

Assignment 1- Web Programming

Html:

```
!DOCTYPE html>

<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <meta name="description" content="Learn about planets and space facts." />
    <meta name="author" content="SpaceNerd" />
    <title>Explore the Solar System</title>
    <link rel="stylesheet" href="style.css" />
  </head>
  <body>

    <header>
      <h1>🌐 Explore the Solar System</h1>
      <nav>
        <a href="#planets">Planets</a>
        <a href="#facts">Facts</a>
        <a href="#form">Join Us</a>
      </nav>
    </header>

    <main>
      <section id="planets">
        <h2>🌟 The Planets</h2>
        <article>
          <h3>Earth</h3>
          <p><strong>Earth</strong> is the third planet from the Sun. It supports <em>life</em> as we know it.</p>
```

```
<figure>
  
  <figcaption>Earth from space - Local Image</figcaption>
</figure>
</article>
```

```
<article>
  <h3>Mars</h3>
  <p><abbr title="National Aeronautics and Space Administration">NASA</abbr> is planning missions to <mark>Mars</mark>.</p>
  <details>
    <summary>Why Mars?</summary>
    <p>Mars has conditions that might support life. Its surface is rocky and dusty with signs of water.</p>
  </details>
  <blockquote cite="https://mars.nasa.gov">"Mars is the next frontier for human exploration."</blockquote>
  <code>&lt;planet name="mars"&gt;&lt;/planet&gt;</code>
</article>
</section>
```

```
<section id="facts">
  <h2>🌟 Fun Space Facts</h2>
  <ul>
    <li>There are 8 planets in our Solar System.</li>
    <li>The Sun accounts for 99.86% of the solar system's mass.</li>
    <li>Jupiter has 92 moons!</li>
  </ul>
```

```
<ol>
  <li>Mercury</li>
  <li>Venus</li>
```

```
<li>Earth</li>
</ol>

<dl>
  <dt>Galaxy</dt>
  <dd>A huge collection of gas, dust, and billions of stars.</dd>
  <dt>Asteroid</dt>
  <dd>Rocky body orbiting the Sun.</dd>
</dl>
```

```
<table>
  <caption>Planet Sizes (approx)</caption>
  <thead>
    <tr><th>Planet</th><th>Diameter (km)</th></tr>
  </thead>
  <tbody>
    <tr><td>Earth</td><td>12,742</td></tr>
    <tr><td>Mars</td><td>6,779</td></tr>
  </tbody>
</table>
</section>
```

```
<section id="form">
  <h2> 🚀 Join Our Space Club</h2>
  <form action="#" method="post">
    <fieldset>
      <legend>Personal Info</legend>
      <label for="name">Name:</label>
      <input type="text" id="name" name="name" required /><br />
      <label for="email">Email:</label>
```

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

<label for="planet">Favorite Planet:</label>
<select id="planet" name="planet">
  <option value="earth">Earth</option>
  <option value="mars">Mars</option>
  <option value="jupiter">Jupiter</option>
</select>
</fieldset>

<label>
  <input type="checkbox" name="subscribe" checked />
  Subscribe to newsletter
</label><br />

<label>
  <input type="radio" name="level" value="beginner" checked /> Beginner
</label>
<label>
  <input type="radio" name="level" value="expert" /> Expert
</label><br />

<textarea name="message" rows="4" cols="40" placeholder="Why do you love space?"></textarea><br />

<button type="submit">Submit</button>
<input type="reset" value="Clear" />
</form>
</section>
</main>
```

```
<aside>  
<h4>Did You Know?</h4>  
<p>The Moon is slowly drifting away from Earth at 3.8 cm per year.</p>  
</aside>
```

```
<footer>  
<p>&copy; 2025 Space Explorers. All rights reserved.</p>  
<address>Contact us: spaceclub@example.com</address>  
</footer>
```

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

CSS:

```
body {  
    font-family: Arial, sans-serif;  
    margin: 20px;  
    line-height: 1.6;  
    background-color: #f9f9f9;  
    color: #222;  
}
```

```
header, footer {  
    background-color: #222;  
    color: white;  
    padding: 15px;  
    text-align: center;  
}
```

```
nav a {
```

```
margin: 0 15px;  
color: white;  
text-decoration: none;  
font-weight: bold;  
}  
  
nav a:hover {  
text-decoration: underline;  
}  
  
main {  
padding: 20px;  
background-color: white;  
border-radius: 10px;  
}  
  
article {  
border-bottom: 1px solid #ccc;  
margin-bottom: 20px;  
padding-bottom: 10px;  
}  
  
figure {  
margin: 20px 0;  
text-align: center;  
}  
  
figcaption {  
font-size: 0.9em;  
color: #666;  
}
```

```
table {  
    width: 60%;  
    border-collapse: collapse;  
    margin-bottom: 20px;  
}  
  
th, td {
```

```
    border: 1px solid #333;  
    padding: 8px;  
    text-align: left;  
}  
  
thead {
```

```
    background-color: #ddd;  
}
```

```
form {  
    margin-top: 20px;  
}
```

```
input, select, textarea, button {  
    margin: 5px 0;  
    padding: 5px;  
    width: 100%;  
    max-width: 400px;  
    box-sizing: border-box;  
}
```

```
fieldset {  
    border: 1px solid #aaa;
```

```
padding: 10px;  
margin-bottom: 10px;  
border-radius: 5px;  
}
```

```
legend {  
font-weight: bold;  
}
```

```
aside {  
background-color: #efefef;  
padding: 15px;  
margin-top: 20px;  
border-radius: 8px;  
}
```

OUTPUT:

The screenshot shows a web browser window with the title bar "Explore the Solar System". The address bar shows the file path "C:/Rachel/WebProg/vscode/index.html". The main content area has a dark header with a globe icon and the text "Explore the Solar System". Below the header are three navigation links: "Planets", "Facts", and "Join Us". The main content section is titled "The Planets" with a subtitle "Earth". It contains the text "Earth is the third planet from the Sun. It supports life as we know it.", a small image thumbnail labeled "Earth from space - Local Image", and a link "NASA is planning missions to Mars.". A section titled "Mars" follows, with a link "Why Mars?".

This screenshot shows the same web browser window after some content has been added or modified. The "Mars" section now includes the quote "Mars is the next frontier for human exploration." and the XML code "<planet name='mars'></planet>". The "Fun Space Facts" section has been expanded to include a bulleted list of facts about the solar system and a numbered list of the first four planets. The "Galaxy" and "Asteroid" sections have also been added, with their respective descriptions and links.

Explore the Solar System

Planet Sizes (approx)

| Planet | Diameter (km) |
|--------|---------------|
| Earth | 12,742 |
| Mars | 6,779 |

 **Join Our Space Club**

Personal Info

Name:

Email:

Favorite Planet:

Subscribe to newsletter

Beginner Expert

Why do you love space?

Explore the Solar System

Email:

Favorite Planet:

Subscribe to newsletter

Beginner Expert

Why do you love space?

Did You Know?

The Moon is slowly drifting away from Earth at 3.8 cm per year.

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