Amazon interview Experience | Set 412 (SDE II)

• Difficulty Level :\nHard

• Last Updated:\n12 Jul, 2019

Overall process time: 2 months(Sep\xe2\x80\x9917 to Nov17)

Overall 60+ people Total Rounds: 6

Overall Difficulty: 2.5 \xe2\x80\x93 3

Round 1:

(3 codes on paper)

• Given a set of yesterday Amazon stock prices {2, -3, 5, 8, 1}
Write a code to buy and sell those stocks at maximum profit.\xc2\xa0 Before sell, you must buy it at minimum price. \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 There should be one minute gap between buy and sell. Gain maximum profit by buying and selling 1 unit (very simple need to find min and max, I did it using thread join) GeeksforGeeks Link

Convert a BST to a sum tree

• Given a 1D Array. Return True if there exists an element where a[i]+a[j] = 0 && i!=j. Reference :\xc2\xa0<u>Find Pair Given Difference</u>

Input: $arr=\{2,3,4,1,-6,-4,1\}\r\nOutput: True\r\nInput: <math>arr=\{2,3,4,1,-6,4,1\}\r\nOutput: False\}$

Round 2:

Regular Expression parser like <u>finite state automata</u>

Example: a*, aab*, abcb*c, ba*.c*, a.b, a*b etc etc and edge cases

- Design a ranking system. We have an infinite supply of words ending with \xe2\x80\x98.\xe2\x80\x99 We need to implement a reader program that ranks words on the basis of certain criteria

 - \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 This house belongs to my uncle
 - \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 An amazing country with so many tourist places And so on..
- Ranking System criteria: rank the words on the basis of occurrence, for example
 Output: This:2, is:2, my:2\xe2\x80\xa6 highest rank (sorted asc or desc based on \xc2\xa0provided flag)
 Design it completely and scalable Ranking System.
- Design a debugger

Round 3:

- Explain your greatest accomplished project and what big you achieved? \xe2\x80\x93 Details of flow and architecture
- Find a <u>longest palindrome String</u>
- Design Amazon Cart System. (HLD and LLD) Discussion on solution.

Round 4:

- Given a Binary Tree, Replace every node with its larger Same as sum tree GeeksforGeeks
- Print min & max (both) of all sub array of size k \xc2\xa0Reference :
- Given an integer array and find first k largest elements. Focus was on complexity of the code GeeksforGeeks Link
- Given an integer array and an integer value X, return three elements in that array such that sum of them equals to X.
 GeeksforGeeks Link

This was the last round for the day as team had to return to Bangalore. HR shortlisted me along with other two candidates. \xc2\xa0Due to Diwali they were falling short of staff for managerial rounds, So it look a month for other two rounds which happened in their Gurgaon office on VC

Round 5:

Bar Raiser: (Duration: 1.15 hours)

- Tell me about yourself
- What were the important projects you have worked on
- · What was your contribution
- Explain Architecture, Design and detailed discussion
- What were challenges you faced and how did you solve them
- Design a notification system \xe2\x80\x9cIn Shorts\xe2\x80\x9d

Round 6:

Hiring Manager: (Duration: 1.15 hours)

• Introduction & very detailed project discussion

Behavioral Questions \xe2\x80\x93

- o Did you encounter any conflicts with colleague or manager and how did you solve them
- Have you ever delivered more than expectations
- Have you ever completed project before deadline
- · Have you have handled a client/customer efficiently and what did you
- o Did you ever design a system/process
- What were the most critical projects you have worked on
- How did you handle a critical situation or helped a colleague
- Tell me about a time when you had to work on a project with unclear responsibilities
- Have you mentored someone? What were challenges you faced and how did you resolve
- What important technical decisions did you take and how did it help your team?
- Why Amazon

I recommend GeeksForGeeks for technical coding rounds, educative.io for design and http://kraftshala.com/how-to-raise-the-bar-in-the-amazon-interview/ for behavioral.

Pretty much covers all the details. They announced result after a week and I was selected \xf0\x91\x99\x82

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Please write comments if you find anything incorrect, or you want to share more information about the topic discussed above.

All Practice Problems for Amazon!

My Personal Notes\narrow_drop_up

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