

# **Asosiy tushunchalar.**

## **HTML tili.**

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# Internet

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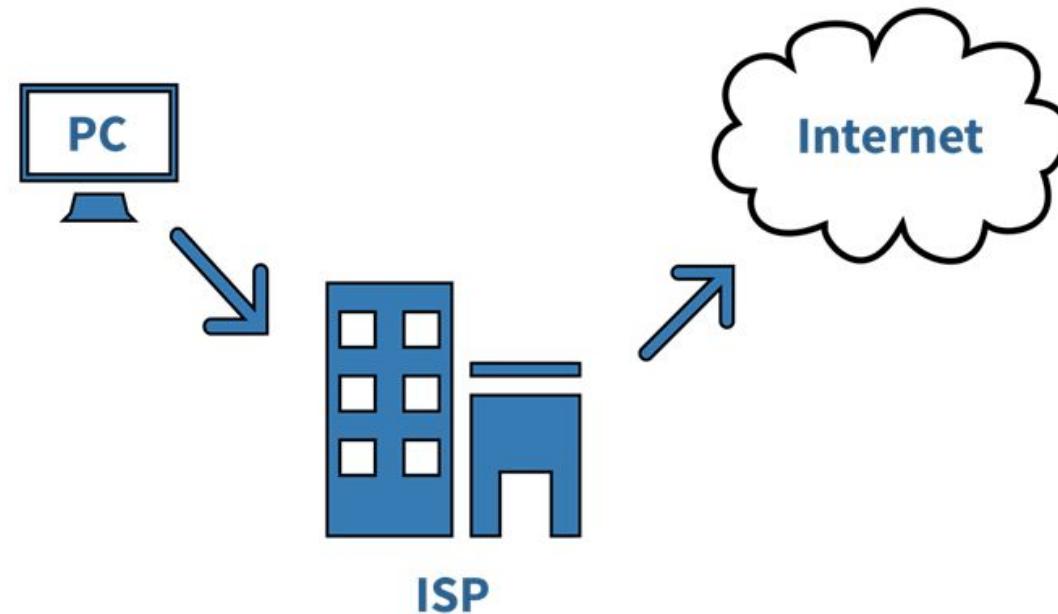
Internet – dunyo bo'ylab joylashgan va yagona tarmoqqa birlashtirilgan minglab kompyuter tarmoqlarining majmuidir.



# Internet service provider

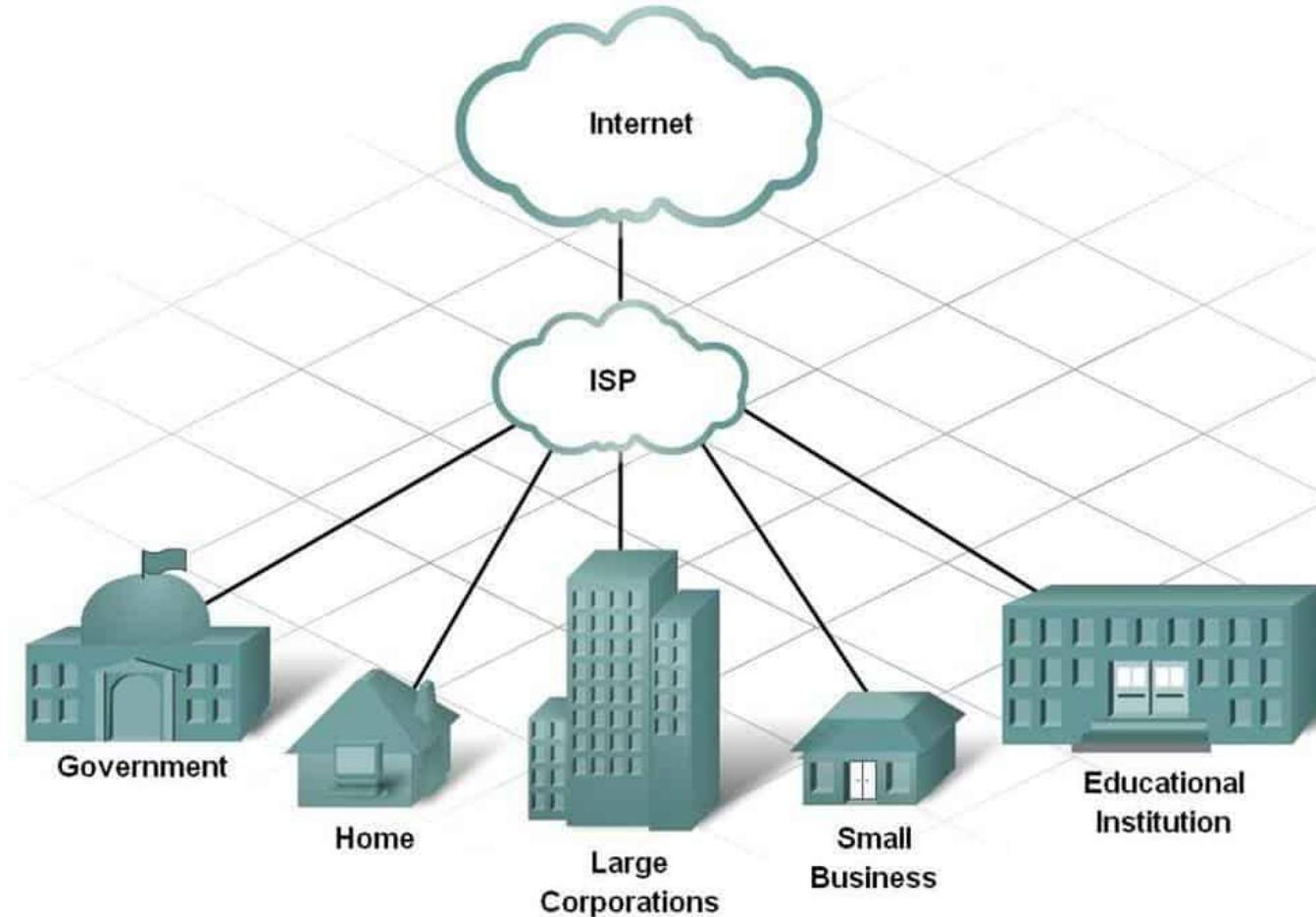
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Internet-provayder (ISP) - bu foydalanuvchiga odatda haq evaziga Internetga kirishni ta'minlaydigan kompaniya.

