HTML Forms

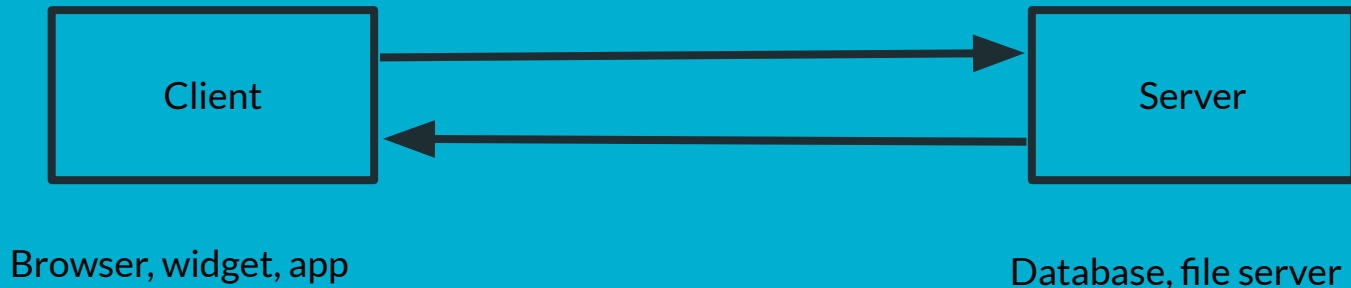Department of Computer Science

SIUE

Designing interactive pages

- Clicking on links and buttons
  - Clicking on a link (URL) and the information is fetch from the server
- Able to record user input
- Entering data into a webpage
- Sending the user data to the server
- Responding to user input
- Storing users information
- etc.

Communication

- Two way communication
- Request and response
- Upload and download
- Why download speed is more than the upload speed

Client	→	Server
Browser, widget, app		Database, file server

HTML forms

- An HTML form is a section of a web page that allows users to enter data that is sent to a server for processing, usage-
  - Collecting feedback
  - Registering users
  - Logging in to a website
- Forms can resemble paper or database forms because web users fill out the forms using checkboxes, radio buttons, or text fields
- The <form> element is used to create an HTML form
- The <form> element has a number of attributes that can be used to control the behavior of the form
  - **action** attribute: specifies the URL that the form data is sent
  - **method** attribute: which specifies the HTTP method that is used to send the form data

HTML form

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form</title>
</head>
<body>
        <h1>GET Method Form</h1>

        <form action="process.php" method="get">
                <!-- Text Input -->
                <label for="name">Name:</label>
                <input type="text" id="name" name="name" placeholder="Enter your name" required>
                <br>
                <label for="email">Email:</label>
                <input type="email" id="email" name="email" placeholder="Enter your email" required>
                <br>

                <!-- Submit Button -->
                <input type="submit" value="Submit">
        </form>
</body>
</html>
```

Label and input tags attributes

- label:
  - The for attribute in the <label> element specifies the **id** of the form element that the label is associated with
    <label for="name">Name:</label>

    <input type="text" id="name" name="name" placeholder="Enter your name" required>

- input:
  - The type attribute determines what kind of data the user can input and how the input is presented
    - text, password, email, number, checkbox, radio, submit, reset
  - The id attribute provides a unique identifier for the input element within the HTML document
    - When used with a <label> element, for attribute of the label can be set to match the id of the input element
    - Useful for CSS and javascript
  - The name attribute is used to identify the data associated with that input field when the form is sent to the server
    - The name attribute is essential for server-side processing of form data
- placeholder: provides a brief, typically instructional, hint or example text

The backend code

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form - Submission Result</title>
</head>
<body>
        <h1>GET Method Form - Submission Result</h1>
        <?php
        if (isset($_GET["name"])) {
        $name = $_GET["name"];
        $email = $_GET["email"];

        echo "<p><strong>Name:</strong> $name</p>";
        echo "<p>Email: $email</p>";

        } else {
        echo "<p>No data submitted.</p>";
        }
        ?>
</body>
</html>
```
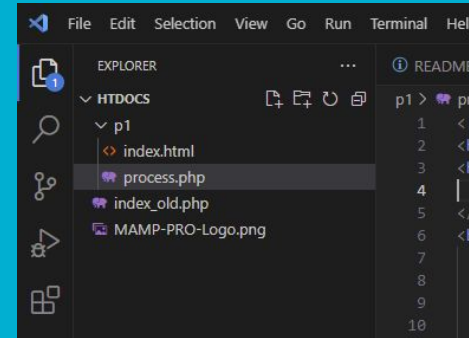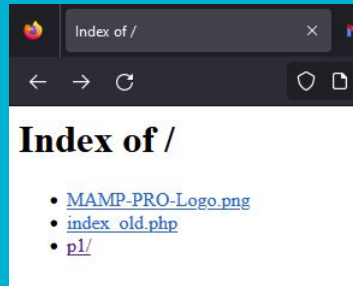
To run front end and php backend

- Run the MAMP
- Look at the port number
- Create your files under htdocs folder which is under your MAMP installation location
- Write the code under htdocs/p4 in vscode
- Go to localhost:80 (use your port number)
- Click on the folder here p1
- IP:port

