DEVELOP AN ATTRACTIVE WEBPAGE USING BOOTSTRAP

AIM:

To develop an attractive webpage using bootstrap.

ALGORITHM:

1. START

2. Create an html file as profile.html

3. Load Bootstrap via CDN.

4. Host the bootstrap locally.

5. Add a Image to the webpage.

6. Include a page title and body text.

7. Add Progress bars for showing the percentage of skills known and add the

   icons of social media.

PROGRAM:

profile.html

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<link rel ="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
  <script
```

```
 src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js">
</script>
<style>
.card {
 box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
 max-width: 300px;
 margin: auto;
 text-align: center;
 font-family: arial;
}
.title {
 color: grey;
 font-size: 18px;
}
button {
 border: none;
 outline: 0;
 display: inline-block;
 padding: 8px;
 color: white;
 background-color: #000;
 text-align: center;
 cursor: pointer;
 width: 100%;
 font-size: 18px;
}
a {
 text-decoration: none;
 font-size: 22px;
 color: black;
}
button:hover, a:hover {
 opacity: 0.7;
}
</style>
</head>
<body>
<h2 style="text-align:center"> Profile </h2>
<div class="card">
 <img src="download.jpg" alt="John" style="width:100%">
 <h2>YASHWANT D B</h2>
 <p class="title">COMPUTER SCIENCE AND ENGINEERING</p>
 <p>RAJALAKSHMI ENGINEERING COLLEGE</p>
 <div style="margin: 24px 0;">
<div id ="exp">
        <h3 id ="skill"> SKILLS </h3>
        <h12></h12>
```

```html
        <p> <span>C programing </span></p>
         <div class="progress">
           <span>
           <div   class="progress-bar   progress-bar-striped"   style="width:90%">
90%</div>
           </span>
         </div>
        <p> python </p>
         <div class="progress">
<div class="progress-bar progress-bar-striped" style="width:80%">  80% </div>
         </div>
         <p> javascript  </p>
         <div class="progress">
          <div class="progress-bar progress-bar-striped" style="width:75%">  75%
</div>
         </div>
  <a href="#"><i class="fa fa-dribbble"></i></a>
  <a href="#"><i class="fa fa-twitter"></i></a>
  <a href="#"><i class="fa fa-linkedin"></i></a>
  <a href="#"><i class="fa fa-facebook"></i></a>
 </div>
 <p><button>Contact</button></p>
</div>
</body>
</html>
```

Result:
    Thus To develop an attractive webpage using bootstrap is created successfully.

Design a Web page with Navigation menu, Inline editor, Order form & Instant Search using Bootstrap

AIM:

   To Design a Web page with Navigation menu, Inline editor, Order form & Instant Search using Bootstrap.

ALGORITHM:

1. START

2. Create an html file as Input.html

3. Load Bootstrap via CDN.

4. Host the bootstrap locally.

5. Create a navbar with home,login page and instant search

6. Create a login form in login page

7. Go back to home page

8. Import summernote CDN for inline editor

9. Include more paragraphs about the particular webpage.

10. STOP.

Program:
Index.html:

```html
<!DOCTYPE html>
<html>
<head>
      <title>INTERNET PROGRAMMING</title>
 <link rel="stylesheet" href="style.css">
 <script src="ok.js"></script>
 <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js">
</script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js">
</script>
 <link
href="https://cdn.jsdelivr.net/npm/summernote@0.8.18/dist/summernote.min.css"
rel="stylesheet">
 <scrip src="https://cdn.jsdelivr.net/npm/summernote@0.8.18/dist/summernote.min.js">
</script>
 <script>
  $(document).ready(function() {
 $('#summernote').summernote();
});
 </script>
</head>
<body>

<nav class="navbar navbar-expand-md navbar-dark bg-dark">
 <a class="navbar-brand" href="#">INTERNET PROGRAMMING</a>

 <div class="collapse navbar-collapse" id="navbarSupportedContent">
  <ul class="navbar-nav mx-auto">
   <li class="nav-item active">
    <a class="nav-link" href="index.html">Home</a>
   </li>
   <li class="nav-item">
    <a class="nav-link" href="#">About</a>
   </li>
```

```html
   <li class="nav-item">
      <a class="nav-link" href="log.html">Login</a>
    </li>
  </ul>
  <form class="form-inline">
    <input class="form-control mr-sm-2" type="search" placeholder="Search" aria-label="Search">
    <button class="btn btn-light my-sm-0" type="submit">Search</button>
  </form>
 </div>
</nav>

<section class="kek">
 <div class="container">
  <br>
  <h1>WHAT IS INTERNET?</h1>
  <div id="summernote">
    <p>The Internet is a vast network of computers, and servers, which communicate
with each other. The internet connects the whole wide world together. The Internet is a
vast network that connects billions of computers and other electronic devices all around
the world. You can get nearly any information, communicate with anyone on the globe,
and do a lot more with the Internet. All of this is possible by connecting a computer to
the Internet, generally known as going online. When someone says a computer is online,
they are simply referring to the fact that it is linked to the Internet.</p>
  </div>
 </div>
</section>
</body>
</html>
```

Log.html:
```html
<!DOCTYPE html>
<html lang="en">
<head>
 <title>LOGIN</title>
 <meta charset="utf-8">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
 <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
 <script
```

```html
  src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
></script>
 <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js">
</script>
</head>
<body>
 <nav class="navbar navbar-expand-md navbar-dark bg-dark">
  <a class="navbar-brand" href="#">INTERNET PROGRAMMING</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent">
    <span class="navbar-toggler-icon"></span>
  </button>

  <div class="collapse navbar-collapse" id="navbarSupportedContent">
   <ul class="navbar-nav mx-auto">
    <li class="nav-item active">
     <a class="nav-link" href="bt.html">Home</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="#">About</a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="log.html">Login</a>
    </li>
   </ul>
   <form class="form-inline">
    <input class="form-control mr-sm-2" type="search" placeholder="Search"
aria-label="Search">
    <button class="btn btn-light my-sm-0" type="submit">Search</button>
   </form>
  </div>
 </nav>
<div class="container">
 <h2>LOGIN</h2>
 <form class="form-horizontal" action="/action_page.php">
```

```html
<div class="form-group">
    <label class="control-label col-sm-2" for="email">Email:</label>
    <div class="col-sm-10">
     <input type="email" class="form-control" id="email" placeholder="Enter email" name="email">
    </div>
  </div>
  <div class="form-group">
    <label class="control-label col-sm-2" for="pwd">Password:</label>
    <div class="col-sm-10">
     <input type="password" class="form-control" id="pwd" placeholder="Enter password" name="pwd">
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
     <div class="checkbox">
      <label><input type="checkbox" name="remember"> Remember me</label>
     </div>
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
     <button type="submit" class="btn btn-default">Submit</button>
    </div>
  </div>
 </form>
</div>

</body>
</html>
```

Result:

    Thus to Design a Web page with Navigation menu, Inline editor, Order form & Instant Search using Bootstrap is created successfully.

CREATE A WEBPAGE USING COMPONENT IN ANGULAR

Aim:

To create a webpage using component in angular.

Algorithm:

1. Start
2. Create the two components corona-img and corona-info for image and text.
3. Add the image path in corona-img-component.ts.
4. In corona-img-component.html add imagepath using img src tag.
5. Add the required text in paragraph tag in corona-info-component.html.
6. stop

Program:
app.component.html:

```
<div>
 <app-corona-img></app-corona-img>
 <app-corona-info></app-corona-info>
</div>
```

corona-img-component.html:

```
<img src="{{imagePath}}" alt="corona-virus-img" style="height: 500px; width: 600px;">
```

corona-img-component.ts:

```
import { Component, OnInit } from '@angular/core';
@Component({
 selector: 'app-corona-img',
```

```
templateUrl: './corona-img.component.html',
 styleUrls: ['./corona-img.component.css']
})
export class CoronaImgComponent implements OnInit {
constructor() { }
 ngOnInit(): void {
 }
 imagePath = "/assets/covid19.jpg";
}
```

corona-info-component.html:

```
<div style="margin-left: 700px; margin-top: -500px;">
   <h1>MINI COVID19 WIKI</h1>
   <p style="font-size: 20px;">
```
Coronaviruses are a group of related RNA viruses that cause diseases in mammals and birds. In humans and birds, they cause respiratory tract infections that can range from mild to lethal. Mild illnesses in humans include some cases of the common cold (which is also caused by other viruses, predominantly rhinoviruses), while more lethal varieties can cause SARS, MERS and COVID-19, which is causing the ongoing pandemic. In cows and pigs they cause diarrhea, while in mice they cause hepatitis and encephalomyelitis.Coronaviruses constitute the subfamily Orthocoronavirinae, in the family Coronaviridae, order Nidovirales and realm Riboviria.They are enveloped viruses with a positive-sense single-stranded RNA genome and a nucleocapsid of helical symmetry.The genome size of coronaviruses ranges from approximately 26 to 32 kilobases, one of the largest among RNA viruses.They have characteristic club-shaped spikes that project from their surface, which in electron micrographs create an image reminiscent of the stellar corona, from which their name derives.
```
</p>
  </div>
```

Result:

Thus to create a webpage using components in angular a simple has been created successfully.

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CREATE A WEBPAGE USING DATABINDING IN ANGULAR

Aim:
   To create a webpage using databinding in angular.

Algorithm:

1. Start
2. Import the form module in app.module.ts
3. Set data to some string in app.component.ts .
4. Input the data using text box by ngmodel and store them in data
5. Entered text should be displayed by printing data.
6. stop

Program:
app.component.html:

