Mentee Guide SWE Mentee Exercises

Summary

The focus of the program is to support students on developing coding skills, soft skills, understanding the Facebook working culture and interview preparation (both technical and non-technical) - all of this in a hands-on approach.

Your Role

Please make sure you set up your Leetcode account and share it with your mentor, so they can track the status of your performance up to date. Below are the necessary exercises that you must complete by end of Module 1.

Performance Assessment

Exercises that your mentee should complete as deliverable of Module 1.

TOPIC	PROBLEM	SOLUTION	LEVEL
Arithmetic	https://leetcode.com/problems /add-digits/		Easy
String manipulation	https://leetcode.com/problems /to-lower-case/		Easy
Bitwise	https://leetcode.com/problems/hamming-distance/		Easy
String Manipulation	https://leetcode.com/problems /reverse-string/		Easy
Arrays	https://leetcode.com/problems/remove-element/		Easy
Bitwise	https://leetcode.com/problems /number-complement/		Easy
Hash table	https://leetcode.com/problems /sort-colors/		Easy

Arithmetic	https://leetcode.com/problems /fibonacci-number/	Easy
Arrays	https://leetcode.com/problems /transpose-matrix/	Easy
Hash table	https://leetcode.com/problems /jewels-and-stones/	Easy
Hash table	https://leetcode.com/problems /uncommon-words-from-two-s entences/	Easy
Binary search	https://leetcode.com/problems /binary-search/	Easy

Appendix Additional Resources

Mock Interview Resources

Overview of Mock Interview and Questions

Basic Computer Science Concepts

- "Above & Beyond programme" run in US click here for further resources
- How to code: <u>techprep.fb.com</u>
- Algorithm intro:
 - $\frac{https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-006-introduction-to-algorithms-fall-2011/$
- Problems to send to mentees as it has problems per each engineering concept: https://www.programcreek.com/2012/11/top-10-algorithms-for-coding-interview/

Students FAQ

 <u>Link to responses of common questions</u> coming from students related to careers, opportunities and timing of recruitment processes.

Interview Prep

- Example Interview Questions: www.careercup.com/page?pid=facebook-interview-questions
- Interview Cake: <u>www.interviewcake.com</u>
- Cracking the coding interview: https://epiportal.com/Ebooks/Cracking%20the%20Coding%20Interview%2CW204%20Edition%20-%20150%20Programming%20Interview%20Questions%20and%20Solutions.pdf

Coding challenges

- Top Coder: <u>www.topcoder.com</u>
- Code Jam: <u>Https://code.google.com/codejam/consts.html</u>
- LeetCode: https://leetcode.com/problemset/algorithms/
- HakerRank: <u>www.hackerrank.com</u>
- Pramp.com: is a tool that pairs you with other candidates that are also practicing, and you
 interview each other.

Specific Language/Area Resources

python syntax reference:
 https://online.umich.edu/courses/programming-for-everybody-getting-started-with-python/

- Python github: https://github.com/amueller/introduction to ml with python
- Machine Learning intro courses: http://cs229.stanford.edu/, there is a simple version in coursera

Branding Resources

- BENEFITS: Read about our benefits here!
- OPENING UP AT MENTAL HEALTH: Read more about our resources available to employees and interns here!
- REAL TALK ABOUT FB CULTURE:
 - Read here about our culture, mission and values!
 - Make Your Next Move With Facebook!
- INTERNS AT FB:
 - Facebook University interns give us a behind the scenes look at their work.
 - o Diary of an ex Facebook intern.
 - Production Engineering Internship with Owen M.
 - Facebook University Interns Share Their Journey
 - o How Facebook Helped Me Grow from an Intern to Design Lead