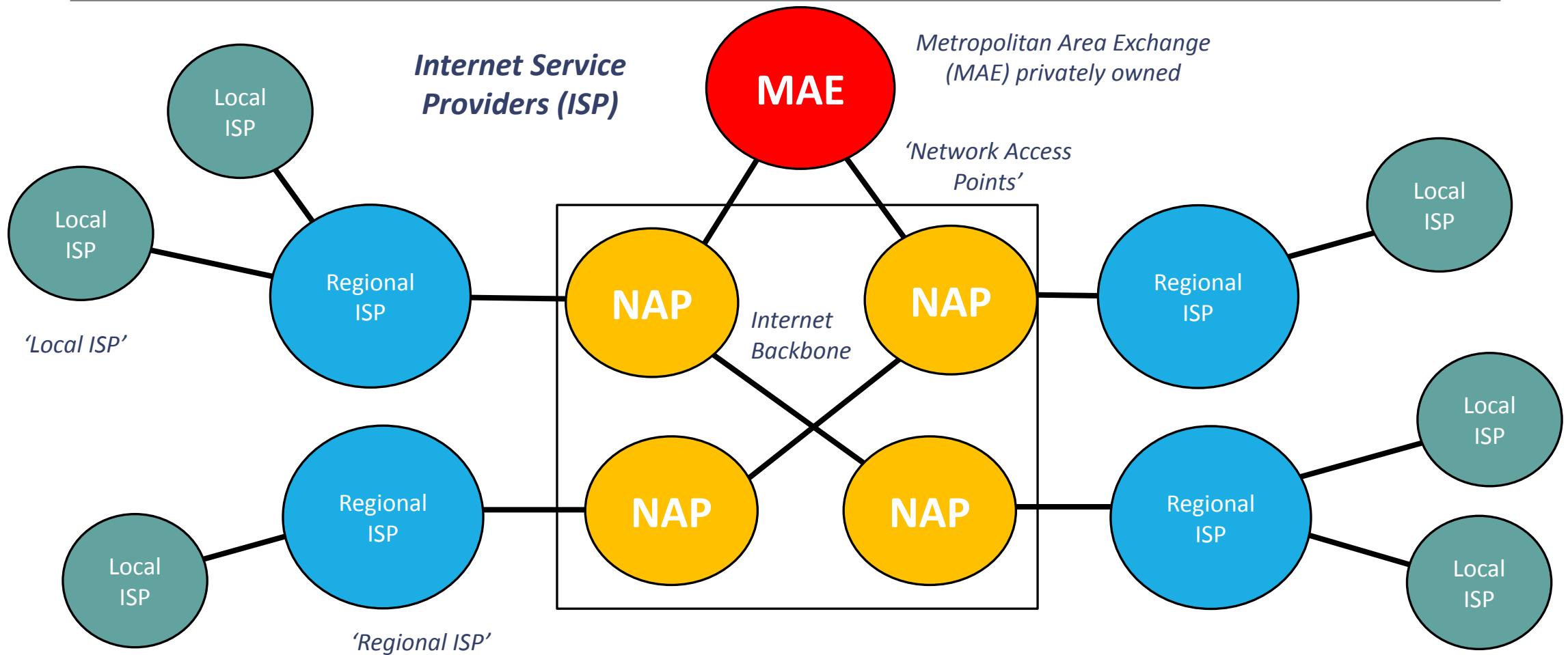


# Internet service provider

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# Internet service provider



# ISP xizmatlari

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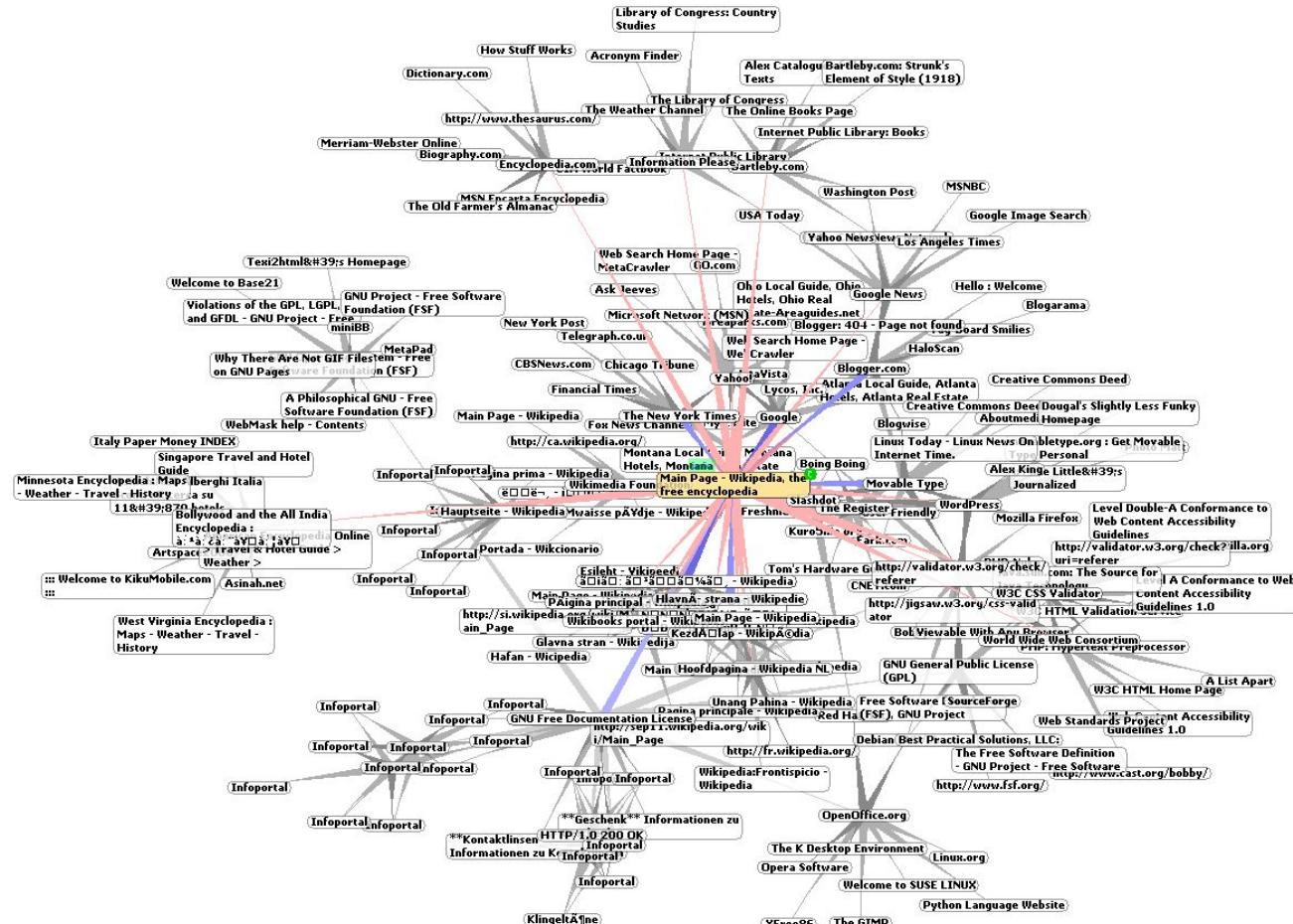
# World Wide Web - WWW

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WWW – Internet tarmog'iga ulangan turli kompyuterlarda (qurilmalarda) joylashgan o'zaro bog'liq xujjatlarga kirishni ta'minlovchi taqsimlangan tizim.

- Web-serverlar tashkil qiladi
- Resurslarining katta qismi gipermatn texnologiyasiga asoslangan
- Web sahifa - gipermatnli hujjat
- Web sayt – umumiy mavzu asosida birlashtirilgan bir nechta web sahifalar (odatda bitta web-serverda, bitta domenda joylashgan bo'ladi)
- Brauzer – web sahifalarni ko'rish va yuklash uchun maxsus dastur
- Ixtirochisi Tim Berners Li (shuningdek, HTTP, URI/URL, HTML)

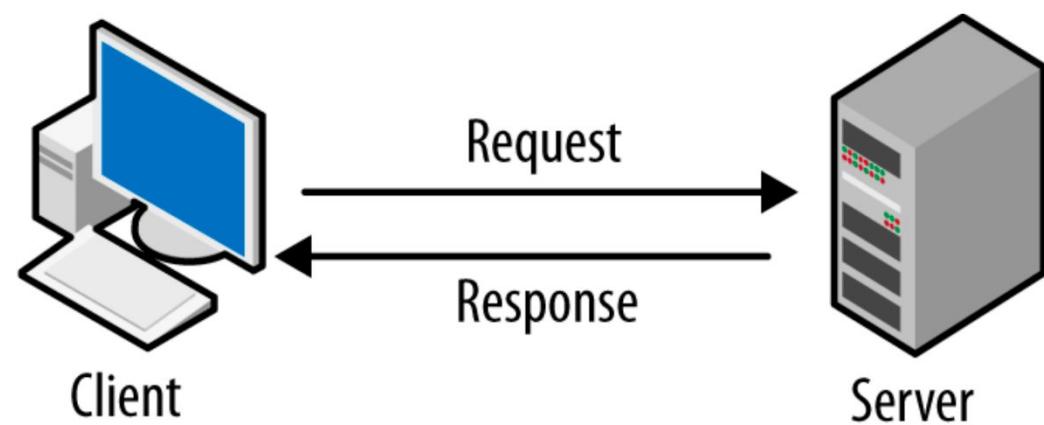
# Wikipedia namunasi



# Server

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Qurilma: xizmat ko'rsatuvchi dasturiy ta'minot ishlashi uchun alohida ajratilgan, maxsus kompyuter.



# Server turlari

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Web Server

Email Server

Fax Server

FTP Server

News Server

Internet Relay Chat Server

Application Server



Proxy Server

Database Server

Telnet Server

File Server

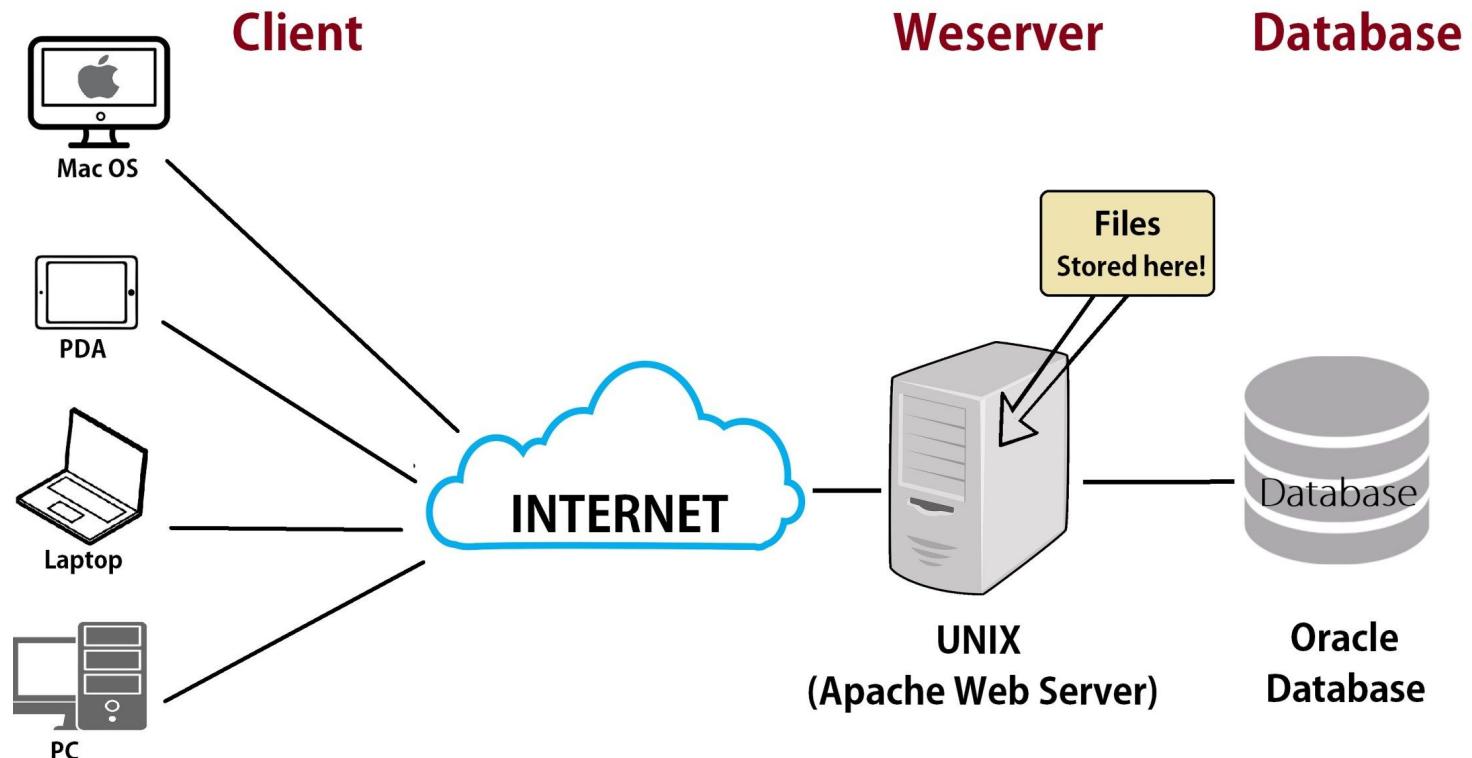
List Server

Groupware Server

Streaming Server

# Web server

Web server – mijozlardan (odatda brauzer) HTTP so'rovlarni qabul qiluvchi va HTTP javoblarni (HTML sahifa, rasm, fayl, media va boshqalar bilan) qaytaruvchi server.