```
<input [(ngModel)]="data"  type="text">
 <hr>
<h3> Entered data is  {{data}}</h3>
```

app.component.ts:

```
import { Component } from '@angular/core';

@Component({
 selector: 'app-root',
 templateUrl: './app.component.html',
 styleUrls: ['./app.component.css']
})
export class AppComponent {
```

```
title = 'angular-check';
  data = "Ram and Syam";
}
```

app.module.ts:

```
import { BrowserModule } from '@angular/platform-browser';
import { NgModule } from '@angular/core';
import { FormsModule } from "@angular/forms";
import { AppRoutingModule } from './app-routing.module';
import { AppComponent } from './app.component';
import { ImageComponent } from './image/image.component';

@NgModule({
  declarations: [
    AppComponent,
    ImageComponent
  ],
  imports: [
    BrowserModule,
    AppRoutingModule,
    FormsModule
  ],
  providers: [],
  bootstrap: [AppComponent]
})
export class AppModule { }
```

Result:

   Thus to create a webpage using databinding in angular a simple has been created successfully.

CREATE A SIMPLE USER INTERFACE IN REACT

AIM :

To create a simple user interface in react.

PROCEDURE :

1. Start

2. Open command prompt.

3. Navigate to the react folder

4. Create a react app using npx create-react-app reactwebpage

5. Once the packages are installed run code. to open the app in vscode .

6. Create a folder called Signup and create brandname.js, signupform.js, signupbox.js and

    respective css files.

7. Import Signupbox in index.js and use Router, Routes and Route tag for routing.

8. Open a new terminal

9. Run the command npm run start.

10. Navigate the path in the browser which uses localhost:3000

11. Compile and save.

12. End

PROGRAM:
index.js :

```
import "./index.css";
import { App } from "./Signup/root";
import React from "react";
import { render } from "react-dom";
import Signupbox from "./Signup/Signupbox";
import { BrowserRouter as Router, Route, Routes } from "react-router-dom";
import { createBrowserHistory } from "history";

class Apps extends React.Component {
 render() {
  return (
   <Router history={createBrowserHistory()}>
    <Routes>
     <Route path={"/"} element={<App />} exact={true}></Route>
     <Route path={"/signup"} element={<Signupbox />}></Route>
    </Routes>
   </Router>
  );
 }
}

render(<Apps />, document.getElementById("root"));
```

root.js:

```
import React from "react";
import Signupbox from "./Signupbox";

export class App extends React.Component {
 render() {
  return (
   <div>
    <div>
     <Signupbox />
    </div>
   </div>
  );
 }
}
```

Brandname.js :

```
import { render, screen } from '@testing-library/react';
import App from './App';
test('renders learn react link', () => {
 render(<App />);
 const linkElement = screen.getByText(/learn react/i);
 expect(linkElement).toBeInTheDocument();
});
```

Brandname.css:

```
@import url("https://fonts.googleapis.com/css2?family=Major+Mono+Display&display=swap");

@media all and (max-width: 484px) {
 .logo {
  margin-top: 5%;
  text-align: center;
  font-family: "Major Mono Display", monospace;
  font-size: 200%;
  font-weight: lighter;
  text-align: center;
  color: #e1e9ee;
 }
}

@media all and (min-width: 484px) {
 .logo h1 {
  text-align: center;
  font-family: "Major Mono Display", monospace;
  font-size: 650%;
  font-weight: lighter;
  text-align: center;
  color: #e1e9ee;
 }
}
```

Signupbox.js:

```
import "./Signupbox.css";
import Signupform from "./Signupform";
import Brandname from "./Brandname";
import bg from "../bg blue.png";

function Signupbox() {
 document.body.style.backgroundImage = `url('${bg}')`;
 return (
  <div className="bname">
   <div className="brand">
    <Brandname></Brandname>
   </div>
   <div className="out">
    <div className="outline">
     <div className="sign">
      <h2>Create an account</h2>
  </div>
     <Signupform></Signupform>
    </div>
   </div>
  </div>
 );
```

```
    }

    export default Signupbox;
```

Signupbox.css:

```css
@media all and (max-width: 484px) {
 .brand {
   margin-top: 15%;
   color: #f4f4ff;
 }
 .outline {
   background-color: #e1e9ee;
   margin-top: 15%;
   height: 100%;
   padding-top: 3%;
 }

 .sign {
   padding-top: 4%;
   padding-bottom: 4%;
   color: #0873c9;
   text-align: left;
   margin-left: 9%;
 }
}

@media all and (min-width: 484px) {
 .brand {
   align-items: center;
 }
 .out {
   position: relative;
   width: 460px;
   height: 460px;
   margin: 5% auto 0 auto;
 }
 .outline {
   position: absolute;
   left: 0px;
   top: 0px;
   bottom: 0px;
   right: 0px;
   width: 458px;
   height: 445px;
   background-color: #e1e9ee;
   border: 2px solid #6ebebd;
   border-radius: 8px;
   padding-top: 3%;
}

 .sign {
   padding-top: 4%;
   padding-bottom: 4%;
   color: #0873c9;
   text-align: center;
 }
}
```

```
Signupform.js:
import React, { useState } from "react";
import { Link } from "react-router-dom";
import "./Signupform.css";

function Signupform() {
  const [usermail, setUsermail] = useState("");
  const [user, setUser] = useState("");
  const [passwordType, setPasswordType] = useState("password");
  const [passwordInput, setPasswordInput] = useState("");

  const mailChangeHandler = (event) => {
    setUsermail(() => event.target.value);
  };

  const userChangeHandler = (event) => {
    setUser(() => event.target.value);
  };

  const handlePasswordChange =(evnt)=>{
    setPasswordInput(() => evnt.target.value);
  }
  const togglePassword =()=>{
   if(passwordType==="password")
   {
    setPasswordType("text")
    return;
   }
   setPasswordType("password")
  }

  const submitChangeHandler = (event) => {

    event.preventDefault();

    const email = usermail;
    const username = user;
    const password = passwordInput;


    alert(email + "\n" + username + "\n" + password +"\nSuccessfully Account Created");
  };

 return (


<div className="form">
    <form onSubmit={submitChangeHandler}>
     <div className="mail">
      <label>EMAIL</label>
      <input
       id="email-inp"
       name="email"
       type="email"
       value={usermail}
       onChange={mailChangeHandler}
      ></input>
     </div>
     <div className="user">
      <label>USERNAME</label>
```

```jsx
      <input id="user-inp" type="text" value={user} onChange={userChangeHandler}
name="username"></input>
    </div>
    <div className="password">
     <label>PASSWORD</label>
      <input type={passwordType} onChange={handlePasswordChange} value={passwordInput}
name="password" />
     <div className="input-group-btn">
       <button type="button" className="btn btn-outline-primary" onClick={togglePassword}>{
passwordType==="password"? <i className="bi bi-eye-slash"></i> :<i className="bi bi-eye"></i>
}</button>
     </div>
    </div>
    <div className="submit">
     <button type="submit">Submit</button>
    </div>
    <div className="login">
     <Link
      to={"/login"}
      style={{ textDecoration: "none", color: "#0873c9" }}
     >
      Already have an account?
     </Link>
    </div>
   </form>
  </div>
 );
}

export default Signupform;
```

RESULT :

   Thus the simple user interface using react has been successfully created.

CREATE A WEB PAGE TO EMBED A MAP ALONG WITH HOT SPOT, FRAMES AND LINKS

AIM:

To create a webpage to embed a map along with hotspot, frames and links.

PROCEDURE:

1. Create a html document file named mapping.html.

2. Inside the body tag create one an element and one image element and a map tag

3. Insert an area tag and link all the other html files 'map1.html', 'map2.html', 'map3.html', 'map4.html', 'map5.html', 'map6.html', 'map7.html' using hyperlink

4. Inside the body tag of the map1.html file create p element with a hyperlink along with an image source tag.

5. Inside the body tag of the map2.html file create p element with a hyperlink along with an image source tag.

6. Inside the body tag of the map3.html file create p element with a hyperlink along with an image source tag.

7. Create a html document file named frames.html

8. Link all the html files 'map1.html', 'map2.html', 'map3.html' using frameset element and set the column parameters equally and link all the files using frame source tag.

9. Save all the files and run the mapping.html.

mapping.html:

