

online coding

interview tool

Key to tide over the tech hiring crisis



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Introduction

Forging ahead, despite the pandemic

Uncertainty and ambiguity have been the central themes of the ongoing COVID-19 crisis. The macroeconomic aftereffects of the pandemic are likely to sustain for times to come. *Diverse sectors of industries have been impacted by this unforeseen disruption, which has derailed their quotidian practices – the global markets are in a 'wait-and-watch' mode*. Social distancing and discretionary movement have taken precedence, bringing the hiring process to a virtual standstill. However, this has also allowed companies to revisit their recruitment strategies.

Amid the doom and gloom, various C-level executives in top tech companies are also hiring. They reckon software engineers to be the company's real assets and maintaining business continuity hinges upon onboarding quality candidates. Therefore, they need fail-safe means to assess, interview and hire the most competent professionals without risking applicants' safety.

It is well-accepted that HR professionals face constraints in hiring tech candidates as, often, hiring managers don't understand what needs to be deduced in a technical interview. HRs are inclined toward traditional face-to-face interviews to assess technical candidates. There is nothing wrong in the process, but interviewers can only evaluate an individual's characteristics, perception, opinion, and attitude, rather than hands-on coding skills. Add to that a long list of considerations, lengthy screening processes, wrong candidate filters or an outdated interview approach that impacts quality hiring.



A decade ago, leading companies such as Microsoft used to pose brain teasers during interviews, such as "why are manholes cover round?"

It was an attempt to assess candidates' caliber but did not suffice. Companies later began showering trivia questions on interviewees, including javascript questions and random factoids about numerous other languages.

Mathematical puzzles continue to form a part of the technical interview process.

These techniques may seem intriguing, but cannot circumvent a wholesome candidate selection that meets hiring goals. They do exhibit candidates' intellect and craftiness or their levels of logical reasoning skills but don't assess the real coding ability and knowledge needed for the job.

Hence, one of the ways that HRs can strengthen their recruitment process is by streamlining their technical interview process. They are closer to the goal to interview and hire the best by eliminating pre-interview inefficiencies and bringing clarity to the initial selection. The more refined your filter is, the more purposeful is your interview.

Prerequisites to conducting a successful tech interview

Here are the two prerequisites to conducting a successful tech interview:



1. Right candidates for the interview

An efficient interview process begins with choosing the right candidates for the interview via effective screening methods. Companies receive a vast number of resumes and often struggle to filter quality candidates. By using a combination of knowledge and application-based questions such as MCQs and coding simulators, hiring managers can gain a holistic, evidence-based overview of a programmer's potential before advancing to the interview round. Here's how:

- MCQs act as the first filter that shortlists based on knowledge, concept, application and analysis
- Afterward, the selected few are assessed practically via coding simulators that provide a real sense of their ability by asking them to mirror real-world challenges

Technical screening verifies more than merely the coders' fundamental skills. It showcases their real-world coding ability, coding knowledge, language proficiency, usage of frameworks, etc. It ensures that employers don't have to sit through time-consuming interviews with applicants who are neither qualified nor suited for a particular position. You'll be amazed at the number of candidates technical screening weeds out. Also, valuable evidence-based analytics on candidate potential and performance deter hiring managers from biased shortlisting, leaving the company with the best for the interview.



2. Modern interview approach

The most common interview approach used by hiring managers to assess a coder's capability is via Whiteboards. This interview approach traditionally involves using a whiteboard or paper to write an algorithm or an actual code instead of an IDE (Integrated Development Environment) or an editor. The coder is expected to use a specific programming language and solve a coding problem by penning down the process on the spot. Sometimes, whiteboard questions are simple wherein the candidates are asked to draw a circle or a grid using only an algorithm. They are also complicated, with more than one programming language to judge how coders handle complexities.

Such a traditional interview is conducted face-to-face with the candidates. The interviewers observe their approach to articulating a question, deciphering and solving it. They note every word and step taken by coders. They also acknowledge how often the candidates communicate and discuss their codes, uses and functionalities, which can take up to hours or even a day. Though a whiteboard coding interview is entirely unrelated to deciphering a coder's on-the-job potential, recruiters have a soft spot for it.

