Today's lecture gives a fairly thorough overview of different approaches to hashing. First, we talk about different hash functions and their properties, from basic universality to k-wise independence, to a simple but effective hash function called simple tabulation. Then we talk about different approaches to using these hash functions in a data structure: basic chaining, (dynamic) perfect hashing, classic but tricky-to-analyze linear probing, and the more recent cuckoo hashing.

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