# Search

Search Engines and Search Directories

# History – pre-1998

#### Search engine

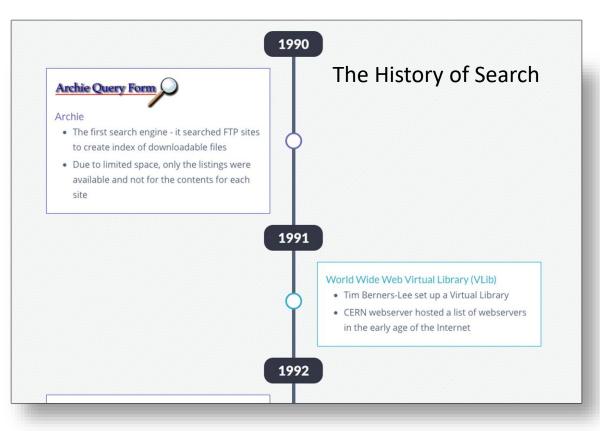
- Automated programs (spiders, robots) go link-to-link looking for data to index in their database(s)
- Examples: HotBot, Ask Jeeves, Dogpile, AltaVista

#### Search directory

- A catalog of websites organized by category
- Organized by people who discover new sites and relevant information by exploring the Internet themselves and by reviewing submitted sites
- Example: <a href="www.dmoz.org">www.yahoo.com</a> (pre-2014)
  - Historically, DMOZ provided database access to search engines like Google, Yahoo, others, to enhance their results (not anymore)

## Evolution

- Yahoo! founded: January 1994
  - Started as a directory (manual)
- AltaVista founded: December 1995
  - The first search engine (automated)
- Google founded: September 1998
  - Started as a search engine
- Bing, formally Live Search, formally MSN Search founded: 1998
  - New business practice: licensing content
  - Originally used Overture, Looksmart, and Inktomi data under their own brand



### Definitions

- Search robots
- Search Engine Results Pages (SERP)
- "Organic" results vs. Paid Placements
- "Paid model"
  - Impressions
  - Page views
  - Pay per click (PPC) and Cost per (thousand) Impressions (CPM)
  - Clickthrough rate (CTR)
- SEO, SEM, SMO