There is now a growing consensus that this process is slow and unscalable. It is unable to simulate real-world problems, which negatively impacts the quality of hires. As technology becomes more affordable, and the demand for software engineers grows exponentially, writing code to test a candidate's technical prowess on a whiteboard has become primitive.

The need to move beyond the traditional interview process



Lack of transparency

Subjective evaluation criterion



No data-backed hiring decisions

No data interview for refernce



High logistics

Manage a large number of interviews

- Traditional interviews lack transparency, are somewhat hypothetical and don't cater to real-life scenarios. This fails to update an interviewer about a candidate's job proficiency. For example, whiteboard coding interviews don't mirror the job demands as they aren't the resources coders need for actual coding. They even filter out the best coders by making them anxious or nervous.
- There are **no data-backed hiring decisions** that lead to improved job outcomes. Most recruiters fail to fix critical parameters for reference and selection. Instead, they prefer easy-to-select candidates based on assumptions or intuition. This prevents organizations from identifying and hiring the best candidate for the job.
- Expenses on onsite interviews and other additional costs make the recruitment process a resource-intensive affair, financial and otherwise. The process starts with posting on job boards, reviewing applications, prescreening steps to interview arrangements, onsite interviews, and finally, sealing the deal, including rolling out offers, negotiations and verifying the references.



How do hiring managers understand a candidate's potential?

How do they make technical interviews an experience and not a burden?

Hiring managers need clarity when deciding what to judge in a technical interview.

Let's elucidate what a hiring manager should assess in a technical candidate during a coding interview.

It includes, and is not restricted to:



In today's competitive scenario, hiring managers must look beyond a candidate's resume and redundant traditional interview approaches. They need to undertake an interview approach that provides a deeper understanding of a coder's proficiency.

- With modern interview tools, employers can be well-informed about the coder's rare skill set, collaboration levels, robust problem-solving ability, and analytical thinking.
- Interviewers must efficiently deduce the coder's agility in coding, the complexity of the code used, proficiency in using features, such as CodeEditor, auto-suggest, etc.
- A modern interview approach will evaluate how well coders can handle ambiguity. It will also highlight their attitude toward the challenge and the aptitude for learning.

Time to embrace live coding interview as a game-changing approach

We understand the current scenario has disrupted the usual interview process. Hence, organizations must creatively assess candidates to improve the interviewing process for tech talent. Phenomenal tech advancements can enable companies to conduct their technical recruiting process virtually, without compromising their experience. Administering live coding interviews via online coding interview tools have lent incredible ease for the recruiters, regardless of the candidate numbers.

What is a live coding interview?

A live coding interview is a next-generation candidate interview process wherein the interviewer assesses a coder's proficiency in real-time. A prerequisite to the interview is that candidates have to accept sharing their screen, video and audio. They are then asked to code in a programming language of their choice. Aside from the fact that the interview is being hosted remotely, it is as natural as a physical interview. It is also substantially more realistic than a traditional pen and paper, whiteboard coding interview approach. It offers the interviewer an accurate idea of how a candidate thinks and collaborates and utilizes various languages, frameworks, libraries or APIs.

In a live coding interview, a screen is split into three parts:



1

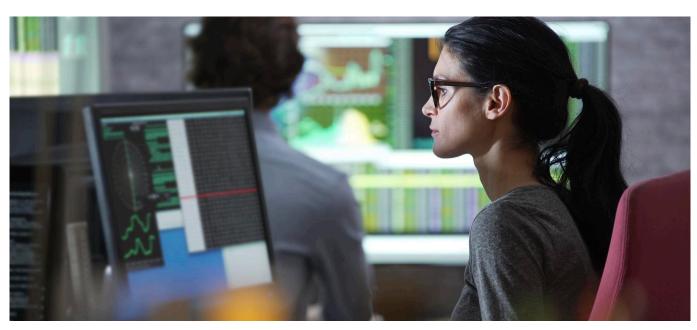
A screen where the candidate types the code

