

# Computing Networks and searching

## Overview



The internet is made up of multiple interconnected networks.

The World Wide Web is a section of the internet that allows users to access websites and webpages.

Search engines help people find information on the World Wide Web.

The internet is also a powerful tool for communication, offering various methods for different needs.



## Search Engines

We can use search engines to locate information on the World Wide Web.

A search engine is a tool that helps users find websites and webpages by matching results to the keywords they enter.

When Tim Berners-Lee created the World Wide Web in 1989, there was only one website. In 2025, that number had grown to over 1.13 billion! With so much content online, search engines are essential for finding what we need.

Popular search engines include Google, Bing, Yahoo, DuckDuckGo, and Kiddle.

You can also perform searches directly from the browser's address bar, such as in Google Chrome or Microsoft Internet Explorer.

## Selecting and ranking search results

### Selecting search results

Search engines rely on special programs called crawlers to scan and organize content from the World Wide Web.

These crawlers explore websites, gather searchable information, and store it in a massive index.

When we enter keywords into a search engine, it pulls relevant results from this index.

Some search terms can generate millions of results, making it important to refine our searches.

Using precise keywords helps the search engine provide the most relevant information.

### Ranking search results

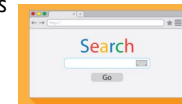
Search engines organize web pages by ranking them.

This ranking is determined by algorithms, which assess various factors and assign each page a score.

The page with the best score appears at the top of the search results.

Factors influencing ranking include whether the search term is in the page title (which earns a higher score) or within the main text (which earns a lower score).

Web designers take these algorithms into account when creating websites.



## Online communication

Communication involves exchanging information with others, and the internet provides many ways to do this, such as messaging apps, emails, social media, video calls, blogs/vlogs, and gaming platforms.

Public communication can be seen by anyone, whereas private communication is limited to specific people.

Some forms of communication are one-way, like YouTube, while others allow two-way interaction, such as Skype.

## Key Questions

What is a search engine?

*A website for finding information on the internet.*

Name a search engine.

*Google, Bing, Yahoo, Kiddle, etc.*

What does a crawler do?

*Explore websites and store information in massive indexes*

Why is it important to make precise searches?

*Searches can generate millions of results.*

Who can see public communication?

*Anyone.*

## Key Vocabulary

Search Engine, Refine, Index, Web Crawler, Ranking, Links, Searching, Selection, Communication, Public, Private, SMS, Blog, World Wide Web