

How Search Engines Work

Professor
School
Search Engine Optimization



Co-funded by
the European Union



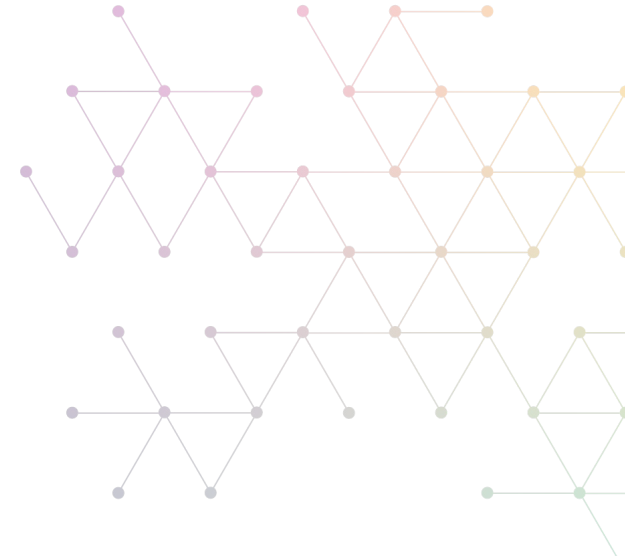
UNIVERSITY
OF APPLIED
SCIENCES
UTRECHT



“Search before the internet”

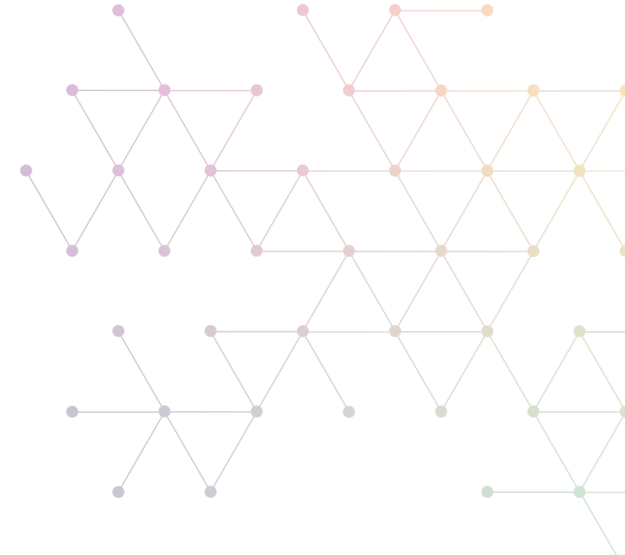
How did users search for information before the advent of the Internet and the Web?

- What resources were needed?
- Information is power. Who held the power?



“Search before the internet”

- Compare the resources that were needed before and the resources that are needed now
- We search anytime, anywhere, anyone, restrictionless and effortless



Learning Objectives

- Describe how search engines work
- Explain how to submit a website to a search engine



Topics

- Key components of a search engine
- How search engines work
- How to submit a website to a search engine

