**Packet switching:**

**Circuit Switching:**

**Pros and cons:**

**GOPHER** – the origin of the internet basically, gave way to NCSA Mosaic, HTTP, Hypertext etc.

**MOSAIC** – first web browser

* Set up WebCrawler that would search through the web for content.

WWW starts out as a way of indexing and organizing the growing repository of information on the internet.

**Evolution of Web Development:**

|  |  |
| --- | --- |
| **Then** | Now |
| Simple HTML with little to no functionality | Websites are portals with high functionality |
| Static content | Dynamic content |
| Tables and graphics, coding for specific browsers | Complex formatting with CSS and better browser standards |
| No security, not much to hack really | Security is a real concern |

**WEB Basics**

* Tim Berners-Lee
* First web client and server in 1990
* Specifications for URIs, HTTP, and HTML
* Director of World Wide Web Consortium (W3C) since 1994

**Hypertext**

* Documents
* Anchors
* Links

**Uniform Resource Identifier (URI):**A screenshot of a computer

Description automatically generated

**Hyper-text Transfer Protocol (HTTP)**

* Communications protocol
* Web based document delivery
* Client/server architecture
* Light and fast
* Stateless

**HTTP 1.0 Client-Server Interaction**

1. Client connects to server
2. Client sends request
   1. GET: request a representation of the requested URI
   2. HEAD: return only the header of the requested URI
   3. POST: submit information to be processed by the request URI
3. Server sends response
   1. A close-up of a computer error

      Description automatically generated
   2. Codes:
      1. First number is code category
      2. 1XX – Informational code
      3. 2XX – Successful code
      4. 3XX – Redirection code
      5. 4XX – Client error
      6. 5XX – Server error
4. Server closes connection