```
<html>
<head>
<title>India Map</title>
<head>
<body bgcolor="PINK">
<font face="Monotype Corsiva" color="BLUE" size="6">
<marquee direction="left" behavior="alternate">INDIA MAP
</marquee>
</font>
<hr size="6" color="RED">
<map name="pagemap">
<area shape="rect" title="Delhi" coords="384,272,388,269" href="frame.html">
<area shape="rect" title="kolkata" coords="652,428,647,411" href="map2.html">
<area shape="rect" title="Mumbai" coords="275,525,280,521" href="map3.html">
<area shape="rect" title="Chennai" coords="441,713,447,700" href="map7.html">
</map>
<img src="C:\Users\yashw\Desktop\webpage\indiamap.jpg" usemap="#pagemap">
</body>
<font color="#ff0000" size="5">
<p><b>Hints:</b><i>Click on the Name of the Cities in the map to know its
description</i></p>
</html>
```

map1.html:

```
<html>
<body bgcolor="SKYBLUE">
<font face="Monotype Corsiva" size="18" color="RED">
<center><b><i><tt>Delhi is the capital of our INDIA<br> and <br>More IT companies are
Camped at Delhi</tt></i></b></center>
<a href="mapping.html">Home Page</a>
</font>
</body>
</html>
```

map2.html:

```html
<html>
<body bgcolor="SKYBLUE">
<font face="Times New Roman" size="18" color="RED">
<center><b><i>Calcutta is the wealthy city in WEST BENGAL<br> and <br>it has Famous
"Sunderbans Forests"</i></b></center>
<a href="mapping.html">Home Page</a>
</font></body></html>
```

map3.html:

```html
<html>
<body bgcolor="DARKGREEN">
<font face="Times New Roman" size="12" color="RED">
<center>MUMBAI is the capital of Maharashtra<br> and <br>it has Famous India
Gate</center>
<a href="mapping.html">Home Page</a>
</font>
</body>
</html>
```

map4.html

```html
<html>
<body bgcolor="BLACK">
<font face="Times New Roman" size="12" color="RED">
<center>Chennai is hte capital of Tamil Nadu<br> and <br>More IT companies are camped at
Chennai</center>
<a href="mapping.html">Home Page</a>
</font>
</body>
</html>
```

map5.html:

```html
<html>
<head>
  <style>
    div{
               background-color: #7fffd4;
      height: 1000px;
      }
  </style>
</head>
```

```html
<body>
  <div>
    <h2>Delhi is the home to the largest market of spices in Asia</h2>
  </div>
 </body>
</html>
```

map6.html:

```html
<!DOCTYPE html>
<html>
<head>
  <style>
    div{
    background-color: #c1ffc1;
    height: 1000px;
            }
  </style>
</head>
<body>
        <div>
    <h1>chennai is famous for its beach</h1>
  </div>
 </body>
</html>
```

map7.html:

```html
<html>
<head>
  <title>Frame tag</title>
</head>
 <frameset cols="50%,50%">
  <frame src="map4.html" >
  <frame src="map6.html">
 </frameset>
</html>
```

RESULT:

Thus, the creation of a webpage to embed a map along with hotspot, frames and links has been successfully completed.

CREATE A WEB PAGE USING AN EMBEDDED, EXTERNAL AND INLINE CSS FILE

AIM:

To create a web page using embedded, inline and external CSS.

PROCEDURE:

1. Create an html document file CSSMain.html to link all the html files.

2. Insert a frameset element and set the rows and column parameters

3. Add a frame src element to insert the left and right CSS file frames and close the frameset tag.

4. Create CSSTop.html, CSSRight.html and CSSLeft.html files.

5. In the CSSRight.html insert a <b> element to provide heading for the starting page in the right.

6. Add an element tag and insert on the webpage topics with the web content fields in CSSLeft.html

7. Add the webpage source image using img element and frameset element using inline css and frames.

8. Create CSSIntro.html , CSSFaculty.html, CSSLab.html, CSSOppor.html, CSSNews.html files and link the html files in the CSSLeft.html files and add CSS for these using styles tag.

9. Insert p element tag and add a few contents about the introduction of the college in the webpage.

10. Add p element tag and add a few contents about the News and achievement details in the CSSNews.html.

11. In the CSSOppor.html add p element tag and add a few contents about the job opportunities of the college in the webpage.

12. Insert p element tag and add a few contents about the Lab facilities and extra facilities available in the CSSLab.html.

13. Insert table element tag tr th element and add content about the of the faculties in a tabular format.

14. Finally link all the html document files to the CSSMain.html

15. Save and run the CSSMain.html

CSSMain.html :

```html
<!DOCTYPE html>
<html lang="en">
<head>
 <title>CSS</title>
</head>
<frameset rows="175,*" frameborder="10" framespacing="20">
 <frame src="CSSTop.html" name="top" scrolling="no" />
 <frameset cols="175, *">
 <frame src="CSSLeft.html" name="left" />
 <frame src="CSSRight.html" name="right"/>
 </frameset>
</frameset>
</html>
```

CSSTop.html:

```html
<!DOCTYPE html>
<html lang="en">
<head>
</head>
<body align="center">
 <img src="topbanner.jpg"  />
 <!-- inline css -->
 <p style="font-size:13pt; color:#0000ff; ">
 Rajalakshmi Nagar, Thandalam, Chennai - 602 105
 </p>
</body>
</html>
```

CSSLeft.html:

```html
<!DOCTYPE html>
<html lang="en">
<head>
 <style type="text/css">
 body {
 background-color: #336699
 }
 a {
 text-decoration: none;
 }
 a:hover {
 text-decoration: underline;
 background-color: yellow
 }
 </style>
</head>
<body>
```

```
 <b>CSE</b>
 <br /><br />
 <a href="CSSIntro.html" target="right">Introduction</a>
 <br /><br />
 <a href="CSSOppor.html" target="right">Opportunities</a>
 <br /><br />
 <a href="CSSFaculty.html" target="right">Faculty Members</a>
 <br /><br />
 <a href="CSSLab.html" target="right">Lab Facility</a>
 <br /><br />
 <a href="CSSNews.html" target="right">News</a>
 </body>
 </html>
```

CSSRight.html:
```
<!DOCTYPE html>
<html lang="en">
<head>
</head>
<body>
 <b>Welcome to the Department of CSE - Home Page</b>
</body>
</html>
```

CSSIntro.html:
```
<!DOCTYPE html>
<html lang="en">
<head>
 <link rel="stylesheet" type="text/css" href="styles.css" />
</head>
<body>
 <b class="special">INTRODUCTION</b>
 <br /><br />
 <b>Vision</b>
<p align="justify">
 To promote highly Ethical and Innovative Computer Professionals through
 excellence in teaching, training and research.
 </p>
<b>Mission</b>
<p align="justify">
 To produce globally competent professionals, motivated to learn the
emerging technologies and to be innovative
in solving real world problems.
 </p>
<p align="justify">
 To promote research activities amongst the students and the members of
faculty that could benefit the society.
 </p>
<p align="justify">
 To impart moral and ethical values in their profession.
 </p>
</body>
</html>
```

CSSOppor.html:
```html
<!DOCTYPE html>
<html lang="en">
<head>
 <link rel="stylesheet" type="text/css" href="styles.css" />
</head>
<style>
body
{
background-image:url("oppu.jpg")
}
</style>
<body>
 <b class="special">OPPURTUNITIES</b>
 <br /><br />
<p align="justify">
 This course provides a comprehensive view of the world of Information Technology
 including Internet Applications and design,besides the traditional opportunities in computer career.
 </p>
<p align="justify">
Web applications require enormous knowledge of several components like Web servers,
 Web Protocols and to use the Web Application tools besides OOPS concept.
 </p>
<p align="justify">
 The information technologist has greater opportunities in Software Development \
because of their excellent knowledge of Web Technology.
 </p>
<p align="justify">
 The department of information technology was started with the aim of catering to the needs for quality
IT professionals in the nations march towards digital age.
</body>
</html>
```

CSSFaculty.html:

```html
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border:1px solid black;
 border-collapse: collapse;
}

th, td {
 text-align: left;
 padding: 8px;
}

</style>
</head>
<body>

<h2>FACULTY MEMBERS</h2>
<table style="width:50%">
 <tr>
   <th>S.NO</th>
```

```html
  <th>FACULTY</th>
 </tr>
 <tr>
  <td>1</td>
  <td>Maria Anders</td>
 </tr>
 <tr>
  <td>2</td>
  <td>Rolex</td>
 </tr>
 <tr>
  <td>3</td>
  <td>vignesh</td>
 </tr>
 <tr>
  <td>4</td>
  <td>Vikram</td>
 </tr>

</table>
</body>
</html>
```

CSSLab.html:

```html
<!DOCTYPE html>
<html>
<body>
<h1>LOGIN</h1>
<form >
 <label for="fname">First name:</label>
 <input type="text" id="fname" name="fname"><br><br>
 <label for="lname">Last name:</label>
 <input type="text" id="lname" name="lname"><br><br>
 <input type="submit" value="Submit">
</form>
<p>Click the "Submit" button</p>
</body>
</html>
```

CSSNews.html:
```html
<!DOCTYPE html>
<html>
<body>
<li>
<strong>INTERNATIONAL CONFERENCE</strong>
<p>
The International Conference on Energy, Smart Structure and Manufacturing - ICESSM2022 jointly
organized by the Departments of Mechanical, Mechatronics, Automobile, Aeronautical, Robotics &
Automation, and Civil
Engineering of Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai - 602 105.
</li>
<li>
<strong>REOPENING - 27.07.2022
</strong>
```

```
</li>
<p>
Dear Students,<br>
 The college reopens for I year B.E./B.Tech. students  27.07.2022. Classes will be held in REGULAR mode
<br>
Transport arrangements will be made accordingly and day scholars are instructed to visit
www.rectransport.com for more details.
</p>
<li>
<strong>NATIONAL LEVEL TECHNICAL SYMPOSIUM</strong>
<p>
INGENIOUS 2K21, A National Level Technical Symposium organized by the Department of Mechanical
Engineering will be held on 27th November 2022.
</li>
</body>
</html>
```

RESULT:
    Thus, the webpage using embedded, inline and external CSS have been successfully created.

CREATE AN ONLINE JOB REGISTRATION PAGE ALONG WITH JAVA SCRIPT VALIDATIONS

AIM:

To create an online job registration page along with JavaScript validations.

PROCEDURE:

1. Create a document forms.html

2. Open a script tag inside which write a function vform.

3. Declare the parameters that are required for the form inside the vform function.

4. Check whether all the field is full and close the script tag.

5. Open a body tag, inside which again open a form tag and give all the details required.

6. Label the form and input the text fields

7. Create two buttons and link with the JavaScript, one button for refreshing and one button for submission of the form.

Forms.html:

```html
<!DOCTYPE html>

<html>

<head>

<style>

p{

font-size: 14px;

}

</style>

<script>

function vform(){

let x = document.forms["myForm"]["fname"].value;

let y = document.forms["myForm"]["lname"].value;

let z = document.forms["myForm"]["adddr"].value;

let a = document.forms["myForm"]["city"].value;

let b = document.forms["myForm"]["state"].value;

let c = document.forms["myForm"]["cnty"].value;

let d = document.forms["myForm"]["pcode"].value;

let e = document.forms["myForm"]["uname"].value;

let f = document.forms["myForm"]["pwd"].value;

var regularExpression  = /^(?=.*\d)(?=.*[!@#$%^&*])(?=.*[a-z])(?=.*[A-Z]).{8,16}$/;

if(x=="")

{

document.getElementById("demo").innerHTML="*First Name missing...please enter your valid first

name";

}

if(y=="")

{

document.getElementById("helo").innerHTML="*Last Name missing...please enter your valid last name";
```

```javascript
}
if(z=="")
{
document.getElementById("hhh").innerHTML="*Address missing...please enter a valid address";
}
if(a=="")
{
document.getElementById("aaa").innerHTML="*City name missing";
}
if(b=="")
{
document.getElementById("bbb").innerHTML="*State name missing";
}
if(c=="")
{
document.getElementById("ccc").innerHTML="*Country not valid";
}
if(d=="")
{
document.getElementById("ddd").innerHTML="*Invalid pincode";
}
if(e=="")
{
document.getElementById("eee").innerHTML="*Enter your valid username to proceed for form
validation and job registration";
}
if(f=="")
{
```

```
document.getElementById("fff").innerHTML="*Please enter valid password to procced for the form validation and for job registration";
}
if(f!="")
{
if(!regularExpression.test(f))
{
document.getElementById("jjj").innerHTML="*The password does not satisfy the given criteria...it must contain minimum of 8 characters and maximum of 16 characters with atleast one uppercase and one lowercase character and atleast one number and one special character";
}
}
if(x!="" && y!="" && z!="" && a!="" && b!="" && c!="" && d!=""&& e!="" && f!="" &&
regularExpression.test(f) )
{
document.getElementById("lll").innerHTML="All your details have been successfully validated and your details have been register successfully for the job!";
}
}
function refreshing()
{
location.reload();
}
</script>
</head>
<body>
```

```html
<h1>ONLINE JOB REGISTRATION FORM </h1>

<form name="myForm" method="post">

First Name :

<input type="text" name="fname"><br>

<p style="color:red;" id="demo"></p>

Last Name :

<input type="text" name="lname"><br>

<p style="color:red;" id="helo"></p>

Address :

<input type="text" name="adddr"><br>

<p style="color:red;" id="hhh"></p>

City :

<input type="text" name="city"><br>

<p style="color:red;" id="aaa"></p>

State :

<input type="text" name="state"><br>

<p style="color:red;" id="bbb"></p>

Country :

<input type="text" name="cnty"><br>

<p style="color:red;" id="ccc"></p>

Pincode :

<input type="number" name="pcode"><br>

<p style="color:red;" id="ddd"></p>

User Name :

<input type="text" name="uname"><br>

<p style="color:red;" id="eee"></p>

Password :

<input type="password" name="pwd"><br>

<p style="color:red;" id="fff"></p>
```

```html
<p style="color:red;" id="jjj"></p>

<p style="color:green;" id="lll"></p>

<button type="button" onclick="vform()">Register user</button>

<button type="reset" onclick="refreshing()">Reset</button><br><br>

</form>

</body>

</html>
```

RESULT:

      Thus, the online job registration page along with JavaScript validations has been created

successfully.

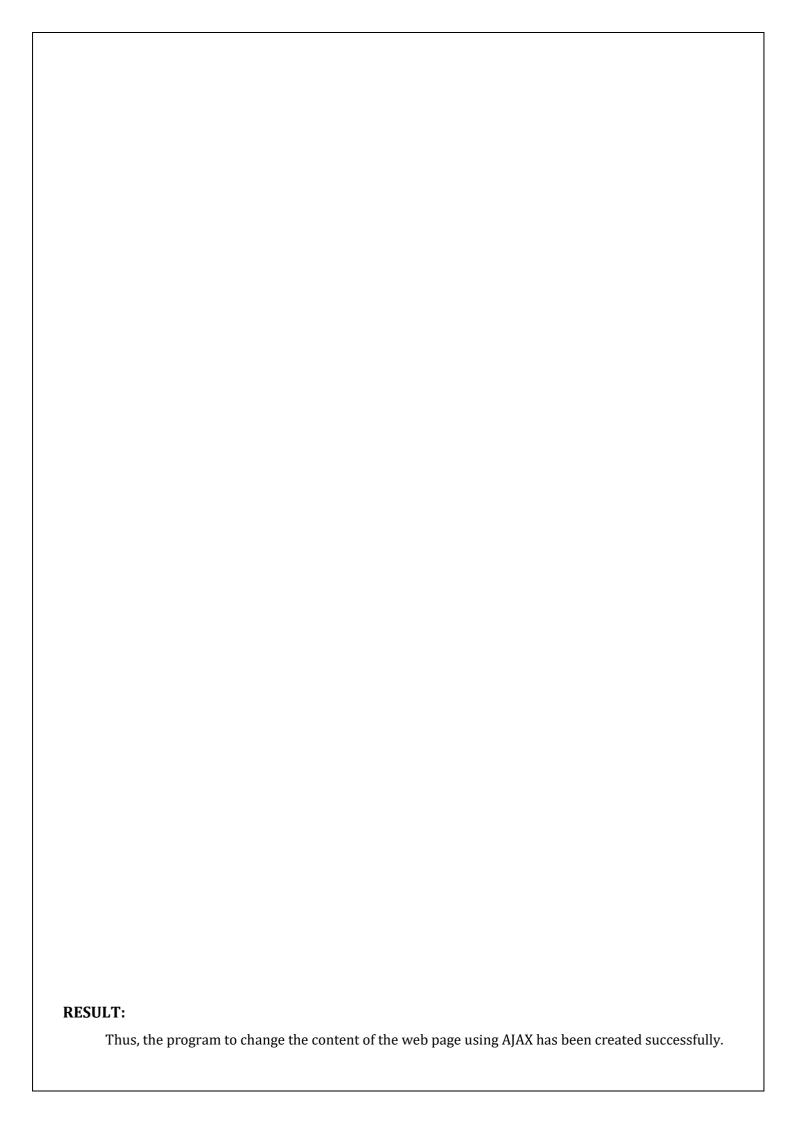## CREATE A PROGRAM TO CHANGE THE CONTENT OF THE WEB PAGE USING AJAX

AIM:

To write a program to create a simple XMLHttpRequest and retrieve data from a TXT file.

PROCEDURE:

1. Create a text document file rec.txt.

2. Type some context in that file.

3. Create a HTML document file File.html.

4. Inside the BODY tag create one h2 element, one p element and one button.

5. Make the button to calls a function named loadDoc(), if it is clicked.

6. Add a <script> tag to the page's body section.

7. Inside the script section create the loadDoc() function.

8. To send a request to a server, use the open() method of the XMLHttpRequest object.

9. Use the url parameter of the open() method, an address to a file on a server.

10. Use the responseText property returns the response as a string, and can use it accordingly.

File.html:

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>AJAX File</title>
</head>
<body>
     <h2>AJAX File Example</h2>
     <p id="demo">Let AJAX change this text.</p>
     <button type="button" onclick="loadDoc()">Change Content</button>
     <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", "rec.html", true);
           xhttp.send();
        }
     </script>
</body>
</html>
```

rec.html:

```html
<hr />
<h1>AJAX</h1>
<hr />
<br />
<i>AJAX is an acronym for Asynchronous JavaScript and XML.</i>
<br />
<i>AJAX allows you to send and receive data asynchronously without reloading the web page.
</i>
<br />
<i>AJAX allows you to send only important information to the server not the entire page.</i>
```

RESULT:

Thus, the program to change the content of the web page using AJAX has been created successfully.