# Web server

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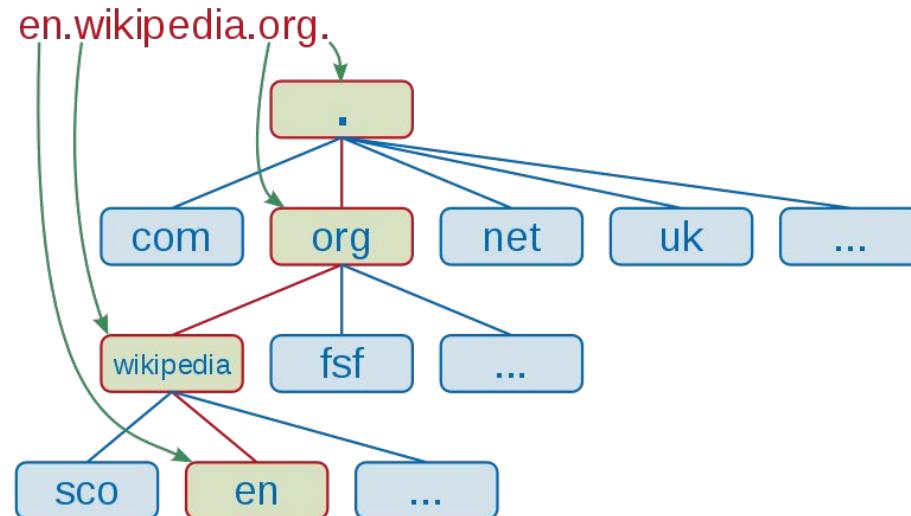
Web serverning qo'shimcha funksiyalari:

- web sahifalar ishlashini avtomatlashtirish;
- resurslarga foydalanuvchilar murojaatlarini jurnalini yuritish;
- foydalanuvchilarni autentifikatsiya va avtorizatsiyadan o'tkazish;
- dinamik yaratiluvchi sahifalarni qo'llash;
- mijozlar bilan himoyalangan aloqalarni o'rnatishda HTTPSni qo'llash.

Web serverlar – Apache, IIS, nginx, lighttpd, Google Web Server, Resin, OpenServer va h.k.

# Domen nomi

Domen nomi – Internet tarmog'idagi avtonom administrativ birligi hisoblangan "qismlar"ni identifikasiya qilish uchun ishlataladigan simvolli nom. Har bir qismi domen deyiladi.



- `.` (nuqta) – nolinch daraja (asos)
- `org` – birinchi (yuqori) daraja
- `wikipedia` – ikkinchi daraja
- `en` – uchinchi daraja

# Domen nomi

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- .com (commercial) — tijorat organizatsiyalari uchun
- .net (networks) — tarmoq bilan ishlovchi kompaniyalar uchun
- .org (organizations) — notijorat organizatsiyalar uchun
- .info (information) — barcha uchun ochiq bo'lgan domen
- .name (personal) — personal saytlar uchun
- .pro (professionals) — ma'lum bir soha mutaxassislari uchun
- .int — xalqaro organizatsiyalar uchun
- .eco — ekologiya bilan bog'liq internet resurslar uchun
- .mobi — mobil telefonlar bilan ishlashga mo'ljallangan saytlar va xizmatlar uchun
- .museum — muzeylar uchun
- .travel — turistik soha uchun
- .gov (US Government) — AQSH hukumati uchun
- edu (educational) — AQSH OTMlari va ta'lim bilan bog'liq loyihalar uchun



**Domen nomlari va IP manzillarni boshqaruvchi korporatsiya (Internet Corporation for Assigned Names and Numbers)**

# Yuqori darajali milliy domen

*country code Top-Level Domain, ccTLD*

<https://cctld.uz>

The screenshot shows the administration interface for the UZ domain. The main header reads "Администрирование доменной зоны «UZ»". The left sidebar includes links for Главная, Новости, Статистика, Регистраторы, Информация, Вопросы и ответы, Термины и определения, Специальные домены, О нас пишут, and Акции. A modal window titled "IDN КОНВЕРТОР" is open, showing a text input field and an "OK" button. Another modal window titled "ПРОВЕРКА ДОМЕНА" shows fields for "Домен" (containing ".uz") and "Зона" (containing ".uz"), with a "Проверить" button.

**ПАРАМЕТРЫ ДОМЕНА**

Домен:	ytit.uz (www.ytit.uz)	Статус:	Активен
Регистратор:	ООО Arsenal D	Первый NS:	Домен
Дата создания:	11.06.2018 г.	Второй NS:	Домен
Активен до:	12.06.2024 г.	Третий NS:	Домен
Четвертый NS:	Домен		

**ПАРАМЕТРЫ КЛИЕНТА**

Тип:	Юридическое лицо			
Организация:				
Регион:	ГОРОД ТАШКЕНТ			
Почтовый индекс:	100013	Город:	г.Ташкент	Страна:
				Узбекистан

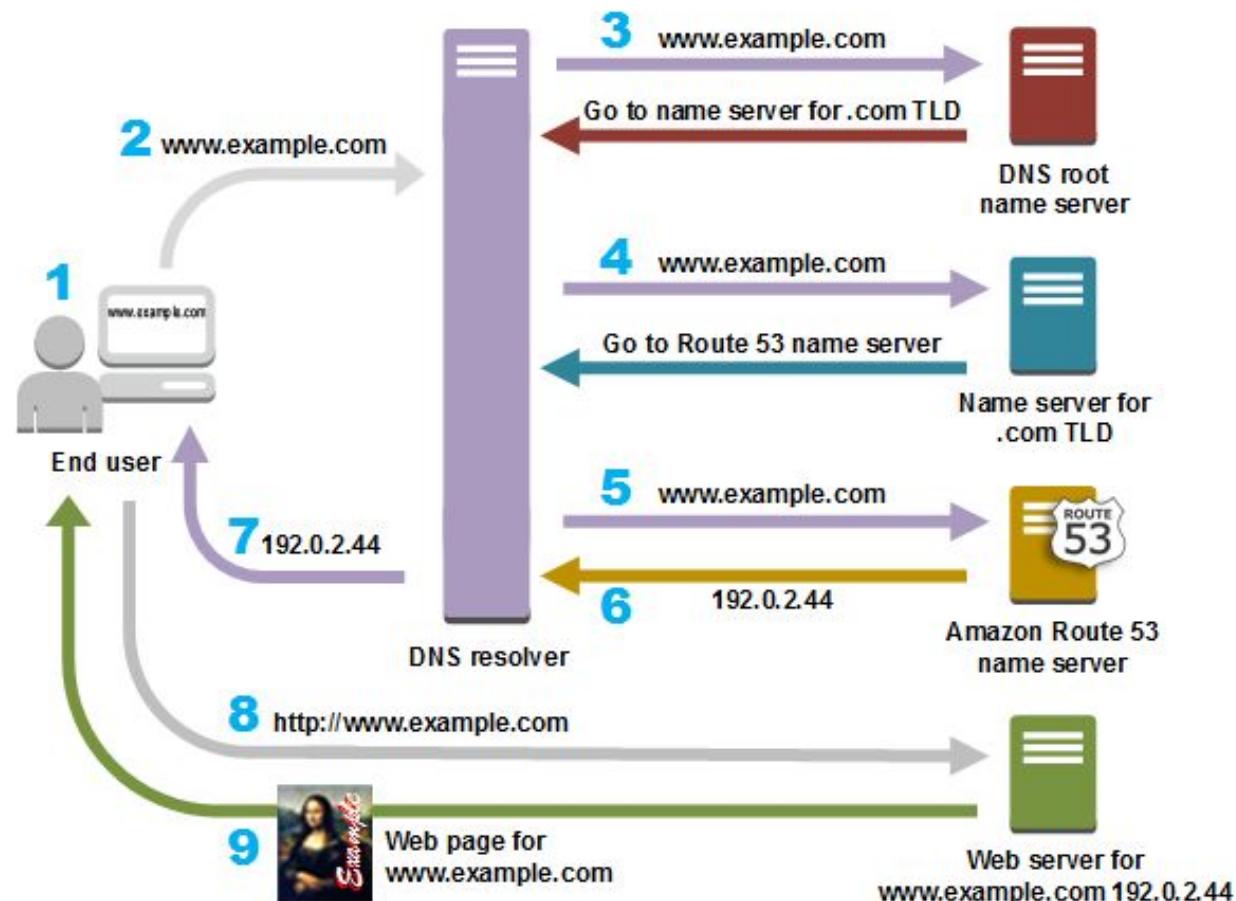
**АДМИНИСТРАТИВНЫЙ КОНТАКТ**

Организация:				
Регион:	ГОРОД ТАШКЕНТ			
Почтовый индекс:	100013	Город:	г.Ташкент	Страна:
				Узбекистан

