens your browser to <http://localhost:4200/>

app.component.htm

```
<app-navbar></app-navbar>
<router-outlet></router-outlet>
```

home.component.html

```
<p>home works!</p>
<h1>Lorem ipsum, dolor sit amet consectetur adipisicing elit. Rerum, ad? Neque ducimus
repellendus enim veniam vel magnam perspiciatis fugit nesciunt?</h1>
<h2>Lorem ipsum dolor sit amet consectetur adipisicing elit. In, aperiam.</h2>
```

about.component.html

```
<h1>about works!</h1>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Consectetur ab natus aperiam, saepe
accusantium voluptas dolo</p>
```

app-routing.module.ts

```
const routes: Routes = [
  { path: 'Home', component: HomeComponent },
  { path: 'About', component: AboutComponent },
];
```

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4. Write a program in CSS to show your city with building and moving cars.

Index.html

```
<!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>Moving Cars</title>
  <link rel="stylesheet" href="/style.css">
</head>

<body>
  <div class="moon"></div>

  <div class="skyline">
    <div class="building1-shadow"></div>
    <div class="building1">

      <div class="building-left-half"></div>
      <div class="building-right-half"></div>
    </div>
  </div>
  <div class="road">
    <div class="road-top-half"></div>
    <div class="road-bottom-half"></div>
  </div>

  <div class="car-container">
    <div class="car-top1">
      <div class="window1"></div>
      <div class="window2"></div>

    </div>
    <div class="car-top2">
      <div class="door">
        <div class="door-knob"></div>
      </div>
    </div>
  </div>
```

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```
<div class="car-bottom">
  <div class="wheel1-top"></div>
  <div class="wheel1">
    <div class="wheel-dot1"></div>
    <div class="wheel-dot2"></div>
    <div class="wheel-dot3"></div>
    <div class="wheel-dot4"></div>

  </div>

  <div class="wheel2-top"></div>
  <div class="wheel2">
    <div class="wheel-dot1"></div>
    <div class="wheel-dot2"></div>
    <div class="wheel-dot3"></div>
    <div class="wheel-dot4"></div>
  </div>
</div>

</body>
</html>
```

Style.css

```
html {
  box-sizing: border-box;
}
*,
*:before,
*:after {
  box-sizing: inherit;
}
body {
  overflow: hidden;
  height: 100vh;
  background: linear-gradient(180deg, #09283d, #1b415c, #29516c, #6e8ea5, #7cadd0, #7cadd0, #7cadd0, #7cadd0, #6e8ea5, #3a6583, #1a4461, #09283d);
  background-size: 2400% 2400%;
```

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```
animation: dayNight 60s ease infinite;  
}
```

```
@keyframes dayNight {  
0% {background-position:25% 0% }  
50% {background-position:76% 100% }  
100% {background-position:25% 0% }  
}  
@keyframes driving {  
0% {  
    left: -25%;  
}  
10% {  
    bottom: 0%;  
}  
20% {  
    transform: scale(0.5) rotateZ(-5deg);  
    bottom: 5%  
}  
25% {  
    transform: scale(0.5) rotateZ(0deg);  
}  
40% {  
    transform: scale(0.5) rotateZ(5deg);  
}  
50% {  
    transform: scale(0.5) rotateZ(0deg);  
}  
100% {  
    left: 110%;  
    bottom: 10%;  
    transform: scale(0.5) rotateZ(0deg);  
}  
}  
@keyframes road-moving {  
100% {  
    transform: translate(-2400px);  
}  
}  
@keyframes wheelsRotation {  
100% {
```

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```
        transform: rotate(360deg);
    }
}
@keyframes moon {
50% {
transform: translateY(-20px);
}
100% {
transform: translate(80px, -140px);
}
}
@keyframes sun-moon {
from { transform: rotate(0deg); }
to { transform: rotate(360deg); }
}
/* CAR CONTAINER */

.car-container {
    position: absolute;
    bottom: -10%;
    width: 430px;
    height: 300px;
    animation: driving 5s infinite linear;
    transform: scale(0.5);
}
.car-container:after {
    content: "";
    width: 426px;
    height: 1px;
    margin-top: 88px;
    display: block;
    position: absolute;
    left: -3%;
    z-index: -1;
    bottom: 0;
    box-shadow: 2px -15px 25px 2px #000000;
}
/* WHEELS */