WEBPAGE FOR LOGIN PROCESS FOR FORM VALIDATION USING SERVLET

AIM:

To create a web page for login process for form validation using servlets.

.

PROCEDURE:

1. Create a html file named as Index.html.

2. In the body tag element create form tag element and create various fields and text boxesusing table tag element .

3. Create a submit button using input tag and implement the form action as Login_page.java servlet file .

4. Create a servlet file named as Login_page.java to validate the form details and fields.

5. Create a HttpRequest and HttpResponse to get and provide request and response using servlets.

6. Get the input text fileds values using getParamater.

7. Check the details and validate the user inputs and print the details in the webpage.

8. Save the Index.html file and Login_page.java file.

9. Run the Index.html file.

Index.html:

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Login</title>
  </head>
  <body>
    <form method="POST" action="LoginServlet">
      <h3>
        Enter the Following Details <br/>
      </h3>
      <h4>
        Name:   <input type="text" name="name" ><br/>
      </h4>
      <h4>
        Department:   <input type="text" name="dep" ><br/>
      </h4>
      <h4>
        Rollno:   <input type="number" name="roll" ><br/>
      </h4>
      <h4>
        Year:   <input type="number" name="year" ><br/>
      </h4>
      <h4>
        Username:   <input type="text" name="uname" ><br/>
      </h4>
      <h4>
        Password:   <input type="password" name="password"><br/>
      </h4>
      <input type="submit"    value="Submit"
    </form>
  </body>
</html>
```

LoginServlet.java:

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
     response.setContentType("text/html;charset=UTF-8");
     try (PrintWriter out = response.getWriter())
         String name =request.getParameter("name");
        String dep=request.getParameter("dep");
         String roll=request.getParameter("roll");
         String year=request.getParameter("year");
         String uname=request.getParameter("uname");
```

```
        String pwd=request.getParameter("password");
    out.println("HI USER "+ uname+"<br><br>");
    out.println("Please check your details</h1><br><br>");
    out.println("Name:"+name+"<br>");
    out.println("Department:"+dep+"<br>");
     out.println("Roll No:"+roll+"<br>");
     out.println("Year:"+year+"<br>");
  }
}
```

RESULT:

Thus the web page for login process for form validation using servlets has been successfully completed.

DEVELOP WEB PAGE FOR LIBRARY MANAGEMENT SYSTEM USING SERVLET /JSP AND JAVASCRIPT PROGRAM THAT WILL VALIDATE THE CONTROLS IN THE FORMS YOU HAVE CREATED FOR THE APPLICATION AND ACCESS A DATA FROM DATABASE

AIM:

Program to develop a Library Management System application accessing a database using JSP.

PROCEDURE:

Relations using MYSQL given below enforcing primary key and foreign key constraints:

BOOK (ACCNO, TITLE, AUTHOR, PUBLISHER, EDITION, PRICE)

MEMBER (MID, MNAME, BRANCH)

FINE (MID, FINE_DATE, AMOUN

1. Open MySQL.

2. Create a database.

mysql> create database library; Query OK, 1 row affected (0.02 sec)

3. Connect to the database.

mysql> use library; Database changed

4. Create the following tables:

mysql> create table book (accno integer, title varchar(20),

     -> author varchar(20), publisher varchar(20),

     -> edition integer, price integer, primary key (accno));

Query OK, 0 rows affected (0.09s)

mysql> create table member (mid integer, mname varchar(20),

    -> branch varchar(20), primary key (mid));

Query OK, 0 rows affected (0.06 sec)

mysql> create table fine (mid integer references member(mid),

    -> fine_date date, amount integer);

Query OK, 0 rows affected (0.06 sec)

Index.html:

<!DOCTYPE html>

<html>

```
<head>
<meta charset="ISO-8859-1">
<title>Library Management System</title>
</head>
<body>
<h1 align="center">Library Management System</h1>
<hr />
<a href="Book.html">Book Details</a>
</body>
</html>
```

Book.html:
```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Book Details</title>
</head>
<body>
<h1 align="center">Book Details</h1>
<hr />
<form action="AddBook.jsp" method="post">
 <table>
 <tr>
 <td>Acc. No. :</td>
 <td><input type="text" name="accno"></td>
 </tr>
<tr>
 <td>Title :</td>
 <td><input type="text" name="title"></td>
 </tr>
<tr>
 <td>Author :</td>
 <td><input type="text" name="author"></td>
 </tr>
<tr>
 <td>Publisher :</td>
 <td><input type="text" name="publisher"></td>
```

```html
   </tr>
<tr>
 <td>Edition :</td>
 <td><input type="text" name="edition"></td>
 </tr>
<tr>
 <td>Price :</td>
 <td><input type="text" name="price"></td>
 </tr>
<tr>
 <td colspan="2" align="center"><input type="submit"
 value="Add Book"></td>
 </tr>
</table>
<br /> <a href="ViewBooks.jsp">View All Books</a>
</form>
</body>
</html>
```

AddBook.jsp:

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" import="java.sql.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Add Book Details</title>
</head>
<body>
<h1 align="center">Add Book Details</h1>
<hr />
<%
 Connection conn = null;
 PreparedStatement ps = null;
 try {
Class.forName("com.mysql.cj.jdbc.Driver");
 String URL = "jdbc:mysql://localhost:3306/library";
 conn = DriverManager.getConnection(URL, "root", "admin");
```

```
 ps = conn.prepareStatement("insert into book values
(?, ?, ?, ?, ?, ?)");
 ps.setInt(1,Integer.parseInt(request.getParameter("accno")));
 ps.setString(2, request.getParameter("title"));
 ps.setString(3, request.getParameter("author"));
 ps.setString(4, request.getParameter("publisher"));
 ps.setInt(5,
Integer.parseInt(request.getParameter("edition")));
 ps.setInt(6,
Integer.parseInt(request.getParameter("price")));
 int res = ps.executeUpdate();
if (res != 0)
 out.println("Book Details Inserted Successfully...");
 else
 out.println("Book Details Insertion Failure...");
 } catch (Exception e) {
 out.println(e);
 }
 ps.close();
 conn.close();
%>
<br />
<a href="Book.html">Back</a>
</body>
</html>
```

ViewBooks.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" import="java.sql.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>View All Book Details</title>
</head>
<body>
<h1 align="center">All Book Details</h1>
<hr />
```

```jsp
<%
Connection conn = null;
PreparedStatement ps = null;
ResultSet rs = null;
try {
Class.forName("com.mysql.cj.jdbc.Driver");
String URL = "jdbc:mysql://localhost:3306/library";
conn = DriverManager.getConnection(URL, "root", "admin");
ps = conn.prepareStatement("select * from book order by
accno");
rs = ps.executeQuery();
%>
<table border="1">
 <tr>
 <td>Acc No.</td>
 <td>Title</td>
 <td>Author</td>
 <td>Publisher</td>
 <td>Edition</td>
 <td>Price</td>
 <td>Edit</td>
 <td>Delete</td>
 </tr>
<%
 while (rs.next()) {
%>
<tr>
 <td><%=rs.getInt("accno")%></td>
 <td><%=rs.getString("title")%></td>
 <td><%=rs.getString("author")%></td>
 <td><%=rs.getString("publisher")%></td>
 <td><%=rs.getInt("edition")%></td>
 <td><%=rs.getInt("price")%></td>
 <td><a href="EditBook.jsp?accno=
<%=rs.getInt("accno")%>">Edit</a></td>
 <td><a href="DeleteBook.jsp?accno=
<%=rs.getInt("accno")%>">Delete</a></td>
 </tr>
```

```
<% }
%>
</table>
<%
} catch (Exception e) {
out.println(e); }
rs.close();
ps.close();
conn.close();
%>
<br />
<a href="Book.html">Back</a>
</body>
</html>
```

EditBook.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" import="java.sql.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Edit Book Details</title>
</head>
<body>
<h1 align="center">Edit Book Details</h1>
<hr />
<%
Connection conn = null;
PreparedStatement ps = null;
ResultSet rs = null;
try {
Class.forName("com.mysql.cj.jdbc.Driver");
String URL = "jdbc:mysql://localhost:3306/library";
conn = DriverManager.getConnection(URL, "root", "admin");
ps = conn.prepareStatement("select * from book where
accno = ?");
ps.setInt(1,
```