**ТЕХНИЧЕСКИЙ КОНТАКТ**

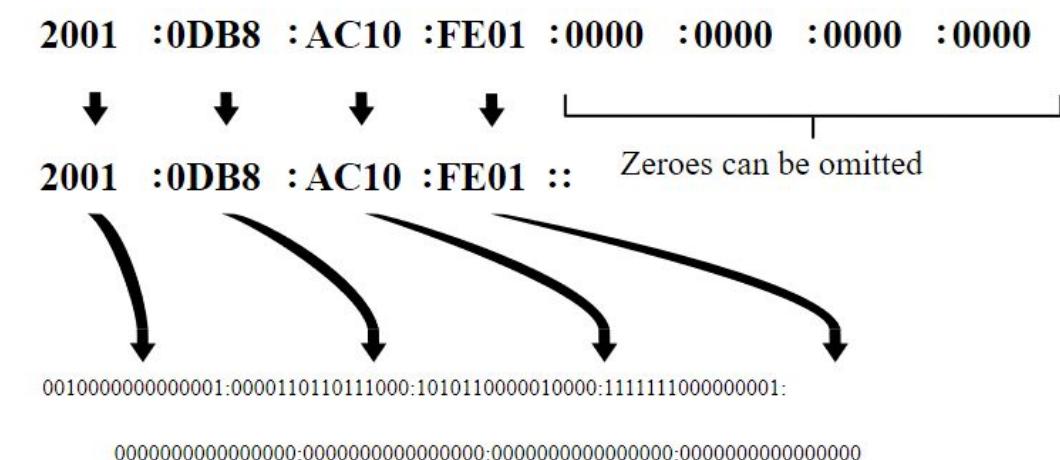
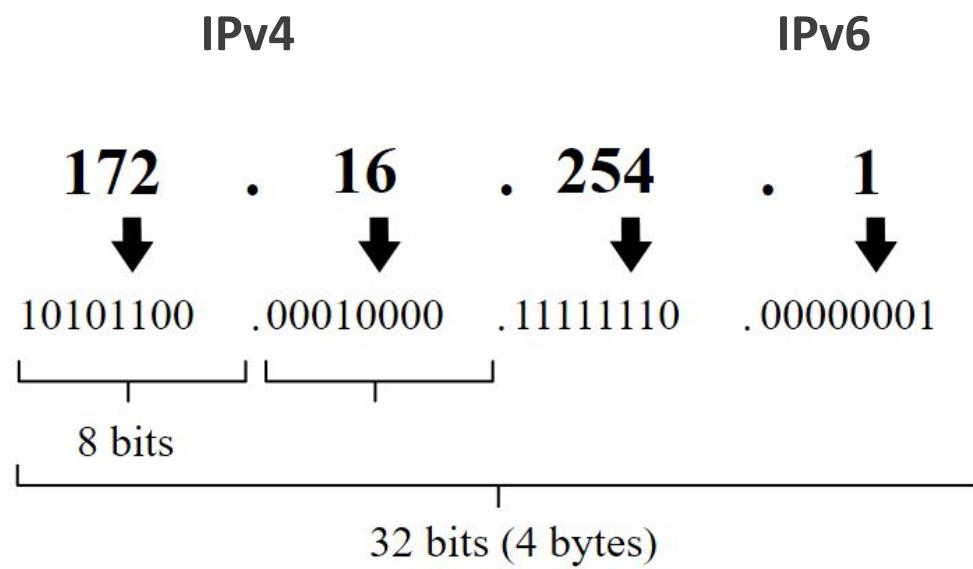
Организация:				
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# DNS (Domain Name System)



# IP manzil

IP manzil (Internet Protocol address) – aloqa uchun Internet protokolidan foydalanadigan, kompyuter tarmog'iga ulangan har bir qurilmaga tayinlangan raqamli metka.



# OSI modeli

Tarmoq - bu ikki yoki undan ortiq qurilmalarni bog'lanishidan hosil bo'ladigan aloqadir.

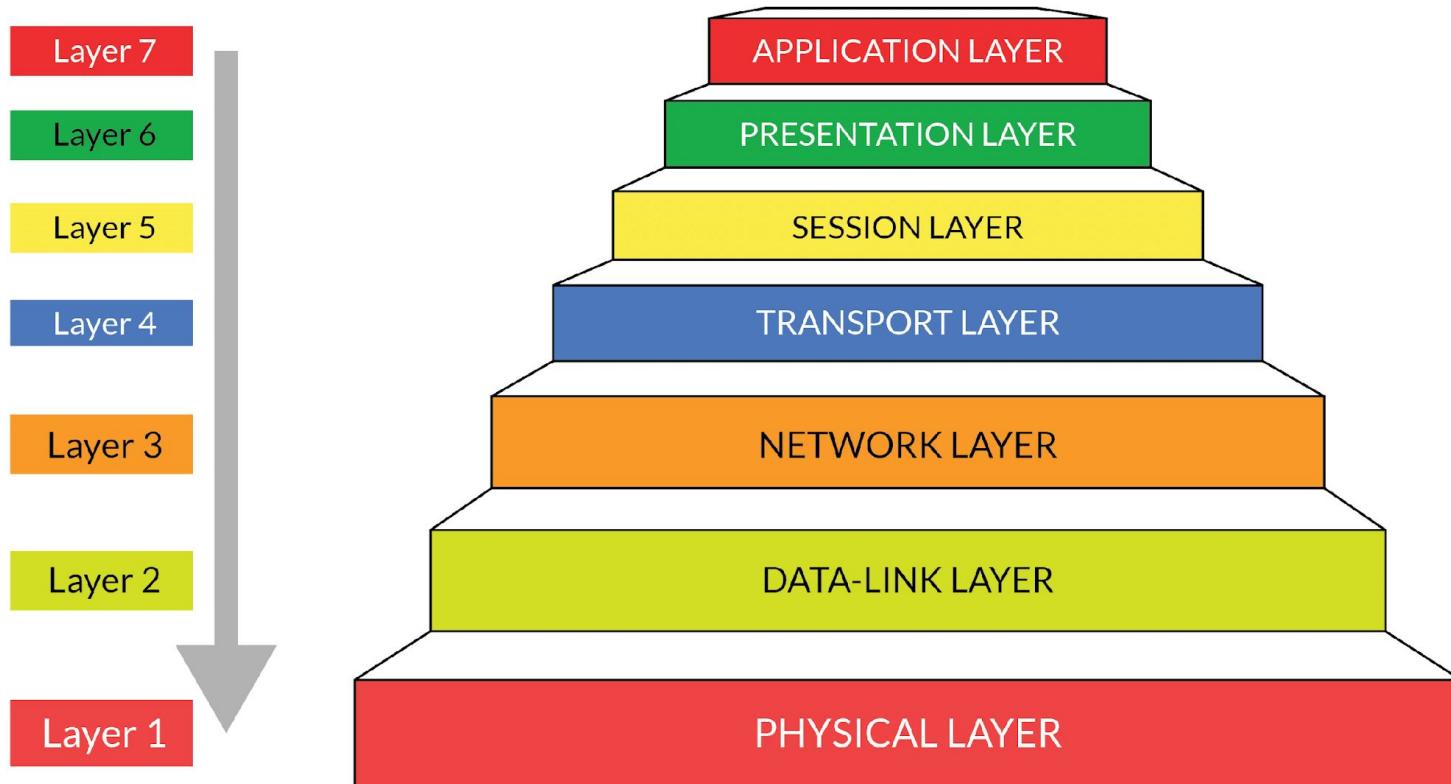
Tarmoqning ishlashi uchun OSI modeli va TCP/IP steki zarur hisoblanadi.

**OSI (Open System Interconnection) modeli** 7ta pog'onadan iborat.



# OSI modeli

Client Side

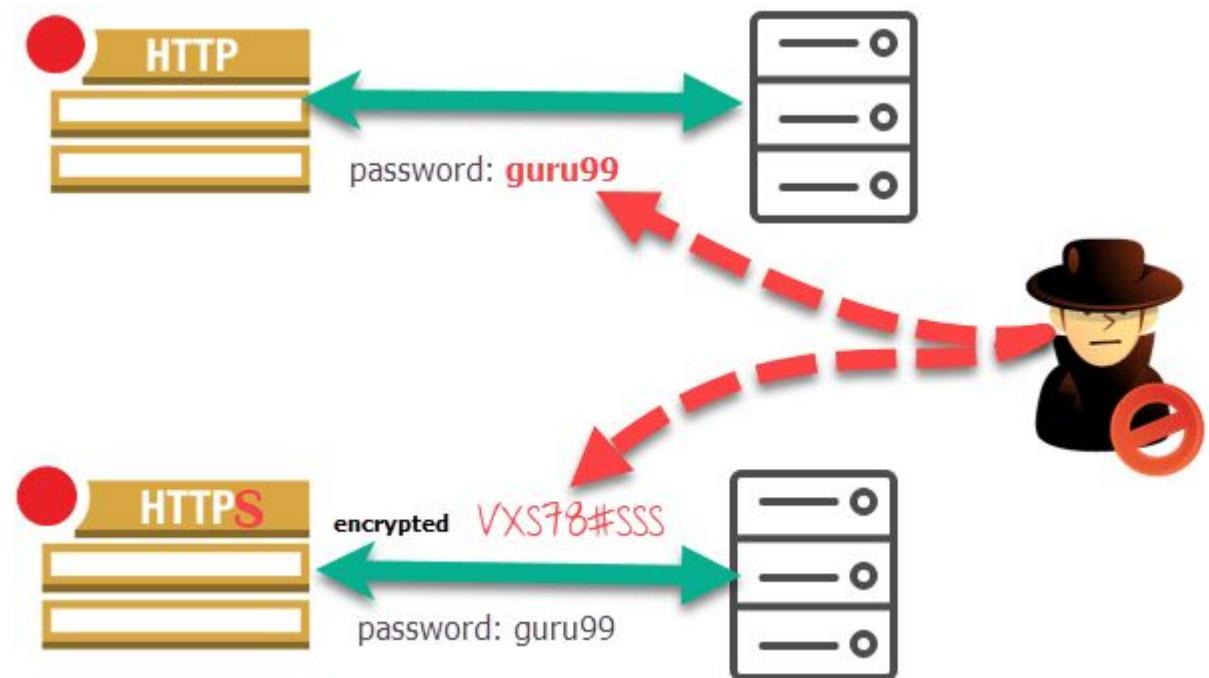


Server Side



# Web dasturchi uchun zarur protokollar

- HyperText Transfer Protocol (HTTP)
- Telnet
- File Transfer Protocol (FTP)
- Hypertext Transfer Protocol Secure (HTTPS)
- IP Security (IPSec)