.wheel1,
.wheel2 {
```

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```
width: 120px;
height: 120px;
background-color: grey;
border-radius: 50%;
border: 20px solid black;
position: absolute;
bottom: 0;
animation: wheelsRotation 1s infinite linear;
}
.wheel1 {
  left: 5%;
}
.wheel1-top,
.wheel2-top {
  bottom: 48px;
  position: absolute;
  width: 106px;
  height: 80px;
  border-radius: 50%;
  z-index: 5;
  box-shadow: 0px 13px 3px 0px rgba(240, 240, 240, 0.53);
  transform: rotateX(180deg);
}
.wheel1-top {
  left: 7%;
}
.wheel2-top {
  right: 7%;
}
.wheel2 {
  right: 5%;
}
.wheel-dot1,
.wheel-dot2 {
  width: 10px;
  height: 25px;
  background-color: black;
  position: absolute;
}
.wheel-dot3,
.wheel-dot4 {
```


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```
width: 25px;
height: 10px;
background-color: black;
position: absolute;
}
.wheel-dot1 {
  top: 10%;
  left: 45%;
}
.wheel-dot2 {
  bottom: 10%;
  left: 45%;
}
.wheel-dot3 {
  top: 45%;
  right: 10%;
}
.wheel-dot4 {
  top: 45%;
  left: 10%;
}
.door {
  width: 110px;
  height: 100px;
  border: 3px solid #B57A84;
  position: absolute;
  left: 36%;
  top: 16px;
  border-radius: 10% 40% 10% 10%;
}
.door-knob {
  width: 30px;
  height: 14px;
  background-color: #E8E6E6;
  border-radius: 30%;
  position: absolute;
  left: 20%;
  top: 5%;
  border: 1px solid lightcoral;
}
.car-top1 {
```

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```
border-radius: 25% 40% 0 0;
background-color: #6A1621;
max-width: 100%;
width: 250px;
height: 130px;
position: absolute;
top: 0;
left: 4%;
}
.window1,
.window2 {
background-color: #E2F0F6;
border-radius: 5px;
position: absolute;
width: 40%;
height: 60%;
margin: 17px;
border: 9px solid #BF6D7B;
}
.window1 {
left: 0;
border-top-left-radius: 30%;
}
.window2 {
right: 0;
border-top-right-radius: 50%;
}
.car-top2 {
border-radius: 100px 200px 0 0;
background-color: #25659C;
/* border: 10px solid #72252F;
background-color: #9C2535;
max-width: 100%;
width: 430px;
height: 140px;
position: absolute;
bottom: 20%;
}
.road {
width: 250%;
height: 200px;
```

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```
background-color: #585858;
border-top: 10px solid #756D6D;
border-bottom: 20px solid #756D6D;
position: absolute;
bottom: 0%;
margin-left: -10px;
padding: 0;
}
.road::before {
  content: " ";
  position: absolute;
  z-index: 0;
  top: -17px;
  left: 0px;
  right: 0px;
  border: 5px solid black;
}
.road-top-half {
  height: 15px;
  width: 250%;
  position: absolute;
  left: -10%;
  top: 30px;
  border-top: 40px dashed white;
  margin-top: 25px;
  animation: road-moving 10s infinite linear;
  transition: all 3s linear;
}
.skyline {
  width: 100%;
  position: absolute;
  bottom: 205px;
  padding: 0;
  left: 110%;
  animation: road-moving 10s infinite linear;
  transition: all 8s linear;
}
.building1 {
  width: 220px;
  height: 450px;
  background-color: #211919;
```

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```
    position: relative;
}
.building1-shadow {
    border-top: 15px solid transparent;
    border-right: 60px solid rgb(44, 37, 37);
    border-bottom: 15px solid #000;
    border-left: 15px solid transparent;
    height: 450px;
    width: 200px;
    position: absolute;
    left: -199px;
}
.building-left-half,
.building-right-half {
    height: 300px;
    width: 50px;
    position: absolute;
    top: 10px;
    border-left: 16px dashed #A9D2C7;
    border-right: 16px dashed rgba(255, 255, 0, 0.19);
    margin-top: 25px;
}
.building-left-half {
    left: 10px;
    padding: 25px;
}
.building-right-half {
    right: 10px;
    padding: 20px;
}
.moon {
    height: 100px;
    width: 100px;
    border-radius: 50%;
    background: rgb(207, 207, 212);
    margin: auto;
    box-shadow: 0 0 60px gold, 0 0 100px rgb(185, 160, 24), inset 0 5px 12px 26px #F5F5F5,
inset -2px 8px 15px 36px #E6E6DB;
    transition: 1s;
    transition: 1s;
    right: 370px;
```