2

A screen where the interviewer gives inputs on the code

3

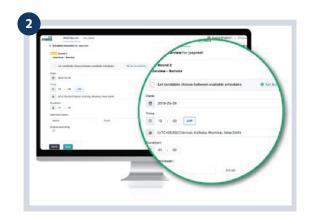
A screen where the written code's output is shown



A stepwise process of conducting live coding interviews



Interviewers need to define certain evaluation parameters for a specific job role aligned to the business objectives for consistent and effective interviews. They are mostly critical competencies for the job role for which the candidate is being assessed. Additionally, they add specific and relevant rolebased questions to determine the core competencies. Either the hiring managers can identify these competencies or Mercer | Mettl's domain experts can provide consultation.



In the next step, conveniently schedule interviews, with the liberty to choose the date, time, location, language and share calendar invites, ensuring seamless execution. Features such as auto-reminder emails, an audio-recording option and the option to choose from 11 supporting international languages enable seamlessly executing the interview process.



The availability of modern tools such as live code evaluation for easy pair programming makes interviews more structured, data-driven and effective. The ease of the coding interview platform lets the interviewer evaluate the coders' coding pattern while viewing them live.



Finally, the hiring manager can access the candidates' assessment results and data from multiple interview modes, all at one dashboard for better data-driven hiring decisions.

Live coding interviews often employ concepts such as pair programming interviews that mirror the coders' real-life scenario, using the same resources people have on the job. Hence, it reduces the hiring time, without losing on quality candidates, also streamlining the process.

With a shared, live development environment enhanced by audio, video, and chat, hiring managers can undertake pair programming interviews to assess real-time skills and make quality decisions for tech candidates. This efficient interview approach in today's remote hiring environment makes for an ideal online coding interview tool.

What is a pair programming interview?

A pair programming interview is a modern gamechanging interview approach. It is also famously used as an online coding interview tool that assesses a coder's proficiency using embedded code simulators.

How pair programming works

This agile and interactive practice consists of two people- the coder and the assessor. The coder writes the code, and the assessor (interviewer) guides them through the process to gauge their skills. Rather than making the candidate anxious, this concept boosts confidence by making the process quite conversational. During the interview, the interviewer and the coder can easily ask questions, voice opinions, and clear doubts about the next possible moves.

Pair programming also goes hand-in-hand with test-driven development (TDD). This means both parties get a real idea of the written code's ability to function without errors.

Far more realistic than a whiteboard coding interview process, pair programming online gives the interviewer an accurate idea of how a candidate thinks, collaborates, and utilizes various languages, frameworks, libraries, or APIs. The pair programming interview is also possible remotely from start to finish.



Advantages of online pair programming interview as an efficient coding interview process:

Besides testing algorithmic and necessary programming skills, you can structure in-depth interviews in a real programming environment that empowers both candidates and interviewers. Online Pair coding offers various advantages.



On-the-go, real-time review:

When the interviewers are viewing the coders' pair programming online, live, they are also listening to the coders explain the design decisions and the thought process behind it. Hence, the interviewers review the code's performance and gain insight into the coders' potential, focus and productivity, all in real-time.



Shorter decision-making cycle:

Automated grading of online pair programming interviews replaces the static grading process, scaling an organization's interview capacity, which improves operations. Pair coding online eliminates the unnecessary back and forth while reducing human errors and inaccurately recorded information. This ensures a continual interview process, considerably shortening the decision-making and feedback process.



Objective evaluations:

Pair programming interview enables evaluating the candidates thoroughly and objectively based on auto-graded simulators. Comprehensive reports elucidate the candidates' performance, offer a comprehensive summary of their attempt and enlists a detailed code journey. This thorough evaluation of a pair coding interview is free from hiring bias and ensures immediate results with optimum reliability and validity of a coder's potential.



Faster hiring and onboarding:

Talented developers are in short supply, which requires being time-sensitive, or you risk losing out on top talent. Hence, the speed, efficiency, and convenience of online pair programming offer a hiring advantage. A custom environment can be set up seamlessly. One can create new and meaningful tests, quickly compiling any popular programming language with the pair coding interview. This saves time that can be utilized better in strategic tasks. Furthermore, a real-time review optimizes selection quality.

