

Laboratoriya 5

Mavzu: Gipermurojaatlar va tasvirlar joylashtirish.

Ishdan maqsad:

Ushbu laboratoriya ishining maqsadlari:

1. **Gipermurojaatlar (Hyperlinks) bilan ishlashni o'rganish:**
 - <a> (anchor) elementining tuzilishi va atributlari
 - Turli turdagi havolalar yaratish (tashqi, ichki, pochta, telefon)
 - Havola holatlarini CSS bilan boshqarish
 - Havola maqsadlarini belgilash (target atributi)
2. **Tasvirlar bilan ishlashni o'zlashitirish:**
 - elementi va uning asosiy atributlari (src, alt, width, height)
 - Responsive tasvirlar yaratish
 - <figure> va <figcaption> semantik elementlari
 - Rasm formatlari va optimallashtirish
3. **Navigatsiya tuzilmasini yaratish:**
 - Sahifa ichidagi navigatsiya (anchor links)
 - Menyu va navigatsiya panellari
 - Breadcrumb (yo'l ko'rsatkichlari)
4. **Zamonaviy texnikalar:**
 - Image maps - rasmda bir nechta havola maydoni
 - Picture elementi - turli o'lchamdagi tasvirlar
 - Lazy loading - kechiktirilgan yuklash
 - Rasm galereyalari yaratish
5. **Accessibility va SEO:**
 - Alt matnlar yozish
 - Title atributlari
 - Aria labellar
 - Semantik to'g'rilik

Nazariy qism:

1. Gipermurojaatlar (Hyperlinks)

Gipermurojaatlar - bu veb-sahifalarning asosiy xususiyati bo'lib, foydalanuvchilarni bir sahifadan boshqasiga, bir resursdan ikkinchisiga o'tishga imkon beradi. Bu World Wide Web tizimining asosiy tushunchasidir.

2 <a> elementi - Anchor (Langar)

Asosiy sintaksis:

html

Havola matni

Komponentlar:

- <a> - anchor (langar) tegi
- href - hypertext reference (havola manzili)
- Havola matni - foydalanuvchi ko'radigan va bosadigan matn

Misol:

html

`Google ga o'tish`

3. HREF atributi turlari

a) Mutlaq URL (Absolute URL): To'liq veb-manzil, boshqa saytlarga havola.

html

`Tashqi havola`

Xususiyatlari:

- Protokol kiritiladi (http://, https://)
- Domen nomi (example.com)
- Fayl yo'li (sahifa.html)

Tasvirlar (Images):

1. elementi

Asosiy sintaksis:

html

``

Majburiy atributlar:

- src - rasm manzili (source)
- alt - muqobil matn (alternative text)

2. SRC atributi

Nisbiy yo'l:

html

``

``

Mutlaq URL:

html

``

3.ALT atributi.

Rasm yuklanmasa yoki ko'zi ojizlar uchun tavsif.

To'g'ri yozish:

html

`<!-- YO'Q -->`

``

`<!-- TO'G'RI -->`

``

Qoidalar:

- Aniq va qisqa tavsif
- Dekorativ rasmlar uchun bo'sh: alt=""
- Matn o'rniga rasm bo'lsa, matnni yozing
- 125 belgidan oshmasin

4. WIDTH va HEIGHT atributlari

Pikselda:

html

``

Foydasi:

- Sahifa tezroq yuklanadi (CLS kamaytiradi)

- Brauzer joy ajratadi
- Layout shift yo'q

Muhim:

- Faqat bitta o'lchamni berish proporsiyanı saqlaydi
- CSS bilan override qilish mumkin.

Rasmlarni CSS bilan stillashtirish

1. Asosiy stillar.

CSS

```
img {  
  max-width: 100%;  
  height: auto;  
  display: block;  
}
```

Tushuntirish:

- max-width: 100% - konteynerdan katta bo'lmaydi
- height: auto - proporsiya saqlanadi
- display: block - pastda bo'shliq yo'q

2. Chegara va soya.

CSS

```
img {  
  border: 3px solid #ddd;  
  border-radius: 10px;  
  box-shadow: 0 4px 8px rgba(0,0,0,0.2);  
}
```

3. Hover effektlar.

CSS

```
img {  
  transition: transform 0.3s ease;  
}  
img:hover {  
  transform: scale(1.05);  
  box-shadow: 0 8px 16px rgba(0,0,0,0.3);  
}
```

4. Doira shakli.

CSS

```
.circular-img {  
  width: 200px;  
  height: 200px;  
  border-radius: 50%;  
  object-fit: cover;  
}
```

Amaliy ish:

Topshiriq 1: Asosiy havolalar

Maqsad: Turli turdagi havolalarni yaratish.

```
<!DOCTYPE html>  
<html lang="uz">  
<head>  
  <meta charset="UTF-8">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Havolalar va Tasvirlar</title>  
  <link rel="stylesheet" href="style.css">  
</head>  
<body>
```

```
<section>
  <h2>1. Tashqi havolalar</h2>
  <ul>
    <li><a href="https://google.com" target="_blank" rel="noopener">Google</a></li>
    <li><a href="https://youtube.com" target="_blank" rel="noopener">YouTube</a></li>
    <li><a href="https://github.com" target="_blank" rel="noopener">GitHub</a></li>
  </ul>
</section>
```

```
<section>
  <h2>2. Ichki havolalar</h2>
  <ul>
    <li><a href="about.html">Biz haqimizda</a></li>
    <li><a href="services.html">Xizmatlar</a></li>
    <li><a href="contact.html">Aloqa</a></li>
  </ul>
</section>
```

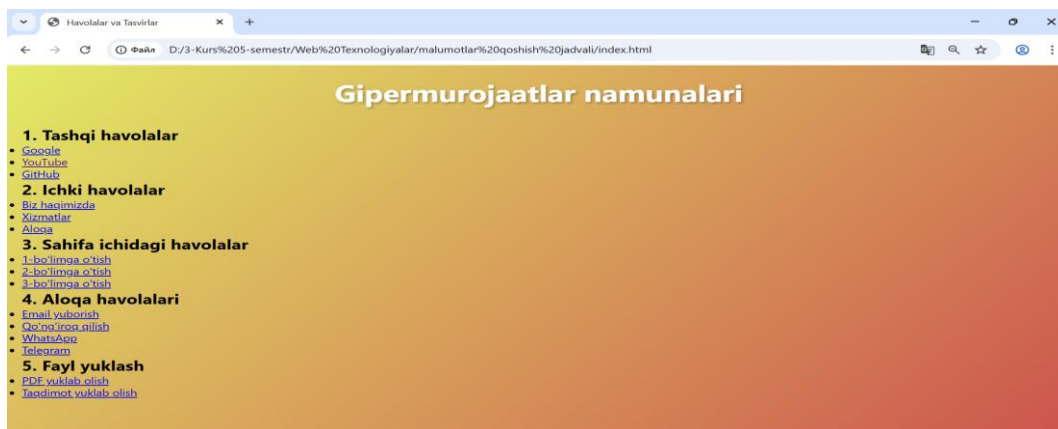
```
<section>
  <h2>3. Sahifa ichidagi havolalar</h2>
  <ul>
    <li><a href="#section1">1-bo'limga o'tish</a></li>
    <li><a href="#section2">2-bo'limga o'tish</a></li>
    <li><a href="#section3">3-bo'limga o'tish</a></li>
  </ul>
</section>
```

```
<section>
  <h2>4. Aloqa havolalari</h2>
  <ul>
    <li><a href="mailto:info@example.com">Email yuborish</a></li>
    <li><a href="tel:+998901234567">Qo'ng'iroq qilish</a></li>
    <li><a href="https://wa.me/998901234567" target="_blank">WhatsApp</a></li>
    <li><a href="https://t.me/username" target="_blank">Telegram</a></li>
  </ul>
</section>
```

```
<section>
  <h2>5. Fayl yuklash</h2>
  <ul>
    <li><a href="files/document.pdf" download>PDF yuklab olish</a></li>
    <li><a href="files/presentation.pptx" download>Taqdimot yuklab olish</a></li>
  </ul>
</section>
```

```
</body>
```

```
</html>
```



Topshiriq 2: Navigatsiya menyusi

HTML (index.html ga qo'shish):

```

54     </section>
55     <nav class="main-nav">
56     <div class="logo">
57         <a href="index.html">MyWebsite</a>
58     </div>
59     <ul class="nav-menu">
60         <li><a href="index.html" class="active">Bosh sahifa</a></li>
61         <li><a href="about.html">Biz haqimizda</a></li>
62         <li><a href="services.html">Xizmatlar</a></li>
63         <li><a href="portfolio.html">Portfolio</a></li>
64         <li><a href="contact.html">Aloqa</a></li>
65     </ul>
66 </nav>
67 </body>
68 </html>

```

Topshiriq 3: CSS (style.css):

```

/* Navigatsiya */
section{
    background-color: #f0c558;
    padding: 20px 0;
    align-items: center;
}

.main-nav {
    background-color: #f0c558;
    padding: 15px 50px;
    display: flex;
    justify-content: space-between;
    align-items: center;
}

.logo a {
    color: hsl(0, 0%, 100%);
    font-size: 24px;
    font-weight: bold;
    text-decoration: none;
}

.nav-menu {