```jsp
Integer.parseInt(request.getParameter(("accno"))));
rs = ps.executeQuery();
rs.next();
%>
<form action="UpdateBook.jsp" method="post">
<table>
<tr>
<td>Acc. No. :</td>
<td><input type="text" name="accno"
value="<%=rs.getInt("accno")%>"
readonly></td>
</tr>
<tr>
<td>Title :</td>
<td><input type="text" name="title"
value="<%=rs.getString("title")%>"></td>
</tr>
<tr>
<td>Author :</td>
<td><input type="text" name="author"
value="<%=rs.getString("author")%>"></td>
</tr>
<tr>
<td>Publisher :</td>
<td><input type="text" name="publisher"
value="<%=rs.getString("publisher")%>"></td>
</tr>
<tr><td>Edition :</td>
<td><input type="text" name="edition" value="<%=rs.getInt("edition")%>"></td>
</tr>
<tr><td>Price :</td>
<td><input type="text" name="price"
value="<%=rs.getInt("price")%>"></td>
</tr>
<tr>
<td colspan="2" align="center"><input type="submit"
value="Update Book"></td>
</tr>
```

```
 </table>
</form>
<%
} catch (Exception e) {
out.println(e);
}
rs.close();
ps.close();
conn.close();
%>
<br />
<a href="ViewBooks.jsp">Back</a>
</body>
</html>
```

UpdateBook.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" import="java.sql.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Update Book Details</title>
</head>
<body>
<h1 align="center">Update Book Details</h1>
<hr />

<%
Connection conn = null;
PreparedStatement ps = null;
try {
Class.forName("com.mysql.cj.jdbc.Driver");
String URL = "jdbc:mysql://localhost:3306/library";
conn = DriverManager.getConnection(URL, "root", "admin");
ps = conn.prepareStatement(
"update book set title = ?, author = ?, publisher = ?,
edition = ?, price = ? where accno = ?");
```

```
 ps.setString(1, request.getParameter("title"));
 ps.setString(2, request.getParameter("author"));
 ps.setString(3, request.getParameter("publisher"));
 ps.setInt(4,
Integer.parseInt(request.getParameter("edition")));
 ps.setInt(5,
Integer.parseInt(request.getParameter("price")));
 ps.setInt(6,
Integer.parseInt(request.getParameter("accno")));
 int res = ps.executeUpdate();
if (res != 0)
 out.println("Book Details Updated
Successfully...");
 else
 out.println("Book Details Updation Failure...");
 } catch (Exception e) {
 out.println(e);
 }
 ps.close();
 conn.close();
%>
<br />
<a href="ViewBooks.jsp">Back</a> </body> </html>
```

DeleteBook.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" import="java.sql.*"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Delete Book Details</title>
</head>
<body>
<h1 align="center">Delete Book Details</h1><hr />
<%
 Connection conn = null;
 PreparedStatement ps = null;
```

```
 try {
 Class.forName("com.mysql.cj.jdbc.Driver");
 String URL = "jdbc:mysql://localhost:3306/library";
 conn = DriverManager.getConnection(URL, "root", "admin");
ps = conn.prepareStatement("delete from book where
accno = ?");
 ps.setInt(1,
Integer.parseInt(request.getParameter(("accno"))));
 int res = ps.executeUpdate();
if (res != 0)
 out.println("Book Details Deleted
Successfully...");
 else
 out.println("Book Details Deletion Failure...");
 } catch (Exception e) {
 out.println(e);
 }
 ps.close();
 conn.close();
%><br />
<a href="ViewBooks.jsp">Back</a> </body> </html>
```

RESULT:

      Thus, the program to develop a Library Management System application accessing a database using JSP is executed successfully.

Develop web page for Banking Management System using Servlet that will validate the controls in the forms you have created for the application and access a data from database.

AIM:

To Develop web page for Banking Management System using Servlet /JSP and JavaScript program that will validate the controls in the forms you have created for the application and access a data from database.
.

PROCEDURE:

1) Create a index.html and customer.html.

2) Create AddCustomer.java , EditCustomer.java , DeleteCustomer.java ,UpdateCustomer.java ,

ViewCustomer.java AddAccount.java , EditAccount.java ,DeleteAccount.java, UpdateAccount.java ,

ViewAccount.java , AddTransaction.java ,ViewTransaction.java , DeleteTransaction.java ,

EditTransaction.java,UpdateTransaction.java Servlets file to create a connection between the

database andthe server .

3) Add conn to provide a connection to the database and and access the data created form

the database by using the servlet files and html files with javascript.

4) Relations using MYSQL given below enforcing primary key and foreign keyconstraints:

5) CUSTOMER (CID, CNAME) , ACCOUNT (ANO, ATYPE, BALANCE, CID), TRANSACTION

(TID, ANO, TTYPE, TDATE, TAMOUNT)

6) Open MySQL.

7) Create a database.

8) mysql> create database banking;

9) Connect to the database.

mysql> use banking;

Database changed

10)Create the following tables:

11)mysql> create table customer (cid integer, cname varchar(20), primary key (cid));1

12) create table account (ano integer, atype varchar(1), balance integer, cid integer references

customer (cid), check (atype in ('S', 'C')), primary key (ano));1

13) create table transaction (tid integer, ano integer references account(ano), ttype varchar(1), adate date, tamount integer, check (ttype in ('D', 'W')), primary key (tid));1

14) Save the code and run the program in eclipse environment with tomcat server at localhost 1 server.

Index.html:

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Banking Application</title>
</head>
<body>
<h1 align="center">Banking Application</h1>
<hr />
<a href="Customer.html">Customer Details</a>
<br />
<br />
<a href="Account.html">Account Details</a>
</body>
</html>
```

Customer.html:

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Customer Details</title>
</head>
<body>
<h1 align="center">Customer Details</h1>
<hr />
<form action="AddCustomer" method="post">
 <table>
 <tr>
 <td>Customer Id. :</td>
 <td><input type="text" name="cid"></td> </tr>
<tr>
 <td>Customer Name :</td>
 <td><input type="text" name="cname"></td> </tr>
<tr>
 <td colspan="2" align="center">
<input type="submit" value="Add Customer"></td>
 </tr>
 </table>
<br /> <a href="ViewCustomers">View All Customers</a></form>
</body>
</html>
```

AddCustomer.java:

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
public class AddCustomer extends HttpServlet {
private static final long serialVersionUID = 1L;
 Connection conn = null;
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 out.println("<html>");
out.println("<head><title>Add Customer Details</title></head>");
out.println("<body>");
out.println("<h1 align='center'>Add Customer Details</h1>");
out.println("<hr />");
try {
 Class.forName("com.mysql.cj.jdbc.Driver");
String URL = "jdbc:mysql://localhost:3306/bank";
conn = DriverManager.getConnection(URL, "root", "");
ps = conn.prepareStatement("insert customer values (?, ?)");
ps.setInt(1,Integer.parseInt(request.getParameter("cid")));
ps.setString(2, request.getParameter("cname"));  int res = ps.executeUpdate();
 if (res != 0)
 out.println("Customer Details Inserted Successfully...");
 else
 out.println("Customer Details Insertion Failure...");  ps.close();
conn.close();
 }
catch (Exception e) {
 out.println(e);
 }
out.println("<br />");
out.println("<a href='Customer.html'>Back</a>"); out.println("</body></html>");
 }
 }
```

ViewCustomer.java:

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import jakarta.servlet.ServletException;
```