How to conduct live coding interviews

Businesses today need a holistic technical interviewing solution that refines the entire process, transcends conventional means, bridges all hiring inefficiencies. How is it possible?

The answer lies in utilizing a dynamic online coding interview platform—a purpose-built, all-in-one coding interviewing platform that lets recruiters build a variety of pair coding interview questions and scenarios without having to toggle back and forth between different platforms.

By harnessing the technological interventions and shifting to a new candidate assessment approach, an online coding interview platform can help meet technical assessment challenges and exceed the hiring manager and company's expectations.

An online coding interview platform is an easy-to-use interactive environment that lets recruiters conduct online code test interviews while checking the coder's skills, live, with ease. An online coding interview platform is a virtual, data-backed, purpose-built interviewing solution for technical roles. Unlike the traditional whiteboard coding interview approach, which tells us very little about the candidates' real skills, online coding interview platforms enable live coding interviews that assess the core competencies and enable a well-informed hiring decision.

How Mercer | Mettl helps hire quality coders

Mercer | Mettl offers a unique advantage for both recruiters and candidates- The ability to administer live coding interviews quite naturally on a dynamic coding interview platform. This platform lets recruiters build various coding interviews without having to toggle back and forth between different platforms.

Mercer | Mettl's coding interview platform grants interviewers the ability to view, interact, and supervise the coders online as they attempt the programming challenges. It runs virtual technical interviews with a unified code editor, compiler, an audio-video conferencing tool, a whiteboard, and video analytics. Functions such as multi-language support, chat support, easy API integration with ATSs, versatile coverage of coding languages, simulation, and test history, help widen a company's talent funnel. Provisions such as location-agnostic, customization, hands-on skill support, swift auto-evaluation, result validation, and proficient tracking of the tech hiring funnel enable quality online interviewing and hiring at scale. Hence, when companies are looking to be agile, using an online coding interview platform is an excellent way of evaluating the candidate while interviewing them.

There is more.

Mercer | Mettl's coding interview platform is a state-of-the-art tool and supports more than twenty popular programming languages. It works well with the code editor, code executor and code intelligence. This coding interview platform comes as a boon for tech recruiters to accurately evaluate the coding skills of the interviewees. The platform offers a vast array of coding skills tests and an advanced coding simulator and video interview questions for an in-depth assessment of the candidates' coding skills within the given time. It also includes:

Data analysis:

The online coding interview platform also gives interviewers the option to assess candidates using data from previous screening rounds on the same platform. This comprehensive assessment with feedback from multiple rounds makes interview analysis and decision-making reliable, fast, and way more effortless than before.

Digital ideation using inbuilt interactive whiteboard and notepad:

Interactive whiteboard and notepads on the coding interview platform act as collaborative substitutes to share, draw, discuss, decipher, and digitally ideate with your candidates as smoothly as you would offline but with a little more flexibility.

Comprehensive scoring and reporting:

Understanding the strengths and vulnerabilities of the coders is vital for making the right hiring decision. The platform enables examiners to scrutinize the potential candidates through extensive reports, highlighting every aspect of the coder in a customized format, such as:

- · Selected programming language
- Number of attempts of compiling codes
- Error details (when code compilation fails)
- Code complexity
- Code playback
- Number of times the candidate deviated from the screen



There are two ways to administer coding interviews on the mettl platform: live interview and pre-recorded interview.



Live interview:

It will be a beneficial method if you want to conduct remote interviews with the ease of face-to-face interviews. Live coding interviews provide you with some excellent tools such as live coding evaluator, collaborative tools like notepad and whiteboard that simulate real face-to-face interview processes.



Q. Where do coders write their codes on an online coding interview platform?

The online coding interview platform enables coders to type their responses by giving them access to coding editors on the simulator screen.