Form tag
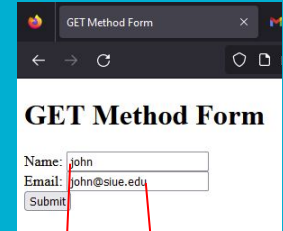
- <form> ... </form>
- action attribute <form action="process.php">
- The action attribute in the <form> element specifies where the form data is sent when the form is submitted
- The value of the action attribute can be an absolute URL or a relative URL
- Here relative URL <form action="process.php">
-

Form tag

- method attribute: `<form action="process.php" method="get">`
- The GET method appends the form data to the URL of the form's action attribute
- This means that the form data is visible in the URL bar of the browser
- The GET method is also limited in the amount of data that can be sent

Form tag

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form - Submission Result</title>
</head>
<body>
        <h1>GET Method Form - Submission Result</h1>

        <?php
        if ($_SERVER["REQUEST_METHOD"] === "POST") {
        $name = $_POST["name"];
        $email = $_POST["email"];

        echo "<p><strong>Name:</strong> $name</p>";
        echo "<p>Email: $email</p>";

        } else {
        echo "<p>No data submitted.</p>";
        }
        ?>

</body>
</html>
```

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <title>POST Method Form</title>
</head>
<body>
   <h1>GET Method Form</h1>

   <form action="process.php" method="post">
                <!-- Text Input -->
                <label for="name">Name:</label>
                <input type="text" id="name" name="name" placeholder="Enter your name" required>
                <br>
                <label for="email">Email:</label>
                <input type="email" id="email" name="email" placeholder="Enter your email" required>
                <br>
                <input type="submit" value="Submit">

   </form>
</body>
</html>
```
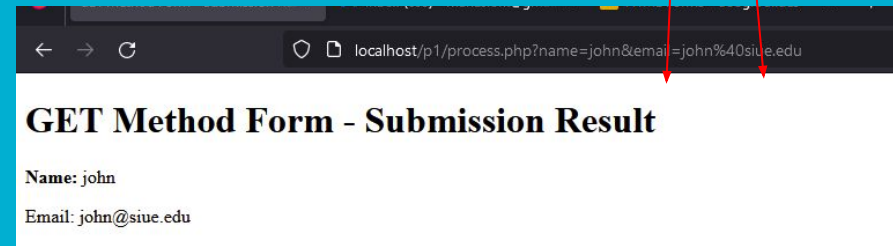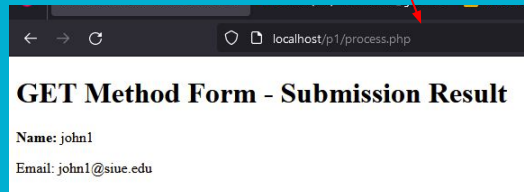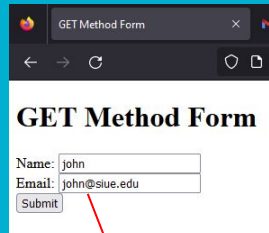

GET Method Form

Name: john
Email: john@siue.edu
Submit

localhost/p1/process.php

GET Method Form - Submission Result

Name: john1

Email: john1@siue.edu

Radio buttons

```html
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form</title>
</head>
<body>
        <h1>GET Method Form</h1>

        <!-- The form element with method="get" -->
        <form action="process.php" method="get">

                <!-- Radio Buttons -->
                <label>Gender:</label>
                <input type="radio" id="male" name="gender" value="Male">
                <label for="male">Male</label>
                <input type="radio" id="female" name="gender" value="Female">
                <label for="female">Female</label>
                <input type="radio" id="other" name="gender" value="Other">
                <label for="other">Other</label>
                <br>
                <input type="submit" value="Submit">
        </form>
</body>
</html>
```

Checkbox

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form</title>
</head>
<body>
        <h1>GET Method Form</h1>

        <!-- The form element with method="get" -->
        <form action="process.php" method="get">

        <!-- Checkbox -->
        <input type="checkbox" id="subscribe" name="subscribe" value="yes">
        <label for="subscribe">Subscribe to newsletter</label>
        <br>

        <!-- Submit Button -->
        <input type="submit" value="Submit">
        </form>
</body>
</html>
```

Select dropbox

- input tag is not used here

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form</title>
</head>
<body>
        <h1>GET Method Form</h1>

        <!-- The form element with method="get" -->
        <form action="process.php" method="get">

                <!-- Select Dropdown -->
                <label for="country">Country:</label>
                <select id="country" name="country">
                <option value="usa">United States</option>
                <option value="canada">Canada</option>
                <option value="uk">United Kingdom</option>
                <option value="other">Other</option>
                </select>
                <br>

                <!-- Submit Button -->
                <input type="submit" value="Submit">
        </form>
</body>
</html>
```

Text area

```
<!DOCTYPE html>
<html lang="en">
<head>
        <title>GET Method Form</title>
</head>
<body>
        <h1>GET Method Form</h1>

        <!-- The form element with method="get" -->
        <form action="process.php" method="get">

        <!-- Text Area -->
        <label for="comments">Comments:</label>
        <textarea id="comments" name="comments" rows="15" cols="50" placeholder="Enter your comments"></textarea>
        <br>

        <!-- Submit Button -->
        <input type="submit" value="Submit">
        </form>
</body>
</html>
```

Thank you

—

See you all in the next class…