

IEEE Specialty Group Proposal
osu-exec@IEEE.org

Group Name: Programming Interview Questions - PIQ

Leader Name: Kyle Mannari

Scope:

What are the goals for your proposed group?

Prepare future software developers for technical interview questions. Learning to write optimal code based on requirements/restrictions (limited memory, use one data structure, use no data structures, etc.), to analyze the runtime of solutions and go over strategies on problem solving.

How are you intending on achieving these goals

We'll be answering questions in Java, sometimes C, from [Cracking the Coding Interview](#) in the following sections:

Arrays and String
Linked Lists
Stacks and Queues
Trees and Graphs
Bit Manipulation
Recursion and Dynamic Programming
Scalability and Memory Limits
Sorting and Searching
Testing
Databases
Threads and Locks
Moderate and Hard Interview Questions

Recruiting:

How are you planning on getting others interested and involved with your group?

We plan on spreading knowledge of the group through word of mouth. Of the five people asked to join all said yes. A Facebook group page has been created to invite more people in the future, once the group has a well defined structure.

NOTES: Submission of a proposal does not guarantee IEEE sponsorship of the group. A meeting with an IEEE executive member may be required before approval and funding is granted.

What should new members expect when first joining? What will they be doing / be involved with?

So far the meetings have only had time to answer 1 – 2 questions, having open collaboration, and meeting other programmers. It would be ideal for everyone to program the answer on his or her own, for best learning experience. I've been emailing out skeleton code with a main method with test cases, each person needs to fill complete the rest of the method(s), and then compile and run.

Example Problem from the Linked Lists chapter:

Write code to remove duplicates from an unsorted linked list. How would you solve this problem if a temporary buffer is not allowed?

Leaders:

Who will be leaders of this group and what will their roles be?

I, Kyle Mannari, will take on the leadership role to prepare and schedule meeting times; create skeleton code; prepare test code; and explain best solution, optimization, and runtime analysis.

Funding / Resources Requests:

Please list all funding / resources that are needed to get off the ground. For each item listed, please state what the resources will provide to the group.

- Reserved Room: A place to meet up

*Members need to bring their own laptop