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```
top: 30px;
position: absolute;
animation: sun-moon 40s 2s linear infinite;
transform-origin: 50% 500px;
}
```

```
/*Headlights*/
.car-top1:after {
width: 13px;
height: 37px;
background-color: #BACCD A;
position: absolute;
bottom: -63px;
right: -168px;
z-index: 10;
content: " ";
border-radius: 10px;
border: 2px solid black;
border-left-style: none;
transform: rotate(-15deg);
}
```

```
.car-top2:after {
position: absolute;
bottom: 7px;
right: -340px;
content: " ";
width: 0;
height: 0;
border-top: 20px solid transparent;
border-bottom: 80px solid transparent;
border-right: 500px solid rgba(191,188,87,0.7);
z-index: -1;
-webkit-mask-box-image: -webkit-linear-gradient(left, black, transparent);
-webkit-mask-box-image: -o-linear-gradient(left, black, transparent);
-webkit-mask-box-image: linear-gradient(to right, black, transparent);
transform: rotate(-9deg);
}
```

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5. Write a program to validate web form using JavaScript.

Register.pug

```
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 Register
      style
        include ./my.css
    body
      div(class='container')
        include ./index.pug
        h1 Registration form
        ul(id="errors")
        Br
        form(action="/Register" method="post" align="center")
          label(for="username") username
          input(type="text" name="username")
          Br
          Br
          label(for="password") password
          input(type="password" name="password")
          Br
          label(for="cpassword") Confirm password
          input(type="password" name="cpassword")
          Br
          Br
          label(for="age") user age
          input(type="text" name="age")
          Br
          Br
          label(for="mobile") user mobile
          input(type="text" name="mobile")
          Br
          Br
```

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```
label(for="email") user email
input(type="text" name="email")
Br
Br
input(type="submit" name="Register" value="Register")
```

App.js

```
Const
express=require('express');
const bodyparser=require("body-parser")
const bcrypt=require("bcrypt");
const user=require('./models/user');
const mongoose = require('mongoose');
const expressValidator = require("express-validator");
const {check, validationResult} = require('express-validator/check')
const app = express();
const port = process.env.PORT || 80
mongoose.connect("mongodb://localhost:27017/user",{userNewUrlParser : true});
app.set('view engine', 'pug');
app.use(bodyparser.json());
app.use(bodyparser.urlencoded({extended:true}));
//handling get request
app.get('/',function(req,res){
res.render('index')
})

app.get('/Register',
function(req,res){

res.render('Register')
})
//handling post request
app.post('/Register',
[
check('username').not().isEmpty().isLength({ min:5 }).withMessage('User name must be 5 characters'),
check('password').not().isEmpty().isLength({ min:6 }).withMessage('Password name must be 6
characters'),
```

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```
check('age').not().isEmpty().isInt().withMessage('age must be integer'),
check('mobile').not().isEmpty().isInt().isLength({ min:10}).withMessage('mobile number must be
number and 10 characters'),
check('cpassword').custom((value,{req}) => (value === req.body.password)).withMessage("Confirm
password not match with your password"),
check('email').not().isEmpty().isEmail().normalizeEmail().withMessage("Enetr proper email"),
],
function(req,res){

    const errors= validationResult(req);
    if(!errors.isEmpty())
    {
        return res.status(422).jsonp(errors.array());
    }
    else{
        //console.log(req.body.username)
        const newUser=new user();
        newUser.username=req.body.username;

        var salt=bcrypt.genSaltSync(10);
        var hash=bcrypt.hashSync(req.body.password,salt);
        newUser.password=hash;
        newUser.age=req.body.age;
        newUser.mobile=req.body.mobile;
        newUser.save(function(err,result){
            if(err){
                console.log(err);
            }
            else{
                console.log(result);
                res.redirect("Login");
            }
        })

    }
})
```


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```
  })
```

```
app.listen(port,() => {console.log(`app is listening on http://localhost:${port}`)})
```

Model/users.js

```
const
mongoose=require('mongoose');

const Schema=mongoose.Schema;
const userSchema=new Schema(
  {
    username : {type:String},
    password : {type:String},
    age : {type:Number},
    mobile : {type:Number}
  }
);
module.exports=mongoose.model("user",userSchema);
```

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6. Write jquery code to show website slider.