**“With data collection, ‘the sooner the better’ is
always the best answer”**

Marissa Mayer



Co-funded by
the European Union

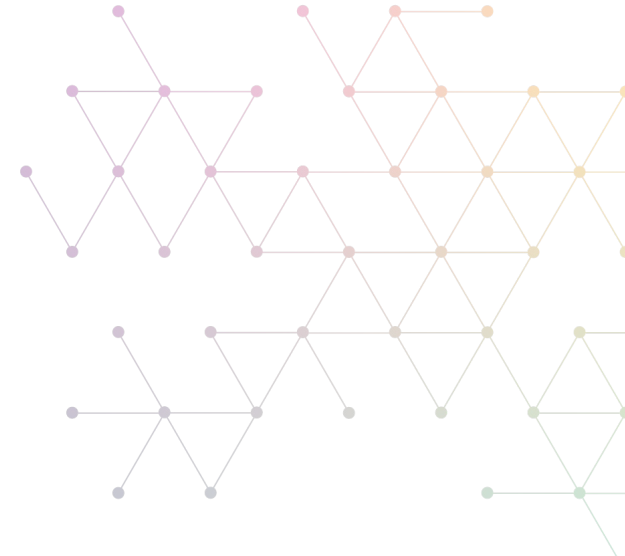
Key components of a search engine





Key components of a search engine

1. Spider, bot or crawler
2. Indexer
3. Answers to the queries

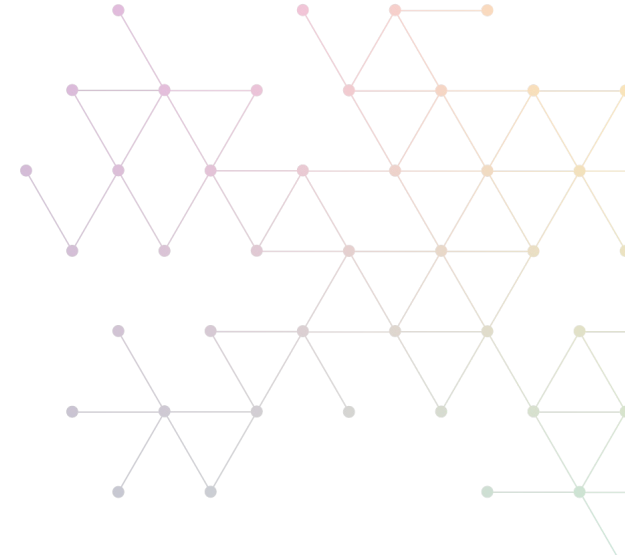


How search engines work



How search engines work

Search engines work by using web crawlers, also known as bots or spiders, to discover new websites and index their content. When someone performs a search, the search engine uses algorithms to match the search query with the indexed content and display the most relevant results



Assessment Activity

- ✓ Search the Internet and identify the main operators you can use when making a search
- ✓ Which operators are the most important? Why?

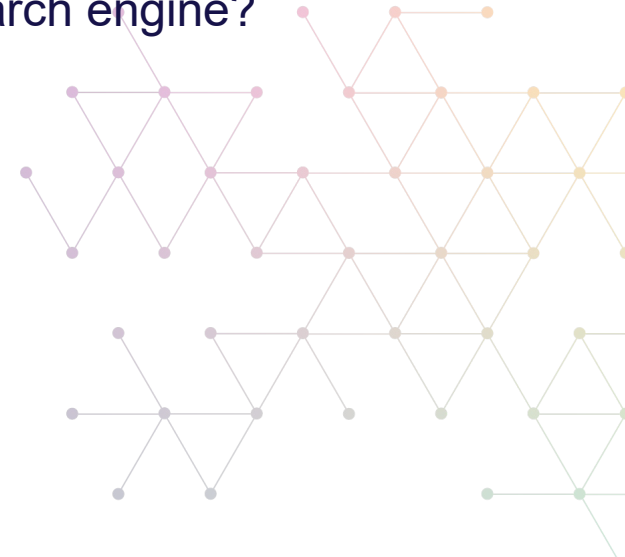


Consolidation Activity



Consolidation Activity

- How can you prevent a website or parts of a website from being indexed by search engines?
- How can you tell which pages are indexed by a search engine?





How to submit a website to a search engine



How to submit a website to a search engine

1. You need to create an account with the search engine's webmaster tools. To do this, go to the search engine's website and look for a link to the webmaster tools or sign-up page.
2. Once you have an account, log in and navigate to the "Add a URL" feature. This may be located under a section called "Crawling" or "Indexing."
3. Enter the URL of your website's home page and click on the "Submit" button. The search engine will then begin to crawl your website and index its content.



How to submit a website to a search engine

- Some search engines do not have a submission option
- Search engines do index, but indexing is not immediate
- Search engines may not index all pages on the Web site
- Search engines only index the content they can find



What is a sitemap?





What is a sitemap?

A sitemap is a file that provides information about the web pages of the website, the content, such as videos, and other files on your site, and the relationships between them.





Why is a sitemap important?

Sitemaps are important for search engines because they provide a way for search engines to easily find and crawl the pages on your website. By creating a sitemap and submitting it to search engines, you are letting them know about all the pages on your website and giving them the opportunity to include those pages in their search results. This can help improve the visibility of your website in search engine results, which can ultimately lead to more traffic and potential customers for your business.



Why is a sitemap important?

Without a sitemap, you won't be able to provide search engines with additional information about your pages, such as when they were last updated or how often they are likely to change.