```

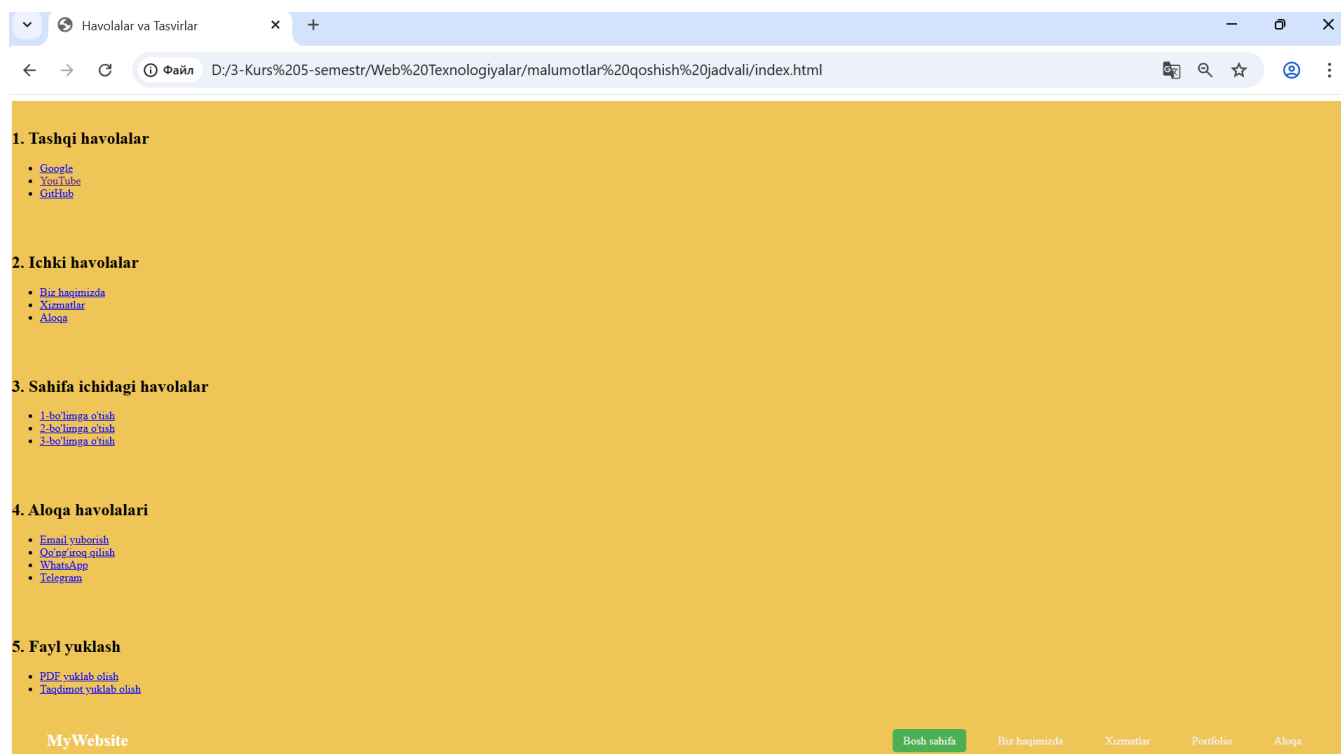
```

list-style: none;
display: flex;
gap: 30px;
margin: 0;
padding: 0;
}

.nav-menu a {
color: rgb(243, 244, 243);
text-decoration: none;
padding: 8px 15px;
border-radius: 5px;
transition: all 0.3s ease;
}

.nav-menu a:hover,
.nav-menu a.active {
background-color: #4CAF50;
}

```



Topshiriq 4: saytga rasimlar qoshish:

```

<h2>Tasvirlar namunalari</h2>

<h3>Oddiy rasm:</h3>

<h3>Figure bilan:</h3>
<figure>
  
  <figcaption>Quyosh botishi - Toshkent, 2025</figcaption>
</figure>

<h3>Lazy loading:</h3>


```

Xulosa:

Laboratoriya ishining yakuniy natijalari:

Ushbu "Gipermurojaatlar va tasvirlar joylashtirish" mavzusidagi laboratoriya ishi davomida HTML da havolalar va tasvirlar bilan ishlashning barcha asosiy jihatlari to'liq o'rganildi va amalda qo'llanildi.

O'rganilgan asosiy tushunchalar:**1. Gipermurojaatlar (Hyperlinks):**

- `<a>` (anchor) elementining asosiy tuzilmasi va ishlash prinsipi
- href atributi orqali turli manzillarga yo'naltirish