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Given a large file with sentences and query string, design a system (Class, data structs, functions, etc) and algorithm to return the smallest window (start and end offsets) in the input file where the query words (in any order) are seen in the text file. What is the time complexity?

(/question?id=5720301565378560) - Ray (/user?id=6011859920486400) May 01, 2017 (2017-05-01T18:22:19.726440Z) in United States | Report Duplicate (/reportduplicate?id=5720301565378560) | Flag (/flagquestion?id=5720301565378560)



How do you design a system for very large graphs(does not fit in a single machine)?

(/question?id=5662125751009280) - Matt Chad (/user?id=19691734) January 31, 2016 (2016-01-31T02:55:39.473540Z) in United States | Report Duplicate (/reportduplicate?id=5662125751009280) | Flag (/flagquestion?id=5662125751009280)



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comprehensive book on getting a job at a top tech company, while

> How would you store the relations in a social network like Facebook and implement a feature where one user receives notifications when their friends like the same things as they

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How would you optimize an elevator system for a building with 50 floors and 4 elevators? Optimize in terms of lowest wait times for the users. Nothing related to power consumption.

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8/1/18, 10:14 AM Software Engineer in Test (820)

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design a video thumb up/down system at youtube scale. how to concurrent read/write, persistence, store, update....etc.

(/question?id=5678600256749568) - rjrush (/user?id=20688670)
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Given n number of legacy services with user data<userid, info, date>

Design an API to return user data in a given date range, it should collect data from each service and merge and return the data sorted by date.

(/question?id=5288170230906880) - next_big_gig (/user?id=134679)

December 05, 2014 (2014-12-05T17:57:45,786910Z) in United States |

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Need to implement something like pastebin wherein you paste some text, you are given an url. The url can be used anywhere to access the text.

Various problems, features and design of this architecture were discussed.

(/question?id=5701782818783232) - kenadams.awesome (/user?id=5635124926349312) May 18, 2014 (2014-05-18T20:38:55.220440Z) in India | Report Duplicate (/reportduplicate?id=5701782818783232) | Flag (/flagquestion?id=5701782818783232)



What would happen if you have only one server for a web cache (a web browser cache whose key is url and value is the loaded content of the webpage) but huge numbers of clients? And how would you solve it? Assume the cache is implemented with a hashmap and a linkedlist.

 $\label{eq:constraints} $$ (\text{question?id} = 4807591515389952) - Guy $$ (\text{user?id} = 5668113790009344) $$ \underline{\text{March 06. 2014}}$ $$ (\underline{2014-03-06T17:57:53.434760Z})$$ in United States | Report Duplicate $$ (\text{reportduplicate?id} = 4807591515389952)$$ | Flag $$ (\text{flagquestion?id} = 4807591515389952)$$ $$$



How would you split a search query across multiple machines?

 $\label{eq:constraints} $$ (\text{question?id} = 5377673471721472) - Guy $$ (\text{user?id} = 5668113790009344) $$ $$ \underline{\text{February 10.2014}}$$ $$ (2014-02-10703:54:43.356540Z) $$ in United States | Report Duplicate $$ (\text{reportduplicate?id} = 5377673471721472) | Flag $$ (\text{flagquestion?id} = 5377673471721472)$$ $$$



How does trie handle scalability as opposed to hashtable? Assuming it is used for a dictionary. Sclability here should cover large size of input, running out of memory, or even running out of memory on multiple machines if distributed system is used.

(/question?id=6577142510911488) - Guy (/user?id=5668113790009344) February 06, 2014 (2014-02-06T04:27:38.429910Z) in United States | Report Duplicate (/reportduplicate?id=6577142510911488) | Flag



What happens during and after a query is being typed (autocomplete) in a search box whether the user is trying to go to a website or asking a question etc, and how do servers complete the request and what is the best (parallel) structure for the request to go through. DFS and how servers are located for proximity

(/question?id=5795040777469952) - Guy (/user?id=5668113790009344) <u>January 30, 2014</u> (<u>2014-01-30T23:35:36.7615902</u>) in United States | Report Duplicate (/reportduplicate?id=5795040777469952) | Flag (/flagquestion?id=5795040777469952)



The setup is that we are given a series of text files which contain information regarding a code repository's commits. Each file represents a single commit and they are formatted as follows:

Commit #: XXX
Author: XXX

Reviewer(s): XXX, XXX, ...

File: XXX File: XXX

...