Assessment Activity

Choose a website:

- Show how you know which pages are indexed
- Show how you know which pages have certain keywords



Co-funded by
the European Union

Consolidation Activity



Consolidation Activity

Choose a website:

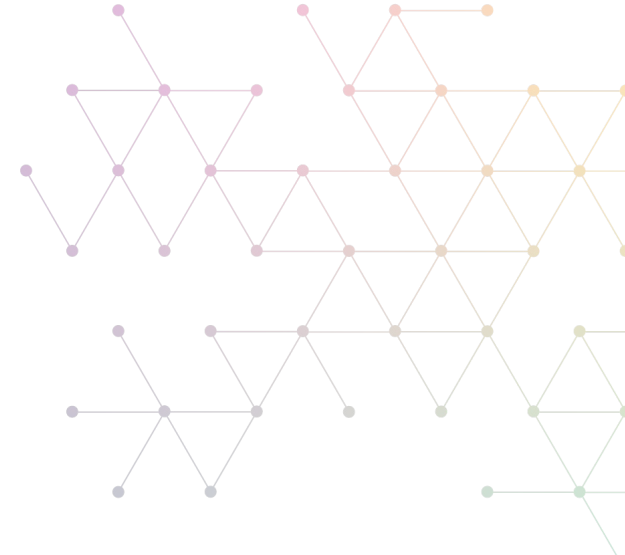
- Check which pages are indexed in the search engines Google, Yahoo, Bing, Yandex and Baidu
- Compare the results



Co-funded by
the European Union

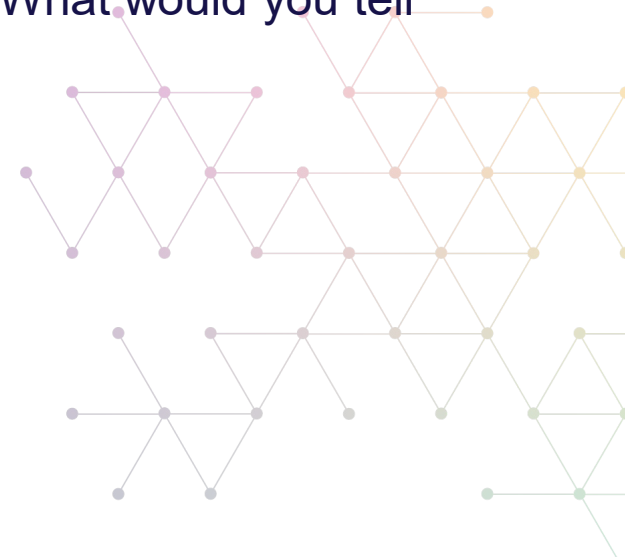
Recap of Learning Objectives

- Now, can you describe how search engines work?
- Now, can you explain the submission process of a website to a search engine?



Recap of Learning

- Describe a connection you can see between today's material and the way you use search engines.
- Pretend a classmate was absent from class today. What would you tell them?



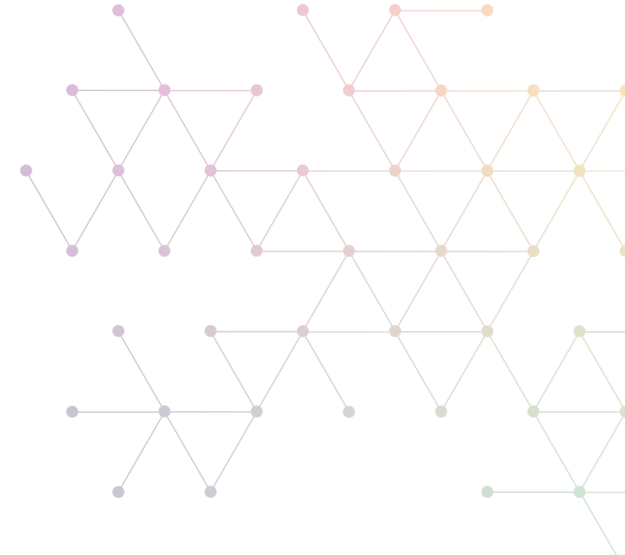
Questions?



Co-funded by
the European Union

Next class...

- SEO strategy



Disclaimer

The DEMS material aims to enhance digital marketing skills in higher education, comprehending the essential needs in organizations. You have access to extensive slide sets with in-class activities and assignments, as well as detailed user instructions for teacher.

Note: The material includes contents and figures retrieved from the internet and is thus subject to changes. The sources have been announced according to the rules of fair use. The publisher's responsibility is restricted to the original material stored at www.dems.pro. All material is produced for open use and co-funded by Erasmus +.

