Interview Preparation

Lecture: 15 – System Design Discussions

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System Design Discussions

1. Open Ended Discussions
2. Process and not the final conclusion

Requirements Collections

Architecture Design

Individual Components

Final Analysis

Lets discuss few problems

1. URL Shortner
2. News Feed
3. Search Engine
4. Design LRU cache
5. Automatic reference Counting in CPP

Brain Teasers and Probability

Brain Teasers and Probability

1. Monty Hall problem

2. Amar and Akbar both tell the truth with probability 3/4 and lie with probability 1/4. Amar watches a test match and talks to Akbar about the outcome. Akbar, in turn, tells Anthony, "Amar told me that India won". What probability should Anthony assign to India's win?

3. Given two dice, one of which has all faces blank. Fill in the blank dice so that you when you roll both of them together, the probability of sum being any of 1-12 is equal.

4. In basket ball game for a player to win a game challenge 1) 2 out of 3 throws should be basket challenge 2) 5 out of 8 throws should be basket

which challenge should the player choose so that he might have better chance of winning the game?

Brain Teasers and Probability

5. What is the probability of 5 people with different ages sitting in ascending or descending order at a round table

6. There are 1000 balls in a bag with 900 black and 100 white ones. Find the probability that 101st drawn ball is black.

Pending doubts with me

Thank you

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