# Brauzer

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Brauzer – web hujjatlar, kompyuter fayllari va kataloglarni o'zida saqlovchi sahifalarni ko'rishga, web ilovalarni boshqarishga va boshqa masalalarni yechishga mo'ljallangan dastur.



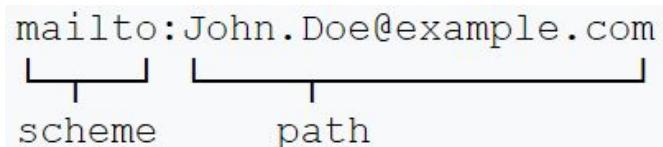
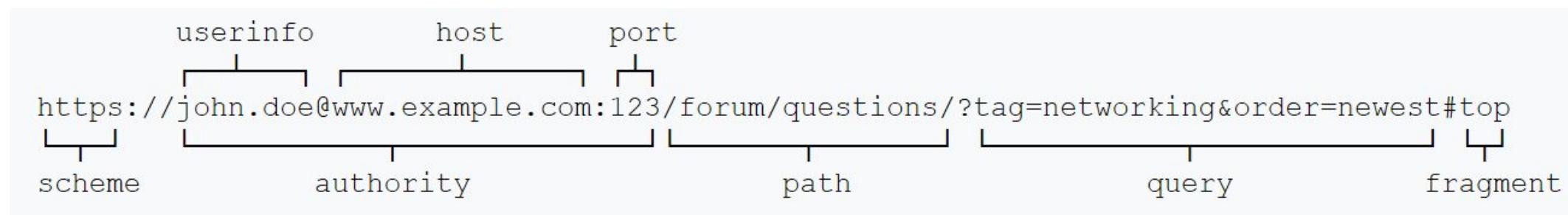
# URI, URL, URN

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**Uniform Resource Identifier (URI)**

**Uniform Resource Name (URN)**

**Uniform Resource Locator (URL)**

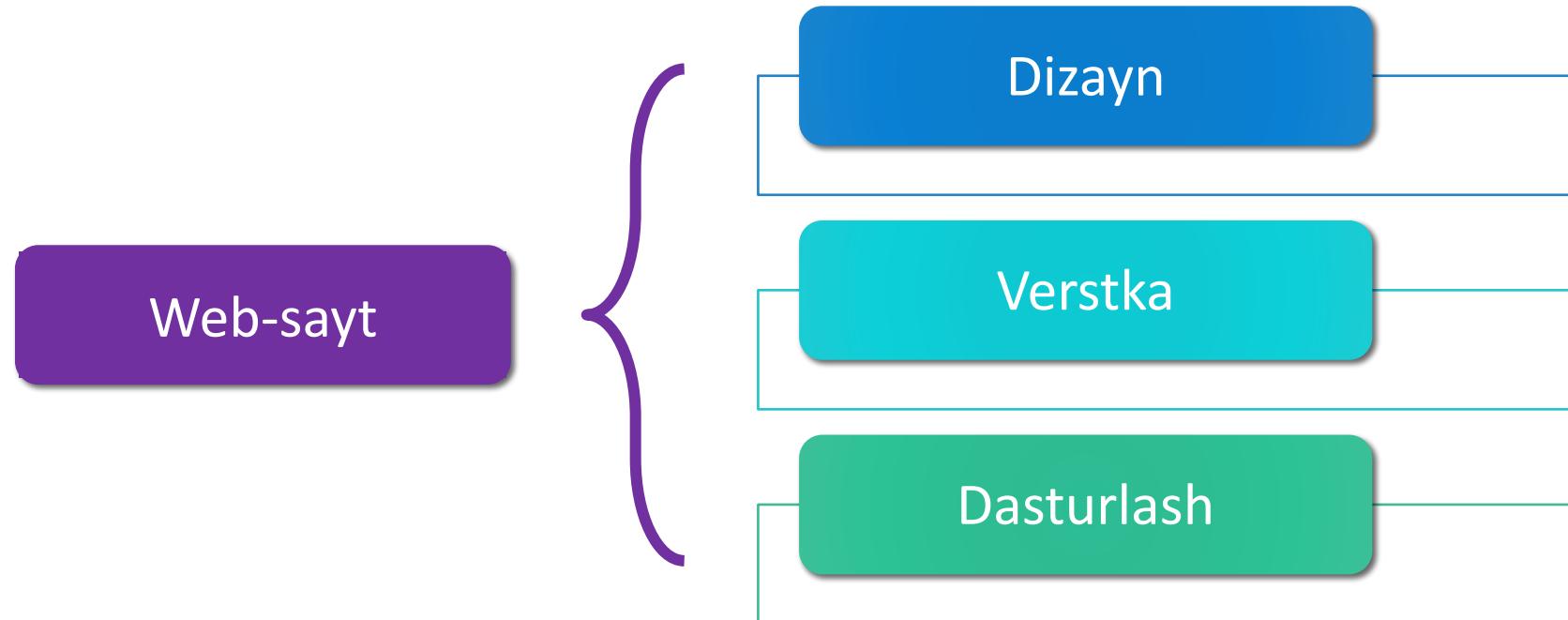


# Web sayt, web sahifa

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Web sayt – o'zaro mantiqan bog'langan bir nechta web sahifalar.

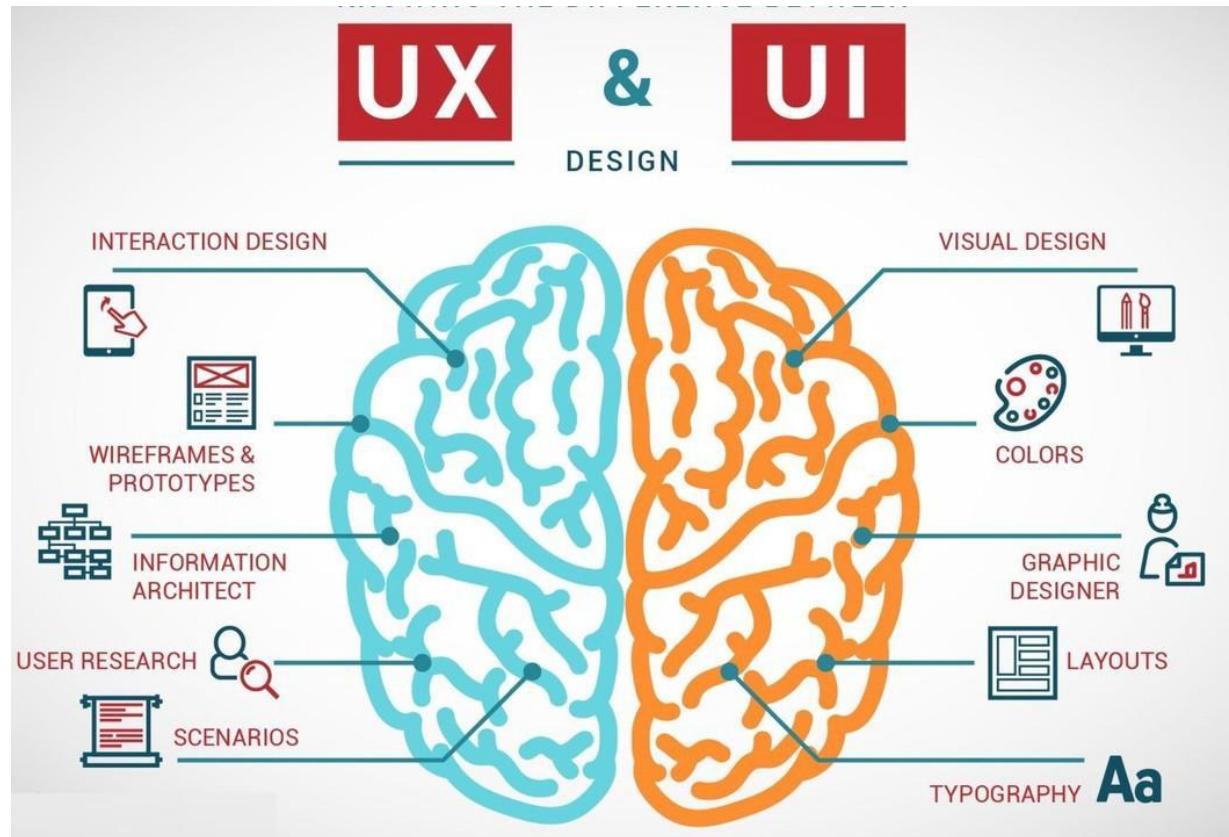
Birinchi web sayt - info.cern.ch (Tim Berners-Li, 1991 yil 6 avgustda ishga tushgan)