```java
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
public class ViewCustomers extends HttpServlet {
private static final long serialVersionUID = 1L;
 Connection conn = null;
 PreparedStatement ps = null;
 ResultSet rs = null;
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
 response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 out.println("<html>");
out.println("<head><title>View All Customer Details</title></head>");
 out.println("<body>");
out.println("<h1 align='center'>View All Customer Details</h1>");
out.println("<hr />");
try {
 Class.forName("com.mysql.cj.jdbc.Driver");
String URL = "jdbc:mysql://localhost:3306/bank";
 conn = DriverManager.getConnection(URL,"root","");
ps = conn.prepareStatement("select * from customer order by cid");
 rs = ps.executeQuery();
out.println("<table border='1'>");
out.println("<tr>");
out.println("<td>Customer Id.</td>");
out.println("<td>Customer Name</td>");
out.println("<td>Edit</td>");
out.println("<td>Delete</td>");
out.println("</tr>");
while (rs.next()) {
 out.println("<tr>");
out.println("<td>" + rs.getInt("cid") + "</td>");
 out.println("<td>"+rs.getString("cname")+"</td>");
out.println("<td><a  href='EditCustomers?cid="  +  rs.getInt("cid")  +  "'>Edit</a></td>");
out.println("<td><a  href='DeleteCustomer?cid="  +  rs.getInt("cid")  +  "'>Delete</a></td>");
out.println("</tr>");
 }
 out.println("</table>");
ps.close();
conn.close();
 } catch (Exception e) {
 out.println(e);
 }
 out.println("<br />");
out.println("<a href='Customer.html'>Back</a>"); out.println("</body></html>");
 }
 }
```

EditCustomers.java:

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
public class EditCustomers extends HttpServlet {
private static final long serialVersionUID = 1L;
 Connection conn = null;
 PreparedStatement ps = null;
 ResultSet rs = null;
 protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
 response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 out.println("<html>");
 out.println("<head><title>Edit Customer Details</title></head>");
 out.println("<body>");
 out.println("<h1 align='center'>Edit All Customer Details</h1>");
 out.println("<hr />");
 try {
 Class.forName("com.mysql.cj.jdbc.Driver");  String URL =
"jdbc:mysql://localhost:3306/bank";  conn = DriverManager.getConnection(URL, "root", "");
 ps = conn.prepareStatement("select * from customer where cid = ?");
 ps.setInt(1,Integer.parseInt(request.getParameter(("cid"))));
  rs = ps.executeQuery();
 rs.next();
 out.println("<form action='UpdateCustomer' method='post'>"); out.println("<table>");
 out.println("<tr>");
 out.println("<td>Customer Id. :</td>");
 out.println("<td><input type='text' name='cid' value='" + rs.getInt("cid") + "'
readonly></td>");
 out.println("</tr>");
 out.println("<tr>");
 out.println("<td>Customer Name :</td>");
 out.println("<td><input type='text' name='cname' value='" + rs.getString("cname")
"'></td>");
 out.println("</tr>");
 out.println("<tr>");
 out.println("<td colspan='2' align='center'><input type='submit' value='Update
Customer'></td>"); out.println("</tr>");
 out.println("</table>");
 out.println("</form>");
```

```java
 ps.close();
 conn.close();
 } catch (Exception e) {
 out.println(e);
 }
 out.println("<br />");
out.println("<a href='ViewCustomers'>Back</a>"); out.println("</body></html>");
 }
}
```

UpdateCustomer.java:

```java
 import java.io.IOException;
 import java.io.PrintWriter;
 import java.sql.Connection;
 import java.sql.DriverManager;
 import java.sql.PreparedStatement;
 import jakarta.servlet.ServletException;
 import jakarta.servlet.annotation.WebServlet;
 import jakarta.servlet.http.HttpServlet;
 import jakarta.servlet.http.HttpServletRequest;
 import jakarta.servlet.http.HttpServletResponse;
 public class UpdateCustomer extends HttpServlet {
 private static final long serialVersionUID = 1L;
 Connection conn = null;
 PreparedStatement ps = null;
 protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
 response.setContentType("text/html");
 PrintWriter out = response.getWriter();
 out.println("<html>");
 out.println("<head><title>Update Customer Details</title></head>");
out.println("<body>");
 out.println("<h1 align='center'>Update Customer Details</h1>"); out.println("<hr />");
 try {
 Class.forName("com.mysql.cj.jdbc.Driver");
 String URL = "jdbc:mysql://localhost:3306/bank";
 conn = DriverManager.getConnection(URL, "root", "");
 ps = conn.prepareStatement("update customer set cname = ? where cid = ?");
 ps.setString(1, request.getParameter("cname"));
 ps.setInt(2, Integer.parseInt(request.getParameter("cid")));
 int res = ps.executeUpdate();
 if (res != 0)
 out.println("Customer Details Updated Successfully...");
 else
 out.println("Customer Details Updation Failure...");
 ps.close();
 conn.close();
 } catch (Exception e) {
 out.println(e);
```

```java
 }
 out.println("<br />");
 out.println("<a href='ViewCustomers'>Back</a>");
 out.println("</body></html>");
 }
 }
```

DeleteCustomer.java:

```java
 import java.io.IOException;
 import java.io.PrintWriter;
 import java.sql.Connection;
 import java.sql.DriverManager;
 import java.sql.PreparedStatement;
 import jakarta.servlet.ServletException;
 import jakarta.servlet.annotation.WebServlet;
 import jakarta.servlet.http.HttpServlet;
 import jakarta.servlet.http.HttpServletRequest;
 import jakarta.servlet.http.HttpServletResponse;
 public class DeleteCustomer extends HttpServlet {
 private static final long serialVersionUID = 1L;
  Connection conn = null;
  PreparedStatement ps = null;
 protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
 response.setContentType("text/html");
  PrintWriter out = response.getWriter();
  out.println("<html>");
 out.println("<head><title>Delete Customer Details</title></head>");
 out.println("<body>");
 out.println("<h1 align='center'>Delete Customer Details</h1>");
  out.println("<hr />");
 try {
  Class.forName("com.mysql.cj.jdbc.Driver");
 String URL = "jdbc:mysql://localhost:3306/bank";
 conn = DriverManager.getConnection(URL, "root", "");
 ps = conn.prepareStatement("delete from customer where cid = ?");
  ps.setInt(1, Integer.parseInt(request.getParameter("cid")));
 int res = ps.executeUpdate();
  if (res != 0)
  out.println("Customer Details Deleted uccessfully...");
 else
  out.println("Customer Details Deletion Failure...");
  ps.close();
 conn.close();
  }

 catch (Exception e) {
  out.println(e);
  }
```

```
out.println("<br />");
out.println("<a href='ViewCustomers'>Back</a>"); out.println("</body></html>");
}
}
```

RESULT:

   Thus to Develop web page for Banking Management System using Servlet that will validate the controls in the forms you have created for the application and access a data from database is executed successfully.

Write a PHP program for Employee Details, which includes EmpID, Name, Age, salary, Designation, etc., to connect with the database and execute queries to retrieve and update data.

AIM:

To Write a PHP program for Employee Details, which includes EmpID, Name, Designation, Salary, DOJ, etc., to connect with the database and execute queries to retrieve and update data.
p

PROCEDURE:

1. Create a php file index.php.
2. Inside the php file create a form for getting employee details and after action the form inserttodb.php.
3. In the inserttodb..php file insert the details into database using phpMyAdmin by starting apache and sql in xampp.
4. Create a database in phpMyAdmin and a table to insert the values from the form.
5. After entering the values in the form it will be stored in the database and the values will be printed.
6. check the inserted values in phpMyAdmin.

Index.php:

```
<!DOCTYPE html>
<html lang="en">
<head>
     <title>Employee- Store Data</title>
</head>
<body>
```

```html
<center>
        <h1>Storing Form data in Database</h1>
        <form action="inserttodb.php" method="post">

<p>
                <label for="Employeeid">Employee id:</label>
                <input type="number" name="id" id="Employeeid">
                </p>


<p>
                <label for="Name">Name:</label>
                <input type="text" name="name" id="name">
                </p>



<p>
                <label for="Age">Age:</label>
                <input type="number" name="age" id="Age">
                </p>



<p>
                <label for="salary">Salary</label>
                <input type="number" name="sal" id="sal">
                </p>
<p>
                <label for="desig">Designation :</label>
                <input type="text" name="desig" id="desig">
                </p>


                <input type="submit" value="Submit">
        </form>
    </center>
</body>
```

</html>

Inserttodb.php:

```php
<!DOCTYPE html>
<html>
<head>
        <title>Insert Page page</title>
</head>
<body>
    <center>
            <?php
            $conn = mysqli_connect("localhost", "root", "", "employee");
            if($conn === false){
                    die("ERROR: Could not connect. "
                            . mysqli_connect_error());
            }
            $id = $_REQUEST['id'];
            $name = $_REQUEST['name'];
        $age = $_REQUEST['age'];
            $salary = $_REQUEST['sal'];
            $designation = $_REQUEST['desig'];


            $sql = "INSERT INTO details VALUES ('$id',
                    '$name','$age','$salary','$designation')";


            if(mysqli_query($conn, $sql)){
                    echo "<h3>data stored in a database successfully."
                            . " Please browse your localhost php my admin"
                            . " to view the updated data</h3>";


                    echo nl2br("\n$id\n $name\n "
                            . "$age\n $salary\n $designation");
            } else{
                    echo "ERROR: Hush! Sorry $sql. "
```

```php
                    . mysqli_error($conn);
        }
        mysqli_close($conn);
        ?>
    </center>
</body>
</html>
```

RESULT:

Thus to Write a PHP program for Employee Details, which includes EmpID, Name, Designation, Salary, DOJ, etc., to connect with the database and execute queries to retrieve and update data is executed successfully.

A SIMPLE GAME USING JQUERY

Aim:
   To create a simple game using jQuery.

Procedure:
1.Create a html file named jQueryGame. Import the library for using jQuery.

2. Read a key Code upon pressing a key on keyboard.

3. Read the screen resolution by var width = screen.width - 100; var height = screen.height – 200.This is done because the browser occupies some of the space at top and bottom.

