Internet Based Programming H.W

2110213561_Manar Mohamed

H.W 1

1. Link to another site, an anchor, a page on the same site.

Link to another site

Link to a page on the same site

2. Link that dials a number, runs JavaScript, runs email client

Dial a number

Run JavaScript

Open email client

3. Open the link in a new tab/window

Open link in a new tab/window

H.W 2

1.Images

<img src="logo.png" alt="Company Logo">

2.Image maps

```
<img src="worldmap.png" alt="World Map" usemap="#map">
<map name="map">
  <area shape="rect" coords="100,100,200,200" href="country1.html" alt="Country 1">
  <area shape="circle" coords="300,200,50" href="country2.html" alt="Country 2">
</map>
```

3.color

<div style="background-color: #ff0000;">

This is red.

</div>

<p style="color: blue;">

This is a paragraph with blue text color.

</p>

<div style="background-image: linear-gradient(to right, #ff0000, #00ff00);">

This div has a horizontal gradient from red to green.

</div>

H.W 3

1. All input type in HTML

<!DOCTYPE html>

<html>

<head>

  <title>All Input Types</title>

</head>

<body>

 <form>

   <label for="hidden">Hidden:</label>

   <input type="hidden" id="hidden" name="hidden" value="Hidden value">

```html
<label for="tel">Telephone:</label>
<input type="tel" id="tel" name="tel" pattern="[0-9]{3}-[0-9]{3}-[0-9]{4}" placeholder="123-456-7890" required>


<label for="email">Email:</label>
<input type="email" id="email" name="email" placeholder="example@example.com" required>


<label for="number">Number:</label>
<input type="number" id="number" name="number" min="1" max="100" required>


<label for="range">Range:</label>
<input type="range" id="range" name="range" min="0" max="100" step="5">


<label for="search">Search:</label>
<input type="search" id="search" name="search" placeholder="Search term">


<label for="image">Image:</label>
<input type="image" id="image" name="image" src="image.png" alt="Submit">


<label for="week">Week:</label>
<input type="week" id="week" name="week">


<label for="url">URL:</label>
<input type="url" id="url" name="url" placeholder="https://www.example.com" required>
```

```html
    <label for="datetime-local">Date and Time:</label>
    <input type="datetime-local" id="datetime-local" name="datetime-local">

    <label for="month">Month:</label>
    <input type="month" id="month" name="month">

    <label for="time">Time:</label>
    <input type="time" id="time" name="time">

    <button type="submit">Submit</button>
  </form>
</body>
</html>
```

2.Meta information

```html
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <meta name="author" content="Author name">
  <meta name="description" content="Website description.">
  <meta name="generator" content="Generator tool.">
```

```html
  <meta name="keywords" content=" Appropriate keywords that reflect the content of The
website. ">

  <title>Website Title</title>

</head>

<body>

  <!-- Rest of the HTML content -->

</body>

</html>
```

H.W 4

1.A form with inputs and buttons

```html
<!DOCTYPE html>

<html>

<head>

  <title>Form Action Example</title>

</head>

<body>

  <h1>Form Action Example</h1>

  <form action="process.php" method="get" target="_blank">

   <h2>GET Method (Open in New Tab)</h2>

   <label for="name">Name:</label>

   <input type="text" id="name" name="name" required>

   <label for="email">Email:</label>

   <input type="email" id="email" name="email" required>
```

```html
    <button type="submit">Submit</button>
  </form>


  <form action="process.php" method="post" target="_self">
    <h2>POST Method (Same Tab)</h2>
    <label for="age">Age:</label>
    <input type="number" id="age" name="age" required>


    <label for="gender">Gender:</label>
    <select id="gender" name="gender" required>
      <option value="male">Male</option>
      <option value="female">Female</option>
      <option value="other">Other</option>
    </select>
    <button type="submit">Submit</button>
  </form>
</body>
</html>
```

2.Canvas application in HTML5

```html
<!DOCTYPE html>
<html>
<head>
  <title>Canvas Application</title>
  <style>
```

```
    canvas {

      border: 1px solid black;

    }

  </style>

</head>

<body>

  <h1>Canvas Application</h1>


  <canvas id="myCanvas" width="400" height="200"></canvas>


  <script>

    // Get the canvas element

    const canvas = document.getElementById('myCanvas');

    const context = canvas.getContext('2d');


    // Set initial position and color

    let x = 200;

    let y = 100;

    let color = 'blue';


    // Draw initial shape on canvas

    drawShape();


    // Function to draw a shape on the canvas

    function drawShape() {

      context.clearRect(0, 0, canvas.width, canvas.height);

      context.fillStyle = color;
```

```javascript
    context.fillRect(x, y, 50, 50);
}




// Event listener for arrow key press
document.addEventListener('keydown', function(event) {
  const key = event.key;


  // Change position and color based on arrow key
  if (key === 'ArrowUp') {
    y -= 10;
  } else if (key === 'ArrowDown') {
    y += 10;
  } else if (key === 'ArrowLeft') {
    x -= 10;
  } else if (key === 'ArrowRight') {
    x += 10;
  } else if (key === 'c') {
    color = getRandomColor();
  }


  // Redraw the shape on canvas
  drawShape();
});


// Function to generate a random color
```

```
    function getRandomColor() {

      const letters = '0123456789ABCDEF';

      let color = '#';

      for (let i = 0; i < 6; i++) {

        color += letters[Math.floor(Math.random() * 16)];

      }

      return color;

    }

  </script>

</body>

</html>
```