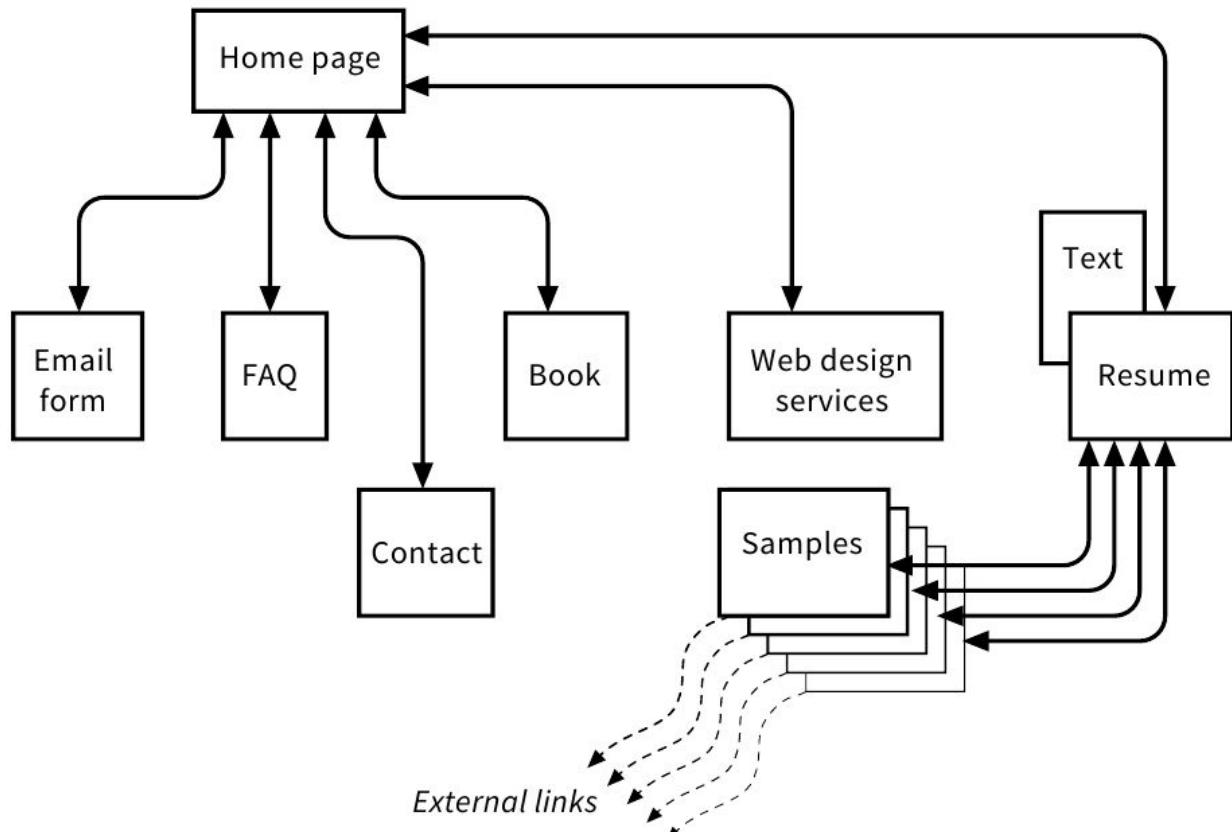
# Web dizayn (UX/UI)

**UX (User Experience)** – foydalanuvchi malakasi, ya'ni foydalanuvchi interfeys bilan ishlaganda qanday malaka (taasurot) olishi. O'z maqsadiga erisha oldimi va bu qanchalik oson / qiyin bo'ldi.

**UI (User Interface)** – foydalanuvchi interfeysi, ya'ni interfeys qanday ko'rinishi, ranglarning o'zaro mosligi, foydalanuvchiga biror tugmani bosish qulaymi, undagi matnni o'qish osonmi va h.k.



# Web dizayn (UX/UI)



LOGO

[Log in](#) or [Create Account](#)

Category SEARCH

All categories

Category1

Category2

Category3

Category4

Category5

Category6

[ PROMOTIONAL IMAGES ROTATE HERE ]

1 2 3 4

Today's Specials

**Product 1**

**Product 2**

**Product 3**

**Product 4**

**Product 5**

**Product 6**

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**ABOUT US**

[Company](#)  
[News](#)  
[Jobs](#)  
[Policies](#)  
[Contact](#)

**SOCIAL**

[Facebook](#)  
[Twitter](#)  
[Try our app](#)

**SERVICE**

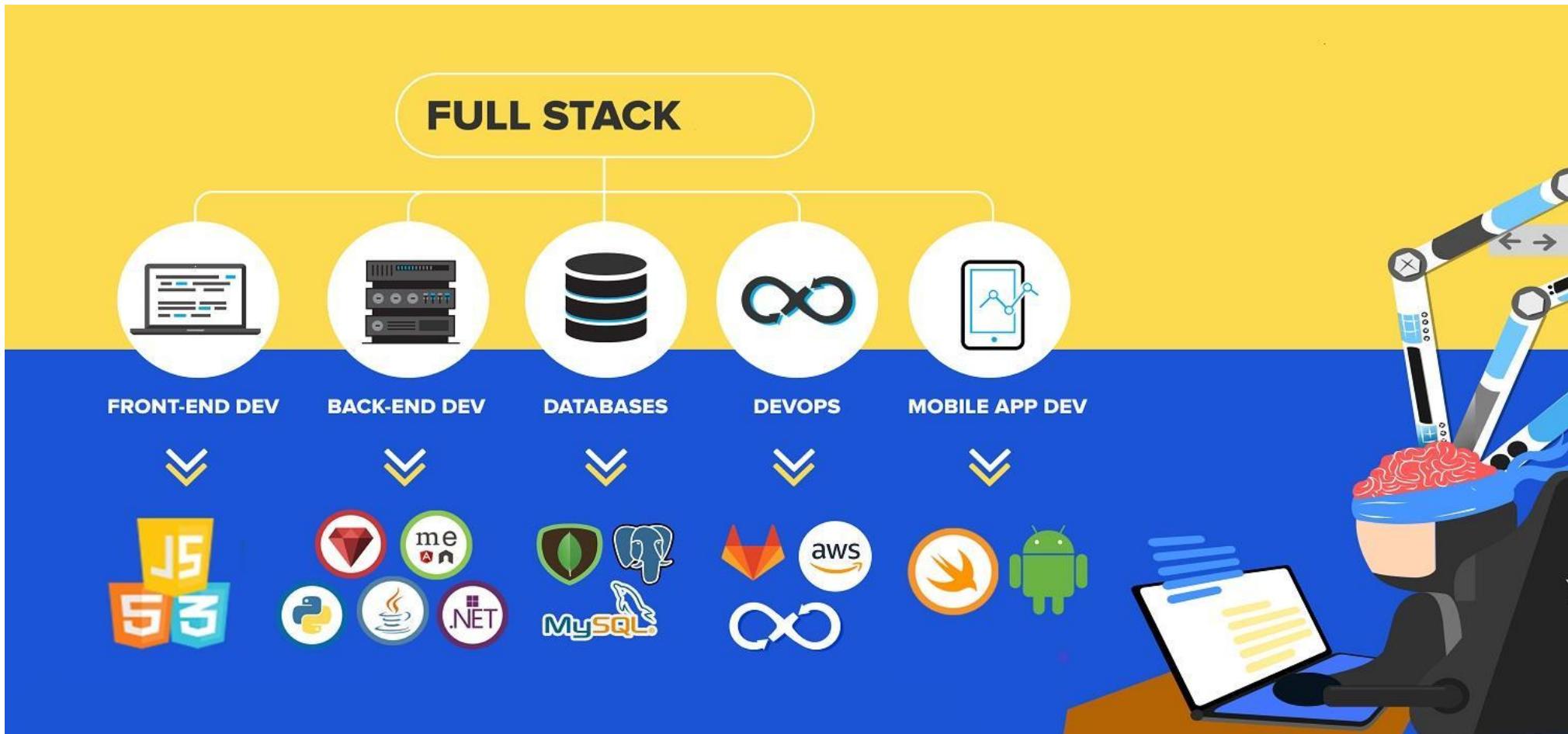
[FAQ](#)  
[Live support](#)  
[Site map](#)

# Web dasturchilar rollari

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# Web dasturchilar rollari



# Boshqa roller

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# Dasturchilar darajasi

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# HTML tili

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HTML tili (*HyperText Markup Language, Gipermatnli belgilash tili*) britaniyalik olim Tim Berners-Li tomonidan taxminan 1989-1991-yillarda yaratilgan.