Date: XX:XX:XX XX/XX/XXXX

The commit number is unique and is generated in synchronous order. There is exactly 1 unique author. There are a variable number of reviewers, delimited by commas; if there are no reviewers, that line is absent from the file. There are a variable number of edited files in the commit, each receiving its own line. The time/date is when the commit was submitted.

First design a graphical model for all of the commit data. Then describe how this model is updated when a new commit is generated. Finally, write the code segment called when a new commit is generated which edits a system that has implemented your model of the data - its input is a file name and whatever necessary data structures that are maintained by your system.

 $\label{eq:constraints} $$ (\text{question?id} = 5105977028247552) - Guy $$ (\text{user?id} = 5668113790009344) $$ | anuary 29, 2014 $$ (2014-01-29722:35:00.003660Z) $$ in United States | Report Duplicate (\text{greportduplicate?id} = 5105977028247552) | Flag $$ (\text{flagquestion?id} = 5105977028247552)$$ | $$$



How would you synchronize a linked list across multiple computers. If nodes are added/removed to a linked list on one computer, all others must reflect this change. Concurrancy must be accounted for. (java)

 $\label{eq:constant} $$ (\text{/question?id} = 5695609600212992) - Guy $$ (\text{/user?id} = 5668113790009344) $$ | \underline{anuary 22, 2014}$$ (\underline{2014-01-22T06:54:41.0844002})$$ in United States | Report Duplicate (\text{/reportduplicate?id} = 5695609600212992) | Flag $$ (\text{/flagquestion?id} = 5695609600212992)$$ $$$



Design Short URL. (I am not sure what it even means)

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18 Answers (/question?id





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How would you model the animal kingdom (with species and their behavior) as a class system?



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How would you model the animal kingdom (with species and their behavior) as a class system? Java

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How would you model the animal kingdom (with species and their behavior) as a class system?



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Design a Rubik's Cube, including backend database portion.

7 Answers (/question?id

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design a system to return an unique ID for each request. For most of requests, the ID value should increase as time goes, the system should handle 1000 requests per second at least. timestamps alone is not valid since there might be multiple requests with same timestamps.



 $\label{eq:constraints} $$ (\text{\sc duestion}: id=5169800024162304) - \text{codingfunnyguy} $$ (\text{\sc duestion}: id=5161939730694144) $$ \underline{\text{December 04. 2013}}$ $$ (2013-12-04T02:51:41.169890Z) $$ in United States | Report Duplicate (\text{\sc duestion}: id=5169800024162304) | Flag (\text{\sc duestion}: id=516980024162304) | Flag (\text{\sc duestion}: id=516$



Given a large network of computers, each keeping log files of visited urls, find the top ten of the most visited urls. (i.e. have many large <string (url) -> int (visits)> maps, calculate implicitly <string (url) -> int (sum of visits among all distributed maps), and get the top ten in the combined map)

Answers (/question id

The result list must be exact, and the maps are too large to transmit over the network (especially sending all of them to a central server or using MapReduce directly, is not allowed)



How do you make sure an API does not leak memory?





design a server architecture for serving Google maps images

(/question?id=13148675) - GKalchev (/user?id=12932664) March 23, 2012 (2012-03-23T15:26:26.143162Z) in United States | Report Duplicate (/reportduplicate?id=13148675) | Flag (/flagquestion?id=13148675)





Design a distributed system for storing a static set of (key,value) pairs and should serve user-queries(users provide a key, and system should return a the value).

This was a system design question where I was supposed to find the number of m/cs required, networking between them, hard disks, distributing the values across them, identify bottlenecks, replication, reliability, estimation of response time, throughput etc.

For designing the system, he gave me set of resources, like configuration of the machines available, Ethernet cable B/w, etc

(/question?id=8706680) - Anonymous <u>April 28, 2011</u> (<u>2011-04-28T23:13:47.251870Z</u>) | Report Duplicate (/reportduplicate?id=8706680) | Flag (/flagquestion?id=8706680)





how you will design system for server and which will have many clients, all clients will keep of adding some words to system and server has to detect which words to accept, at the same time server will also keep on adding words. So which data structure you will use so that system will be efficient and fast. Answers (/question?ic

(/question?id=7391666) - ashish January 09, 2011 (2011-01-09T05:56:07.384868Z) | Report Duplicate (/reportduplicate?id=7391666) | Flag (/flagquestion?id=7391666)



Design a logging system for an application server? see to it that Logging system you define does not include a large overhead in case of large loads to server? Answer (/question?id

(/question?id=316717) - G January 29, 2010 (2010-01-29T02:23:43.586657Z) | Report Duplicate (/reportduplicate?id=316717) | Flag (/flagquestion?id=316717)

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