

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 2.

Performance Assessment

Exercises that your mentee should complete as deliverable of Module 2.

TOPIC	PROBLEM	SOLUTION	LEVEL
Linked lists	https://leetcode.com/problems/merge-two-sorted-lists/		Easy
Linked lists	https://leetcode.com/problems/reverse-linked-list/		Easy
Linked lists	https://leetcode.com/problems/delete-node-in-a-linked-list/		Easy
Linked lists	https://leetcode.com/problems/middle-of-the-linked-list/		Easy
Linked lists	https://leetcode.com/problems/remove-linked-list-elements/		Easy
Linked lists	https://leetcode.com/problems/remove-duplicates-from-sorted-list-ii/		Medium
Linked lists	https://leetcode.com/problems/swap-nodes-in-pairs/		Medium

Linked lists	https://leetcode.com/problems/odd-even-linked-list/		Medium
Linked lists	https://leetcode.com/problems/reverse-linked-list-ii/		Medium
Linked lists	https://leetcode.com/problems/merge-k-sorted-lists/		Hard
Binary tree	https://leetcode.com/problems/merge-two-binary-trees/		Easy
Binary tree	https://leetcode.com/problems/maximum-depth-of-binary-tree/		Easy
Binary tree	https://leetcode.com/problems/invert-binary-tree/		Easy
Binary tree	https://leetcode.com/problems/same-tree/		Easy
Binary tree	https://leetcode.com/problems/binary-tree-inorder-traversal/		Easy
Binary tree	https://leetcode.com/problems/search-in-a-binary-search-tree/		Easy
Binary tree	https://leetcode.com/problems/path-sum-ii/		Medium
Binary tree	https://leetcode.com/problems/longest-zigzag-path-in-a-binary-tree/		Medium
Binary tree	https://leetcode.com/problems/two-sum-iv-input-is-a-bst/		Medium
Binary tree/ BFS	https://leetcode.com/problems/binary-tree-right-side-view/		Medium
Binary tree/ BFS	https://leetcode.com/problems/average-of-levels-in-binary-tree/		Easy
Binary tree/ BFS	https://leetcode.com/problems/binary-tree-level-order-traversal-ii/		Easy
Binary tree/ BFS	https://leetcode.com/problems/find-bottom-left-tree-value/		Medium

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: techprep.fb.com
- Algorithm intro:
<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

- [Link to responses of common questions](#) 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: www.interviewcake.com
- Cracking the coding interview:
<https://epiportal.com/Ebooks/Cracking%20the%20Coding%20Interview%2C%204%20Edition%20-%202015%20Programming%20Interview%20Questions%20and%20Solutions.pdf>

Coding challenges

- Top Coder: www.topcoder.com
- Code Jam: <https://code.google.com/codejam/consts.html>
- LeetCode: <https://leetcode.com/problemset/algorithms/>
- HackerRank: www.hackerrank.com
- [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.](#)
 - [Diary of an ex Facebook intern.](#)
 - [Production Engineering Internship with Owen M.](#)
 - [Facebook University Interns Share Their Journey](#)
 - [How Facebook Helped Me Grow from an Intern to Design Lead](#)