Corousel.html

<!DOCTYPE

E 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>JS Slider</title>
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></scr
ipt>
</head>
<body>
  <div class="container">
    <div id="myCarousel" class="carousel slide">
      <ol class="carousel-indicators">
        <li class="item1 active"></li>
        <li class="item2"></li>
        <li class="item3"></li>
      </ol>
      <div class="carousel-inner" role="listbox">
        <div class="item active">
          

        </div>
        <div class="item">
          

        </div>
        <div class="item">
          

        </div>
      </div>
    </div>
  </div>
```

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```
</div>
<a class="left carousel-control" href="#myCarousel" role="button">
  <span class="glyphicon glyphicon-chevron-left" aria-
hidden="true"></span>
  <span class="sr-only">Prev</span>
</a>
<a class="right carousel-control" href="#myCarousel" role="button">
  <span class="glyphicon glyphicon-chevron-right" aria-
hidden="true"></span>
  <span class="sr-only">Next</span>
</a>
</div>
</div>
<script>
$(document).ready(function(){
  $("#myCarousel").carousel();
  $(".item1").click(function(){
    $("#myCarousel").carousel(0);
  })
  $(".item2").click(function(){
    $("#myCarousel").carousel(1);
  })
  $(".item3").click(function(){
    $("#myCarousel").carousel(2);
  })
  $(".left").click(function(){
    $("#myCarousel").carousel("prev");
  })
  $(".right").click(function(){
    $("#myCarousel").carousel("next");
  })
});
</script>
</body>
</html>
```

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7. Show version control in Github.

```
$ git config --global user.name "cmr"  
$ git config --global user.email cmr@example.com
```

Index.html

```
<h1>welcome to my web page</h1>
```

```
git init  
git add .  
git commit -m "Hello world"
```

Index.html

```
<h1>welcome to my web page</h1>  
<p>My first website</p>
```

```
git add .  
git commit -m "paragraph added"
```

```
git log  
git status
```

```
git branch -M main  
git remote add origin url  
git push -u origin main
```

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8. Write a program in JavaScript to create a user login system.

Login.pug

```
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 Login
      style
        include ./my.css
    body
      div(class='container')
        include ./index.pug
        h1 Login form
        br
        form(action="/Login" method="post" align="center")
          label(for="username") username
          input(type="text" name="username")
          br
          br
          label(for="password") password
          input(type="password" name="password")
          br
          br
          input(type="submit" name="Login" value="Login")
```

Style.css

```
h1{
  color:blue;
  text-align:center;
}
a:link,a:visited{
  background-color: brown;
  color:white;
  padding:14px 25px;
  text-align: center;
  text-decoration: none;
```

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```
    display: inline-block;
}
a:hover,a:active{
    background-color: chartreuse;
}
.header {
    padding: 10px;
    text-align: center;
    background: #1abc9c;
    color: white;
    font-size: 30px;
}
.container {
    border-radius: 5px;
    background-color: #f2f2f2;
    padding: 10px;
}
input{
    width: 20%;
    padding: 12px;
    border: 1px solid #ccc;
    margin-top: 6px;
    margin-bottom: 16px;
    resize: vertical;
}

input[type=submit] {
    background-color: #04AA6D;
    color: white;
    padding: 12px 20px;
    border: none;
    cursor: pointer;
}

input[type=submit]:hover {
    background-color: #45a049;
}
label{
    color: blue;
    font-size: 22px;
    padding: 8px;
```

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```
text-align:left;
}
```