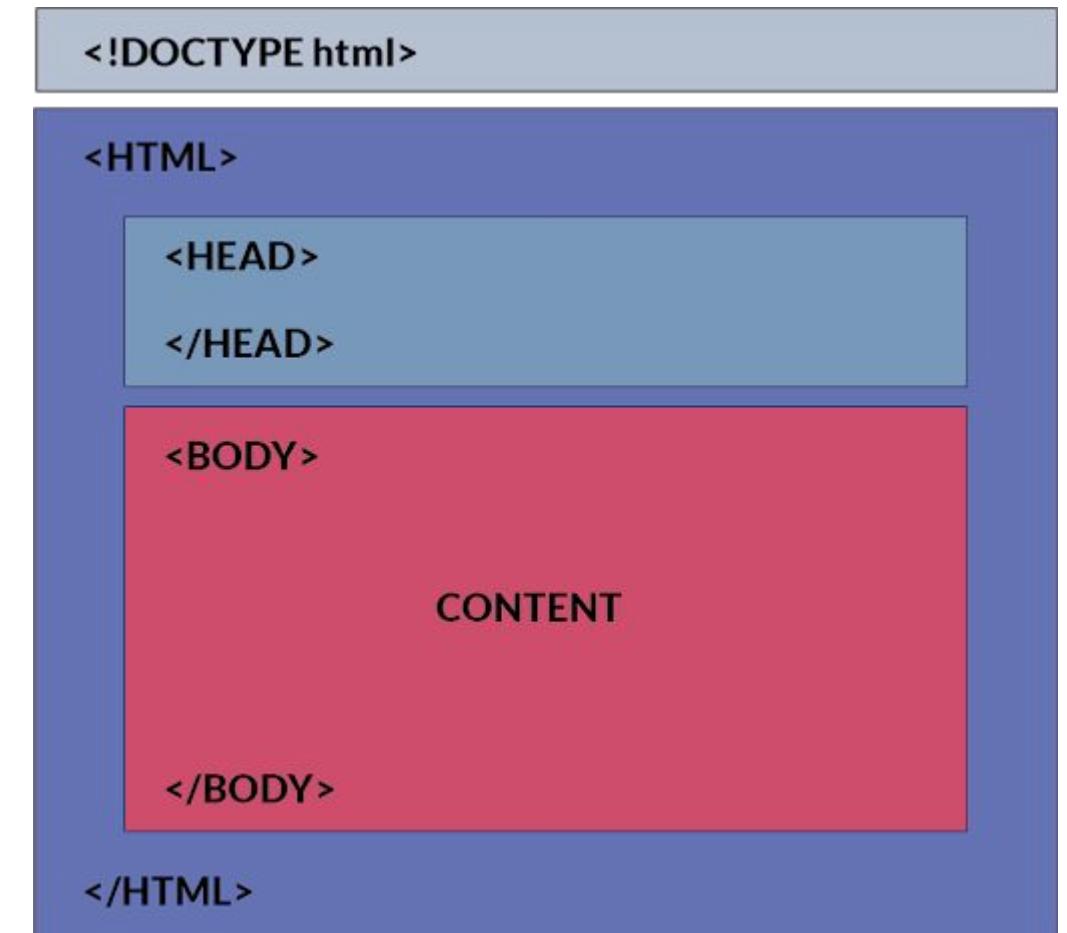
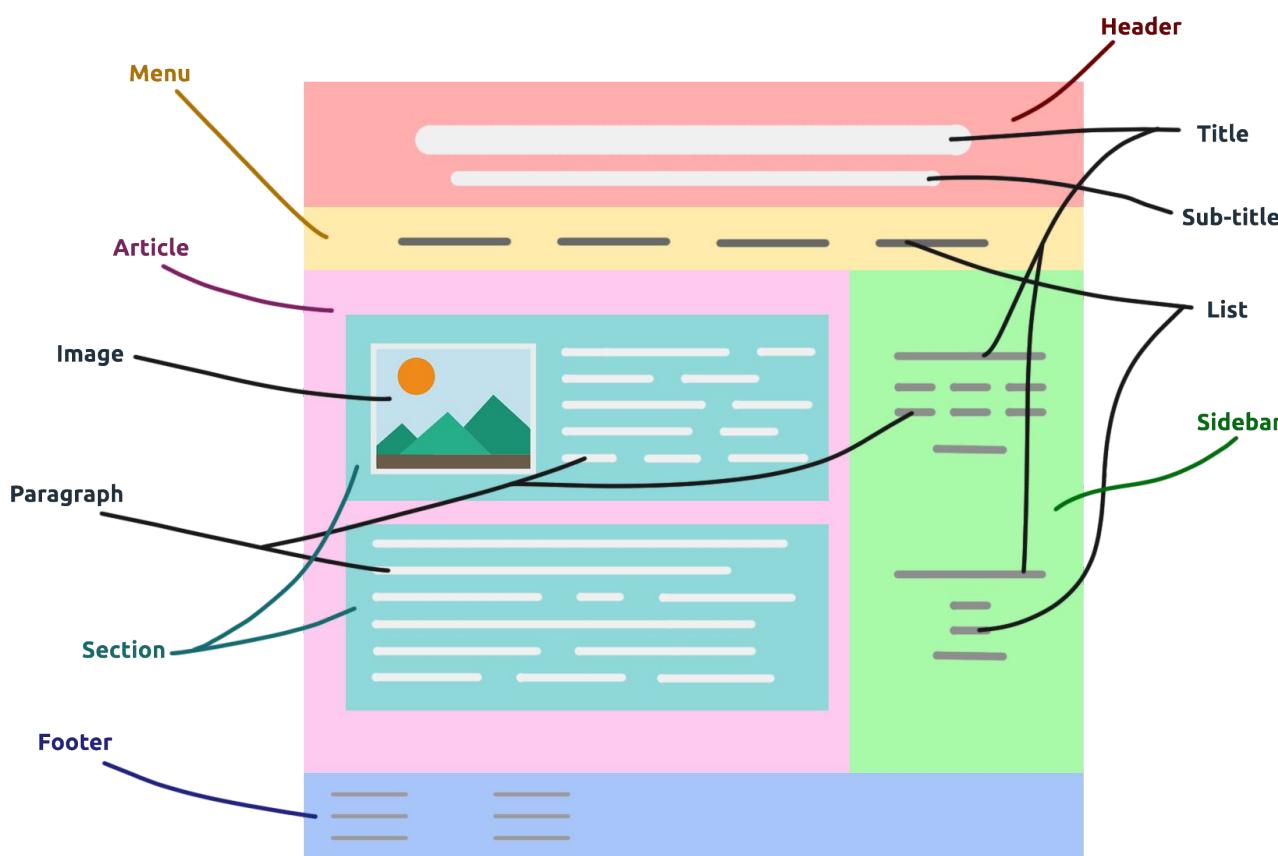
- HTML 2.0 – 1995-yil 22-sentabrda standart sifatida ma'qullangan;
- HTML 3.2 – 14.01.1997 yil;
- HTML 4.0 – 18.12.1997 yil;
- HTML 4.01 (sezilarli o'zgartirishlar kiritilgan) – 24.12.1999 yil;
- ISO/IEC 15445:2000 (ISO HTML nomlanadi) – 15.05.2000 yil.
- HTML 5 – 28.10.2014 yil.
- HTML 5.1 – 01.11.2016 yil
- HTML 5.2 – 14.12.2017 yil.

HTML formatidagi hujjatlar .html yoki .htm kengaytmasiga ega.

[www.w3.org](http://www.w3.org) - World Wide Web Consortium (W3C) web sayti (WWW uchun xalqaro standartlar organizatsiyasi)



# HTML тили



# Kod yozish uchun

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HTML, CSS, JS da kod yozish uchun oddiy matn muharriri kifoya. Lekin maxsus kod muharrirlaridan foydalanish qo'shimcha imkoniyatlar taqdim etadi, masalan, rangli kod, kod qismlariga ko'ra avtomatik to'ldirish, teglarni avtomatik yopish, xatolarni aniqlash va h.k.

Ko'p qo'llaniladigan kod muharrirlari:

- Visual Studio Code (<https://code.visualstudio.com/>)
- Sublime Text (<https://www.sublimetext.com/>)
- Atom (<https://atom.io/>)
- Brackets (<http://brackets.io/>)
- CodeKit (<https://codekitapp.com/>; Mac only)
- Adobe Dreamweaver (<https://www.adobe.com/products/dreamweaver.html>)
- Coda (<https://panic.com/coda/>)
- Webstorm (<https://www.jetbrains.com/webstorm/>)

# Code muharrirlari

The image shows a developer's environment with several windows open:

- Sublime Text:** A large window displaying a C++ file named `xla_compilation_cache.cc`. The code includes comments about XLA compilation and variable assignment.
- File Explorer:** Shows a file tree with folders like `tensorflow`, `third_party`, `tools`, `util`, and `CODEOWNERS`.
- Terminal:** A terminal window showing the command line path: `C: > Users > Qodirbek > Desktop > css2 > asd.html > html >`. It contains HTML code with a `<p>Hello world!</p>` tag.
- Project Explorer:** A sidebar showing the project structure with files like `real-time-package.js`, `buffer-binding.js`, `editor-binding.js`, etc.
- Code Editor:** A smaller window on the right showing a JavaScript file named `real-time-package.js`. The code defines a `RealTimePackage` class with a `constructor` and a `cons` method.