4. Set the position of start button.

5. The key events are set in such a way that the bubbles are faded out when matched.

6. A function genLetter() is set to generate a random alphabet between A - Z.

7. Here the key code values for A - Z are 65 - 90.

8. Use Math.random() to generate a random number.

9. Use String.fromCharCode() to convert a key Code into its equivalent Character.

10. A function randomColor() is created to generate random colour for each alphabet that appears on the screen.

11. The score position is set at top right corner.

12. Save and run the html file.

Program:
jQueryGame.html

```html
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <meta http-equiv="X-UA-Compatible" content="ie=edge">
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js">
```

```
</script>
<title>jQuery Game</title>
<script type="text/javascript">
$(document).ready(function () {
var width = screen.width - 100;
var height = screen.height - 200;
var code = 0;
$('#start').css({ "top": (height / 2) + 'px',"left": (width / 2) + 'px' });
$('#start').click(function () {
$(this).fadeOut('slow');
$('#score').show();
genLetter();
});
$(document).keydown(function (event) {
var keycode = event.keyCode;
$('.bubb' + keycode).animate({ "top": height + "px", "opacity": 0 }, 'slow');
$('.bubb' + keycode).fadeOut('slow').hide('slow', function () {
code += 20;
$('#score').html(code);
$(this).remove();
}
);
});
function genLetter() {
var color = randomColor();
var k = Math.floor(Math.random() * (90 - 65 + 1)) + 65;
var ch = String.fromCharCode(k);
var top = Math.floor(Math.random() * height);
var left = Math.floor(Math.random() * width);
$('body').append('<span class="bubb bubb' + k + '" style="left: ' + left + '; top: ' + top +
'; background-color:' + color + '">' + ch + '</span>');
setTimeout(genLetter, 1000);
}

function randomColor() {
var color = '';
var values = ['a', 'b', 'c', 'd', 'e', 'f', '1', '2', '3', '4', '5', '6', '7', '8', '9', '0'];
for (c = 0; c < 6; c++) {
no = Math.floor(Math.random() * 15);
```

```
  color += values[no];
 }
 return color;
 }
 });
 </script>
<style type="text/css">
 body {
 width: 100%;
 margin: 0 auto;
 padding: 0;
 }
.bubb {
 position: absolute;
width: 30px;
height: 30px;
font: bold 14px verdana;
 background-color: yellow;
text-align: center;
-webkit-border-radius: 20px;
-moz-border-radius: 20px;
vertical-align: middle;
padding: 5px;
 }
 #score {
 font-size: 46px;
top: 25px;
right: 50px;
display: none;
text-align: right;
 #start {
 width: 50px;
padding: 10px 15px;
 text-align: center;
font: bold 15px arial;
 background-color: #dedede;
color: #000;
-webkit-border-radius: 6px;
-moz-border-radius: 6px;
```

```
position: absolute;
 }

#start:hover {
 cursor: pointer;
 }
 </style>
</head>
<body>
 <div id="score">0</div>
 <div id="start">Start</div>
</body>
</html>
```

Result:

    Thus, a simple game using jQuery has been created successfully.

TOURISM MANAGEMENT USING PHP

AIM:

To create an online application in any of the web application like PHP for Tourism management like the available trip details in season based.

ALGORITHM:

1. Open MySQL.

2. Create a database.

mysql> create database tourism;

3. Connect to the database.

mysql> use tourism;

Database changed

4. Create the following tables:

mysql> create table tour (name varchar(25), num varchar(25) ,mode varchar(25) ,numpas integer ,date varchar(25),numdays varchar(25) , costperpas integer,total integer);

5. Create forms for different packages available which gets the input from the customers.

6. Index page shows all the details of the available packages and can guides the user to other

7. Details.php show all the registered customers.

8. Cancel.php is used to cancel the specified customer details

Index.php:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Tourism Management System</title>
</head>
```

```php
<body>
<center>
<?php
echo "<h1>Welcome to Explore India!!!</h1>";
echo "<h2>Click Book trip for more Details!</h2>";
?>
</center>
<a href='details.php' style="color: maroon; font-size: 20px;">CHECK ALL THE BOOKINGS</a>
<h3>WEEKEND TRIP TO KERELA</h3>
<img src="img1.png" alt="alt"/>
<br><br>
<a href="form1.php" style="color: maroon; font-size: 20px;">BOOK NOW</a></center>
<br><br>
<h3>WEEKEND TRIP TO DARGEELING</h3>
<img src="img2.png" alt="alt"/>
<br><br>
<a href="form2.php" style="color: maroon; font-size: 20px;">BOOK NOW</a></center>
<br><br>
<h3>TRIP TO HIMACHAL PRADESH</h3>
<img src="img3.png" alt="alt"/>
<br><br>
<a href="form3.php" style="color: maroon; font-size: 20px;">BOOK NOW</a></center>
</body>
</html>
```

Details.php:

```php
<?php
//including the database connection file
$databaseHost = 'localhost';
$databaseName = 'tourism';
$databaseUsername = 'root';
$databasePassword = '';
$mysqli = mysqli_connect($databaseHost, $databaseUsername, $databasePassword,
$databaseName);
$result=mysqli_query($mysqli, "SELECT * FROM tour "); ?>
<html>
```

```php
<head>
<title>Homepage</title>
</head>
<body>
<h1 align="center">Booked Tour Details</h1>
<hr />
<table width='100%' border=0>
 <tr bgcolor='#CCCCCC'>
<td>Name</td>
<td>Phone number</td>
<td>Mode of transport </td>
<td>No of passengers</td>
<td>Date (tentative)</td>
<td>No of days </td>
<td>Cost per passenger</td>
<td>Total</td>
<td>Cancel</td>
</tr>
<?php
while($res = mysqli_fetch_array($result)) {
echo "<tr>";
echo "<td>".$res['name']."</td>";
echo "<td>".$res['num']."</td>";
echo "<td>".$res['mode']."</td>";
echo "<td>".$res['numpas']."</td>";
echo "<td>".$res['date']."</td>";
echo "<td>".$res['numdays']."</td>";
echo "<td>".$res['costperpas']."</td>";
echo "<td>".$res['total']."</td>";
echo "<td><a href='cancel.php?name=$res[name]'>CANCEL</a> </td></tr>";
}
?>
</table>
</body>
</html>
```

Form.php:

```html
<html>
<head>
</head>
<body>
<h1 align="center">WEEK END TOUR TO KERELA</h1>
<hr />
<br /><br />
<form action="add.php" method="post" name="form1">
<table width="25%" border="0">
<tr>
<td>NAME </td>
<td><input type="text" name="name"></td>
</tr>
<tr>
<td>PHONE NUMBER: </td>
<td><input type="text" name="num"></td>
</tr>
<tr>
<td>MODE OF TRANSPORT: </td>
<td><input type="text" name="mode" value="Train"></td>

</tr>
<tr>
<td>NO OF PASSENGERS</td>
<td><input type="textr" name="numpas"></td>
</tr>
<tr>
<td>DATE</td>
<td><input type="text" name="date"></td>
</tr>
<tr>
<td>NO OF DAYS</td>
<td><input type="text" value="5days6night" name="numdays"></td>
```

```html
</tr>
<tr>
<td>COST PER PASSENGER</td>
<td><input type="text" value=6500 name="costperpas"></td>
</tr>
 <td>TOTAL</td>
<td><input type="text" name="total"></td>
</tr>
<tr>
<td colspan="2" align="center"><input type="submit" name="Submit" value="Add"></td>
</tr>
</table>
</form>
</body>
</html>
```

Add.php:

```php
<html>
<head>
<title>Add Details</title>
</head>
<body>
<?php
//including the database connection file
$databaseHost = 'localhost';
$databaseName = 'tourism';
$databaseUsername = 'root';
$databasePassword = '';
$mysqli = mysqli_connect($databaseHost, $databaseUsername, $databasePassword,
$databaseName);
$name = $_POST['name'];
$num = $_POST['num'];
$mode = $_POST['mode'];
$numpas = $_POST['numpas'];
$date = $_POST['date'];
```

```php
$numdays = $_POST['numdays'];
$costperpas = $_POST['numdays'];
$total = $_POST['numdays'];
if(isset($_POST['Submit'])) {
//insert data to database
$result = mysqli_query($mysqli, "INSERT INTO tour values ('$name',
'$num','$mode','$numpas','$date','$numdays','$costperpas','$total')");
//display success message
echo "<h1 align='center'>Tour Details</h1>"; echo "<hr />";
echo "<font color='green'>Data added successfully."; echo "<br/><a href='index.php'>View
Result</a>";
}
?>
</body>
</html>
```

Cancel.php:

```php
<?php
//including the database connection file
$databaseHost = 'localhost';
$databaseName = 'tourism';
$databaseUsername = 'root';
$databasePassword = '';
$mysqli = mysqli_connect($databaseHost, $databaseUsername, $databasePassword,
$databaseName);
$name = $_GET['name'];
//deleting the row from table
$result = mysqli_query($mysqli, "DELETE FROM tour WHERE name='$name'");
echo "<h1 align='center'>Tour trip details bave been deletd successfull</h1>";
echo "<hr />";
echo "<font color='green'>Data deleted successfully."; echo "<br/><a href='index.php'>View
Result</a>";
?>
```

RESULT:

Thus a web page for Tourism Management has been created using php successfully.