App.js

Const

```
express=require('express')
');
```

```
const bodyparser=require("body-parser")
const bcrypt=require("bcrypt");
const user=require('./models/user');
const mongoose = require('mongoose');
const expressValidator = require("express-validator");
const { check, validationResult } = require('express-validator/check')
const app = express();
const port = process.env.PORT || 80
mongoose.connect("mongodb://localhost:27017/user",{ useNewUrlParser : true });
app.set('view engine', 'pug');
app.use(bodyparser.json());
app.use(bodyparser.urlencoded({extended:true}));
//handling get request
app.get('/',function(req,res){
res.render('index')
})
app.get('/Login',function(req,res){
res.render('Login')
})
//handling post request
app.post('/Login',function(req,res){

user.findOne({ username:req.body.username },function(err,docs){
if(err)
{
console.log(err)
}
else
```

Full Stack Web Development Lab Experiments Codes

```
    {
      if(docs.username==req.body.username)
      {
        bcrypt.compare(req.body.password,docs.password,function(err,data)
        {
          if(err)
          {
            console.log(err);
          }
          if(data)
          {
            console.log(data);
            res.send("Welcome");
          }
          else
          {
            res.send("invalid password");
          }
        });
      }
    }
  }
  else
  {
    //res.send("invalid username or password")
    res.redirect("Register");
  }
}
}))

}))
```

```
app.listen(port,() => { console.log(`app is listening on
http://localhost:${port}`)})
```

Models/user.js

```
Const
mongoose=require('mongoose');
const Schema=mongoose.Schema;
```


Full Stack Web Development Lab Experiments Codes

```
const userSchema=new Schema(  
  {  
    username : {type:String},  
    password : {type:String},  
    age : {type:Number},  
    mobile : {type:Number}  
  }  
);  
module.exports=mongoose.model("user",userSchema);
```

Full Stack Web Development Lab Experiments Codes

9. Create a website showing jquery slider.

```
<!DOCTYPE
E 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>JS Slider</title>
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></scr
ipt>
</head>
<body>
  <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="#">WebSiteName</a>
      </div>
      <div class="collapse navbar-collapse" id="myNavbar">
        <ul class="nav navbar-nav">
          <li class="active"><a routerLink="/Home">Home</a></li>
          <li class="dropdown">
            <a class="dropdown-toggle" data-toggle="dropdown" href="#">Page 1
            <span class="caret"></span></a>
            <ul class="dropdown-menu">
              <li><a href="#">Page 1-1</a></li>
              <li><a href="#">Page 1-2</a></li>
              <li><a href="#">Page 1-3</a></li>
            </ul>
          </li>
        </ul>
      </div>
    </div>
  </nav>
</body>
</html>
```

Full Stack Web Development Lab Experiments Codes

```
</li>
<li><a href="#">Page 2</a></li>
<li><a routerLink="/About" >About</a></li>
</ul>
<ul class="nav navbar-nav navbar-right">
  <li><a href="#"><span class="glyphicon glyphicon-user"></span> Sign
Up</a></li>
  <li><a href="login.html"><span class="glyphicon glyphicon-log-
in"></span> Login</a></li>
</ul>
</div>
</div>
</nav>
<div class="container">
  <div id="myCarousel" class="carousel slide">
    <ol class="carousel-indicators">
      <li class="item1 active"></li>
      <li class="item2"></li>
      <li class="item3"></li>
    </ol>
    <div class="carousel-inner" role="listbox">
      <div class="item active">
        

      </div>
      <div class="item">
        

      </div>
      <div class="item">
        

      </div>
    </div>
    <a class="left carousel-control" href="#myCarousel" role="button">
      <span class="glyphicon glyphicon-chevron-left" aria-
hidden="true"></span>
      <span class="sr-only">Prev</span>
    </a>
    <a class="right carousel-control" href="#myCarousel" role="button">
      <span class="glyphicon glyphicon-chevron-right" aria-
```

Full Stack Web Development Lab Experiments Codes

```
hidden="true"></span>
    <span class="sr-only">Next</span>
</a>
</div>
</div>
<script>
$(document).ready(function(){
    $("#myCarousel").carousel();
    $(".item1").click(function(){
        $("#myCarousel").carousel(0);
    })
    $(".item2").click(function(){
        $("#myCarousel").carousel(1);
    })
    $(".item3").click(function(){
        $("#myCarousel").carousel(2);
    })
    $(".left").click(function(){
        $("#myCarousel").carousel("prev");
    })
    $(".right").click(function(){
        $("#myCarousel").carousel("next");
    })
});
</script>
</body>
</html>
```

