

## **Dhawal Jain MTech CSE**

### **Microsoft Internship Interview Experience**

#### **Round 1(75min)**

It was merely a coding round consists of 3 Questions:

**Question1:**

<https://www.geeksforgeeks.org/find-day-of-the-week-for-a-given-date/>

**Question2:**

<https://www.geeksforgeeks.org/delete-n-nodes-after-m-nodes-of-a-linked-list/>

**Question3:**

<https://www.geeksforgeeks.org/sum-of-cousins-of-a-given-node-in-a-binary-tree/>

**Coding Platform:**A very bad platform with nearly no support for debugging.If you stuck in edge cases coding test will convert into patience check test. Also remember running of basic 3 test cases doesn't mean that ur code is correct because there are background cases as well which will be run later so if u finish early please recheck before submitting.

**Main Focus:**Tree and Link list

**Total number of Students shortlisted:**46/200(Approx)

#### **Round 2(60 min)**

It was a group fly round consists of 2 Question:

**Question1:**

<https://www.geeksforgeeks.org/print-a-given-matrix-in-spiral-form/>

**Question2:**

<https://www.geeksforgeeks.org/longest-palindromic-substring-set-2/>

### **Important Points to remember for this round:**

1.It was Pen Paper Round and there will be mentors from microsoft possibly 1 mentor among every six.

2.If your writing is good it will definitely be an advantage but in case it is not no need to worry I am one among you because in this round apart from just writing clear code interaction with mentor will be main scoring area.The more you convince mentor for your proposed solution the better is your chance to get selected.

3.If time permits it is better to write solution in hierarchy like first  $O(n^3) \rightarrow O(n^2) \dots$

I have written 2 solutions for first and 3 for second.

**Students shortlisted:**30/46

### **Round 3(Face to Face I--max(2 Interviewer))(40 min)**

For me it was again a coding round.However there were questions from resume also as some my friends told after interview. As far as my Question are concerned they are as follows:

#### **Question1:**

<https://www.geeksforgeeks.org/check-binary-tree-subtree-another-binary-tree-set-2/>

#### **Question2:**

<https://www.geeksforgeeks.org/iterative-depth-first-traversal/>

#### **Question3:**

If asked to implement BFS using stack can u do it.

**Soln:**I first said No it would be just a waste of time and memory.But they emphasize that if suppose that you just have to implement that I suggested them bfs using 2 stack but then they said suppose if one stack is system stack can u do it then also,then I just tried to explain it in a similar way and somehow he was convinced and Ques ends.Such question are basically just to check your attempt to an unknown,vague question,don't be afraid and just go for any solution that comes in your mind.

**Question4:**

<https://www.geeksforgeeks.org/count-nodes-within-k-distance-from-all-nodes-in-a-set/>

**Important Points to remember:**

1. All this code you have to write on paper so first think clearly than write.
2. Even though u know the most optimised solution than also go in hierarchy of reducing complexity to demonstrate your understanding.

**Total number of students selected:**21/30

**Round 4:(Face to Face II)**

Some of my friends gave this round but amazingly i got bye in this round. But rest all my friends gave this round and questions were mainly from the resume.

**Total number of students selected:**16/21

**Round 5:(HR + open ended Ques)(50 min)**

This round will begin with your intro and then some random talks to make u comfortable. After intro this round mainly consists of questions related to your project but not directly but in some indirect way. Like in order optimize processing of our project let it be xyz what you can do, now first u have to relate that somehow with some of your project and then suggest some algos which can optimize it. They may also ask you what are some problems you faced in making your project and how you resolved it.

**Important Points to remember:**

1. Speak whatever comes to your mind, even if u think it is 20% correct because they are there to check mainly your thinking ability not to get an exact solution of the problem.
2. Stay positive even if nothing strikes to your mind for 5-10 min in this round because they will give you sufficient time to think.
3. Interviewer will be very cooperative in each of the round irrespective of your performance so remain positive always.

**Total number of students selected:15/16**

*All the best to everyone appearing for microsoft,just remain chill,focus and then rock,,if it's your day  
no one can stop u you from cruising through all hurdles:)*

*If you get rejected consider it as a priceless experience,there is nothing great you have lost enjoy:)*