# Nomlashdagi qoidalar

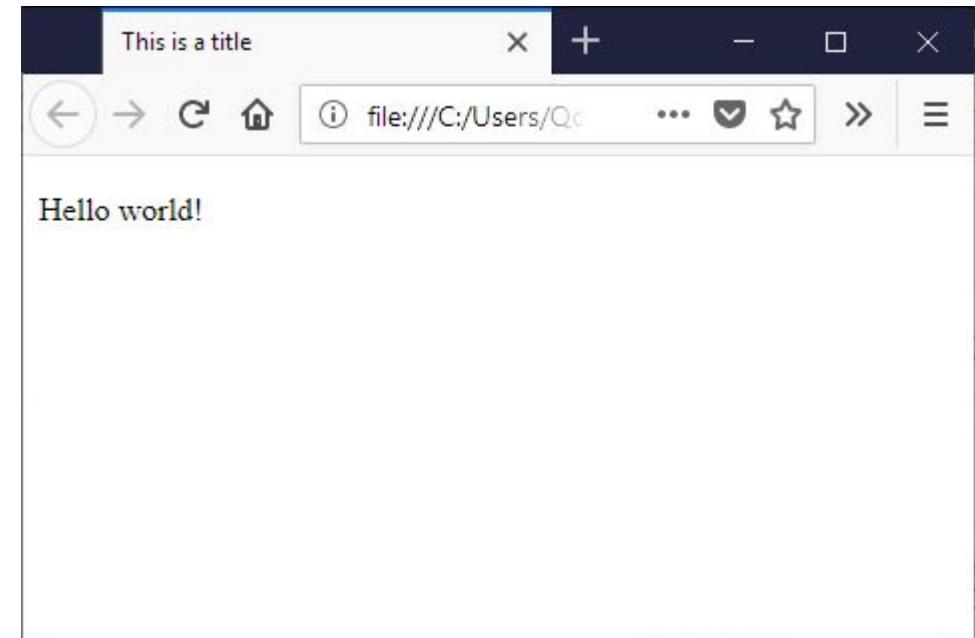
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- Fayllar uchun to'g'ri kengaytma tanlash kerak, .html yoki .htm. Rasmlar uchun odatda .gif, .png, .jpg (.jpeg) yoki .svg formatlari ishlatalishi maqsadga muvofiq;
- Fayl nomlarida '' (probel) belgisini umuman ishlatmang! Uning o'rniga '-' yoki '\_' (tire, tag chiziq) belgilarini ishlating, masalan: birinchi-kurs.html yoki birinchi\_kurs.html;
- Maxsus belgilarni ishlatishdan qoching. Masalan, ? % # / : ; , . Shuningdek, xalqaro belgilarni ishlatishdan ham qoching, masalan, å ü va h.k.;
- Fayl nomlari belgilar registriga sezuvchan bo'lishi mumkin (operations tizimga bog'liq). Shuning uchun fayl nomlarida kichik registrli harflarni ishlatish maqsadga muvofiq;
- Fayl nomlari qisqa bo'lishi maqsadga muvofiq;
- Fayllarni nomlashni oldindan kelishiv olish, masalan, doim kichik harflar va tireni ishlatish va h.k.

# HTML tilida soda web sahifa

---

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>This is a title</title>
  </head>
  <body>
    <div>
      <p>Hello world!</p>
    </div>
  </body>
</html>
```



# Brauzer e'tibor bermaydi:

---

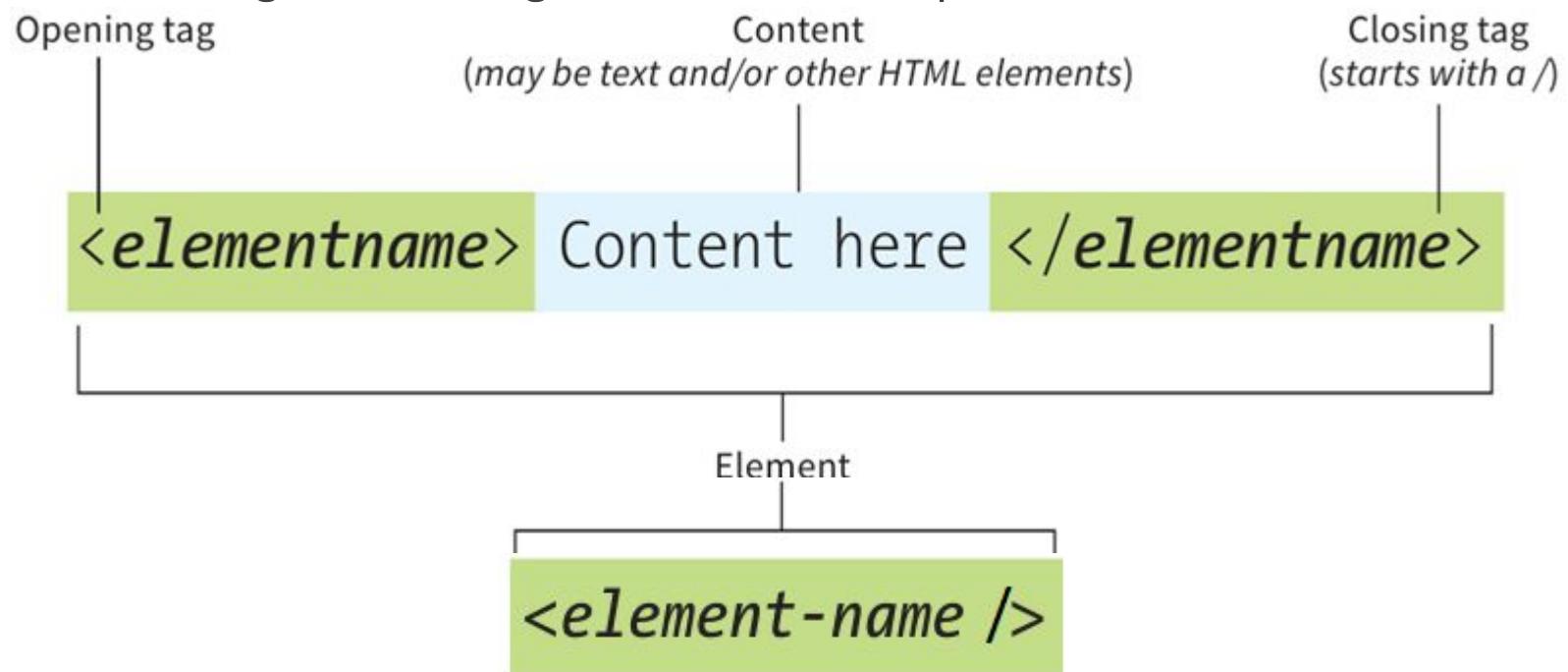
- Bir nechta probellar
- Yangi qatorlar
- Tablar
- Aniqlanmagan belgilar (teglar)
- Izohlardagi matn

Izohlar maxsus "<!--" va "-->" teglar orasida yoziladi.

# Teg

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Teg – HTML tili asosi. Teglar sahifadagi elementlarni aniqlashda ishlataladi



Example:

`<h1> Black Goose Bistro </h1>`

`<br />`



# Atribut

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Atribut – elementning turli xossalariiga qiymat yuklash uchun ishlataladi. Sintaksisi quyidagicha:

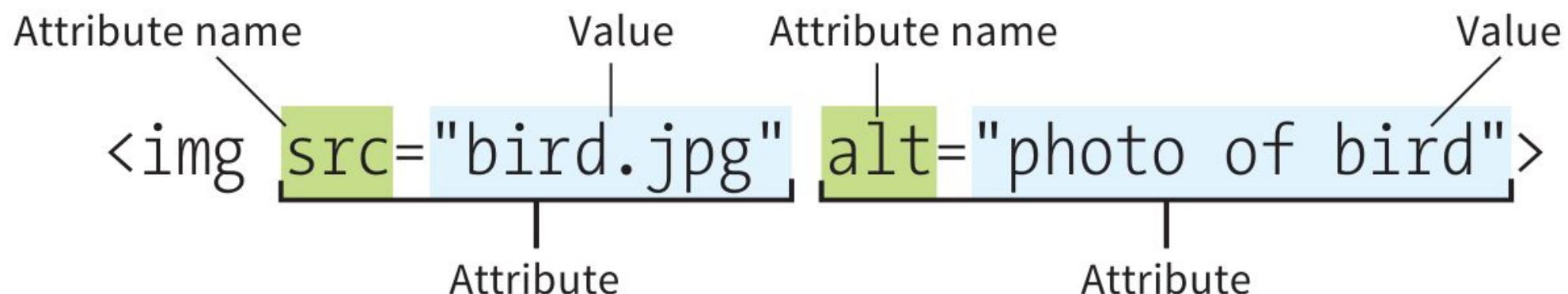
**attributename="value"**      **attributename**

Elementlarning ochiluvchi teglarida probel bilan ajratilgan holda ishlataladi:

```
<element attributename="value" />  
<element attributename="value">Content</element>
```

Element bir nechta atributga ega bo'lishi mumkin:

```
<element attribute1="value" attribute2="value" attribute />
```



# Meta teg

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<meta> tegi orqali HTML hujjatning metama'lumotlari (metadata) aniqlanadi. Metadata – sahifa haqida brauzer va qidiruv tizimlari uchun ma'lumot.

Atributlari:

charset – hujjat kodirovkasini aniqlaydi;

name – metateg nomi, shuningdek uning maqsadini belgilaydi

http-equiv – metategni HTTP sarlavhaga aylantirish uchun ishlatalidi

content – name yoki http-equiv yordamida aniqlangan atribut qiymatini o'rnatadi

```
<meta charset="utf-8">
```

```
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
```

# Meta teg

---

name atributi qiymatlari:

application-name – sahifa taqdim etayotgan web-ilova nomi

author – hujjat muallifi

description – joriy hujjat ta'rifi

generator – sahifani yaratgan dasturiy ta'minot

keywords – joriy hujjat uchun kalit so'zlar

viewport – foydalanuvchining ko'rish sohasini aniqlaydi

```
<meta name="author" content="John Doe">  
<meta name="description" content="Free web tutorials">  
<meta name="generator" content="FrontPage 4.0">  
<meta name="keywords" content="HTML, meta tag, tag reference">  
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

# Meta teg – name=viewport

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viewport siz



viewport bilan



*Etiam tempus dolor et enim. Curabitur aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet domino.*

# Savollar?

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