Q. What coding language is used for technical interviews?

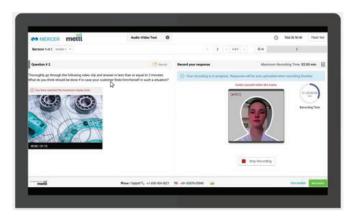
Mercer | Mettl's online coding interview platform is language agnostic. With access to more than 20 programming languages, the platform's language tool enables the coders to code in a language of their preference.



Pre-recorded interview:

Under this system, you can predefine the set of interview questions for each of the defined competencies for a specific role. You are then required to record a clear video response for each of the given problems and save it systematically on the platform.

After the interviewee has submitted the answers, evaluate the video responses as per your convenience.



Mercer | Mettl hack's game-changing screening tools

Mercer | Mettl has a fast-growing roster of online screening tools that enable a comprehensive hiring process. These screening tools independently harness the crowd's wisdom and select eligible and qualified candidates for the interview round. A combination of application-based questions, and simulation-based tests, screen and evaluate candidates quickly and fairly, so that you only hire the best.

Here's how we help you accelerate:

Expansive topic coverage

We offer an unprecedented range of programming languages and frameworks, available for all significant coding job roles. The diversity with which we cover every existing and new-age language, framework, technology, topics, and skills requirements at your end, is also unmatched. A rich repository of 100,000+technical questions for 300+ skills helps tests a coder's competency at every level comprehensively. The landscape of our offerings gives an accurate picture of a candidate's comprehensive fit for a required position. You can choose from a set of readily-available standardized tests or customize them as per your need instantaneously to assess a coder's skill.

Mercer | Mettl I/O

Mercer | Mettl I/O is a first-of-its-kind, all-in-one coding assessment platform. This highly sophisticated and customizable tool assesses programming ability by providing a comprehensive coding environment for all major programming roles (Front-end, backend, database, full-stack, data science, DevOps, QA engineers etc.) supporting all major languages and technologies. You name it, and we have it.

Mercer | Mettl I/O is well-suited for simplifying and improving lateral hiring processes at a large and small scale. In-built with real-time, insightful reports, this efficient screening tool auto-evaluates codes, and provides best-in-class integrated development environments (IDE) that measure an experienced candidate's real ability.



Codelysis for campus hiring

Mercer | Mettl's coding platform is embedded with a list of simulators that evaluate a fresh coder's hands-on coding skill ability in various languages. Simulators give recruiters the liberty to test real coding skills in over 20 programming languages with a supremely user-friendly interface. Codelysis enables assessing and hiring the best freshers at scale.

Simulator assessment is incorporated with a few much needed state-of-the-art features such as:

- **Plagiarism checker-** It detects partially similar coders and copied codes from the Internet, ensuring better decision-making.
- Intellisense- It is an auto-complete feature that automatically recommends language-specific context-driven suggestions at specific syntax points. It can be activated if required.

If you're looking to know the candidate's thought process and how he/she executed the entire program, a full video of code recorded at each keystroke is available using Code Playback. This feature shows the video of the evolution of code at each compilation. Hence, another way to evaluate on-the-spot proficiency and a coder's capability to code in the desired language.



Connect with an expert

Conclusion

Downturns and fluctuations in the job market are intrinsic to economic activities. However, the pandemic has underlined the importance of identifying alternative courses of action and maintaining preparedness.

With in-person meetings and regular social interaction taking a back seat during a crisis, it's mission-critical for companies to adopt digital technology to conduct job interviews (technical or non-technical) smoothly. It is undeniable that recruiting processes need to go online in the time of social distancing. However, much has changed in the tech-hiring landscape over the past few years. It's just that we have come to realize off late that online coding interview tools are a pressing priority for the hiring industry. Such tools are enabling hiring managers to conduct interviews and connect with the candidates in real-time. This move will bolster the recruitment strategy, not only now but even after normalcy is restored, negating any unforeseen disruptions.







About Us

At Mercer I Mettl, our mission is to enable organizations to make better people decisions by making credible people decisions across two key areas: Acquisition and Development. Since our inception in 2010, we have partnered with 2900+ corporates, 31 sector skill councils/ government departments, and 15+ educational institutions across 90+ countries.

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