

TECHNOLOGY TEAM

Coding Interview Toolkit



At Agoda, we emphasize data structures and algorithms because they are essential for solving the unique challenges we encounter daily.

The coding interview lasts **60 minutes** and includes **2 problem statements**. Aim to solve each within **30 minutes**, focusing on algorithms, data structures, and computational complexity.

this guide is tailored to highlight the key areas we assess during the coding round to help you approach the interview with confidence and clarity

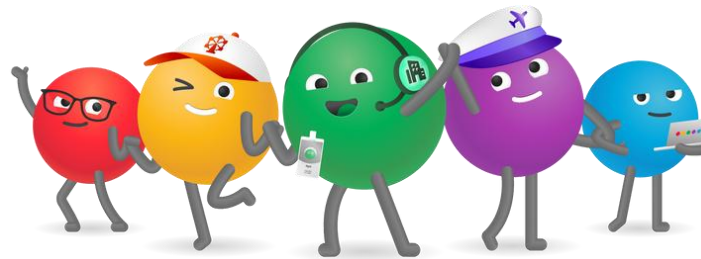
Understanding
the Problem

Coding Efficiency

Understanding
Performance

Testing

Communication



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How to Prepare

Practice Coding Challenges

We strongly encourage practicing problems on [LeetCode.com](https://leetcode.com), focusing on **medium level questions**. Solving problems across key topics will help you build confidence and improve your problem-solving speed.

Here are some recommended topics to focus on:

- Arrays and Strings
- Sorting and Searching
- Recursion and Backtracking
- Dynamic Programming
- Hash Maps and Sets
- Graphs and Trees

Why LeetCode Practice Matters

Our survey showed that many candidates felt confident going into their coding interview, but a significant number had only practiced a handful of LeetCode problems beforehand.

To improve your chances of success, **dedicate time to solving a variety of LeetCode problems**, reinforcing problem-solving skills and familiarity with common patterns.



Get Yourself Familiar with HackerRank

The coding round will be conducted on [HackerRank](#), an online coding platform. To avoid technical issues during the interview, we recommend spending time familiarizing yourself with HackerRank.

- Practice writing and running code in the platform's editor
- Learn how to debug and test your code within the platform.
- Ensure your environment (e.g., browser, internet connection) is stable and ready for the interview.

Pro Tip: If you encounter any technical issues during the interview, let the interviewer know immediately so they can assist you.

Time Management During the Interview

We understand that time can feel limited during coding interviews, so here are some tips to help you manage it effectively to solve **2 problems (30 minutes each)**:

- Spend the first **5** minutes understanding the problem and planning your approach.
- Allocate **20** minutes to coding and debugging.
- Reserve the last **5** minutes for testing and optimizing your solution.

Pro Tip: If you get stuck, communicate your thought process to the interviewer. They may guide you in the right direction.

2 Interview Attributes

Understanding the Problem

Understanding the problem is the foundation of solving it effectively. This evaluates how well you comprehend the problem statement, identify constraints, and ask clarifying questions.

- Carefully read the problem statement and highlight key requirements
- Ask clarifying questions to ensure you fully understand the constraints and edge cases
- Verify your understanding with the interviewer before starting

Pro Tip: Practice breaking down problems into smaller, manageable parts. Use pseudocode to outline your approach before jumping into coding.

Coding Efficiency

Coding efficiency is about translating your solution into clean, optimized code. This assesses your ability to write code that is both functional and efficient, while minimizing errors

- Write clean, readable code with meaningful variable names
- Avoid brute force solutions; prioritize time and space complexity
- Use common utility methods and advanced language constructs where appropriate

Pro Tip: Practice problems on [LeetCode](#). Start with easy problems to build confidence, then gradually move to medium-level challenges.

Understanding Performance

Performance is critical for scalable and efficient solutions. This attribute evaluates your understanding of time and space complexity and your ability to optimize your solution.

- Understand the concept of time and space complexity
- Optimize your solution to handle large inputs effectively
- Be prepared to discuss trade-offs and alternative approaches

Pro Tip: Use resources like the [Big-O Cheat Sheet](#) to strengthen your understanding of algorithmic complexity.

Testing

Testing is critical. Make sure your solution works for all edge cases and handles large inputs effectively. This evaluates your ability to test your code thoroughly and identify potential issues.

- **Proactively test edge cases:** Agoda values candidates who think critically about edge cases and test their solutions against them. Mention these cases even if you don't have time to implement all tests
- **Optimize iteratively:** Start with a correct, functional solution, then discuss or implement optimizations if time permits.
- **Demonstrate awareness of trade-offs:** If your solution isn't fully optimized, explain the trade-offs you made and how you would improve it with more time

Pro Tip: Always test your solution with edge cases before considering it complete. Work on problems like Valid Parentheses and Binary Tree Inorder Traversal to practice handling edge cases.

Communication is Key

During the interview, explain your thought process clearly. This helps the interviewer understand your approach, reasoning, and decision.

- Think out loud and explain your approach step by step
- Use simple and concise language to articulate your reasoning
- Be open to feedback and adapt your approach if needed

Pro Tip: Use the "why, what, how" structure when explaining your approach

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Resources to Help You Prepare

Here are some useful resources to guide your preparation:

- [LeetCode](#) - Top Interview 150
- [LeetCode](#) - 75 Essential & Trending Problems
- [Agoda's Tech Blog](#) - Insights into our tech culture & knowledge
- [GeeksforGeeks](#) - Tutorials on algorithms and data structures
- [Big-O Cheat Sheet](#) - A quick reference for time and space complexity
- [Pramp](#) & [Interviewing.io](#) - Free mock interview sessions

Note: [Pramp](#) & [Interviewing.io](#) are external resources and are not affiliated with Agoda.