Full Stack Web Development Lab Experiments Codes

10. Write a program to show user details using HTML, CSS, & AJAX.

Ajax.pug

```
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 Login
    style
      include ./my.css
    script(src="http://code.jquery.com/jquery-3.1.0.min.js")
    script(src="/magic.js")
    include ./index.pug
  body
    div(class='container')
      form(method="post" id="change" align="center")
        input(type='text', placeholder='search user', name='name')
        input(type="submit", value="Search")
        br
        h1 User Details
        p !{name}
```

/public/magic.js

```
$(document).ready(function(){
  $("form#change").on('submit', function(e){
    e.preventDefault();
    var data = $('input[name=name]').val();
    $.ajax({
      type: 'post',
      url: '/ajax',
      data: data,
      dataType: 'text'
    })
    .done(function(data){
      $('h1').html(data.name);
    });
  });
});
```

Full Stack Web Development Lab Experiments Codes

App.js

```
const express = require('express');
const bodyparser=require("body-parser")
const bcrypt=require("bcrypt");
const user=require('./models/user');
const mongoose = require('mongoose');
const expressValidator = require("express-validator");
const {check, validationResult} = require('express-validator/check')

const app = express();
const port = process.env.PORT || 80
mongoose.connect("mongodb://localhost:27017/user",{useNewUrlParser : true});
app.set('view engine', 'pug');

app.use(bodyparser.json());
app.use(bodyparser.urlencoded({extended:true}));
app.get('/ajax', function(req, res){
    res.render('ajax', {title: 'An Ajax Search', name: "Search user!"});
});
app.post('/ajax', function(req, res){

    user.findOne({username:req.body.name},function(err,docs){
        if(err)
        {
            console.log(err)

        }
        else
        {
            res.render('ajax', {title: 'An Ajax search', name: "Name "+docs.username+", Age "+docs.age+", Mobile "+docs.mobile });
        }
    });

});

app.listen(port,() => {console.log(`app is listening on http://localhost:${port}`)}))
```

Full Stack Web Development Lab Experiments Codes

11. Write a program to display options in a search engine using Ajax.

Ajax.pug

```
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 Login
    style
      include ./my.css
    script(src="http://code.jquery.com/jquery-3.1.0.min.js")
    script(src="/magic.js")
    include ./index.pug
  body
    div(class='container')
      form(method="post" id="change" align="center")
        input(type='text', placeholder='search user', name='name')
        input(type="submit", value="Search")
        br
        a(href="") All
        a(href="") images
        a(href="") Latest
        a(href="") News
        h1 User Details
        p !{name}
```

/public/magic.js

```
$(document).ready(function(){
  $("form#change").on('submit', function(e){
    e.preventDefault();
    var data = $('input[name=name]').val();
    $.ajax({
      type: 'post',
      url: '/ajax',
      data: data,
      dataType: 'text'
    })
    .done(function(data){
      $('h1').html(data.name);
    });
  });
});
```

Full Stack Web Development Lab Experiments Codes

App.js

```
const express = require('express');
const bodyparser=require("body-parser")
const bcrypt=require("bcrypt");
const user=require('./models/user');
const mongoose = require('mongoose');
const expressValidator = require("express-validator");
const {check, validationResult} = require('express-validator/check')

const app = express();
const port = process.env.PORT || 80
mongoose.connect("mongodb://localhost:27017/user",{useNewUrlParser : true});
app.set('view engine', 'pug');

app.use(bodyparser.json());
app.use(bodyparser.urlencoded({extended:true}));
app.get('/ajax', function(req, res){
    res.render('ajax', {title: 'An Ajax Search', name: "Search user!"});
});
app.post('/ajax', function(req, res){

    user.findOne({username:req.body.name},function(err,docs){
        if(err)
        {
            console.log(err)

        }
        else
        {
            res.render('ajax', {title: 'An Ajax search', name: "Name "+docs.username+", Age "+docs.age+", Mobile "+docs.mobile });

        }
    });

});

app.listen(port,() => {console.log(`app is listening on http://localhost:${port}`)}))
```