

Coding Tests - Friend or Foe?

Agenda

Tech screening and things to think about

Types of assessments

Strategies for doing well

Strategies for evaluating

About me

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ThePrimeagen ✓
@ThePrimeagen

i am not convinced tech interviews are broken

i am convinced that most interviewers are bad at it

...



Trek Glowacki @trek ·



I've been twitter following the careers of people we interviewed but passed on at my last gig.

Turns out we were almost always wrong.



Trek Glowacki
@trek

... we had a group called "Bar Raisers" who mainly torpedoed candidates that lacked "CS Fundamentals". We passed on so many good people.



Max Howell @mxcl



Google: 90% of our engineers use the software you wrote (Homebrew), but you can't invert a binary tree on a whiteboard so f*** off.

💬 509

↻ 7.4K

♥ 11.7K



Tech screening is a must

Job descriptions

Art vs science

No false positive



The rockstar developer is a myth ...

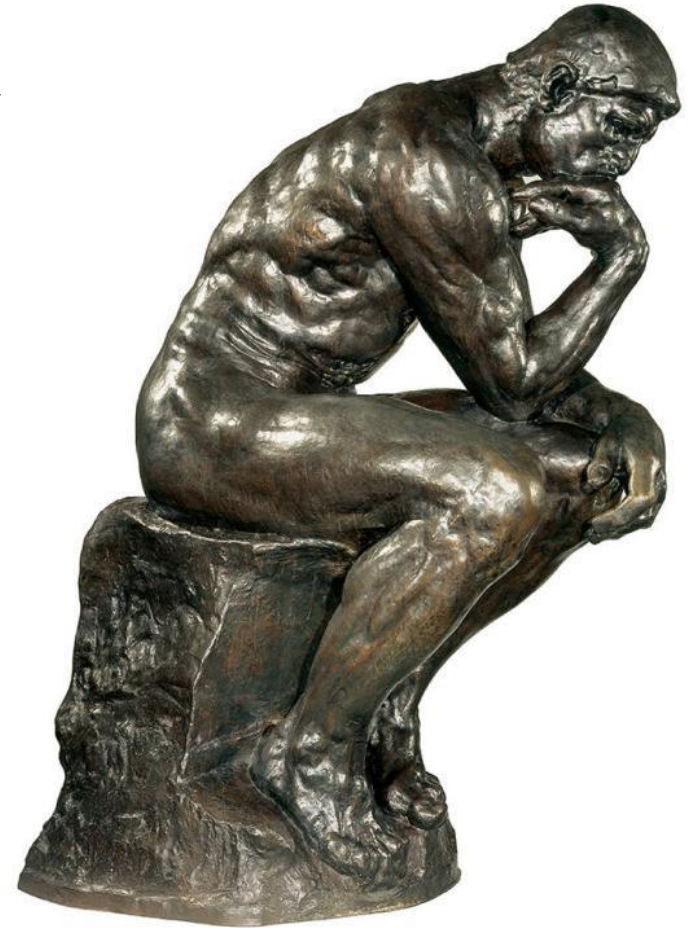
S. Hanselman

But what about ...

No silver bullet

Focus?

False negative



“

They just want to know if they
can work with you.

”

M. Emo

It's an interview ...

EVERYTHING counts

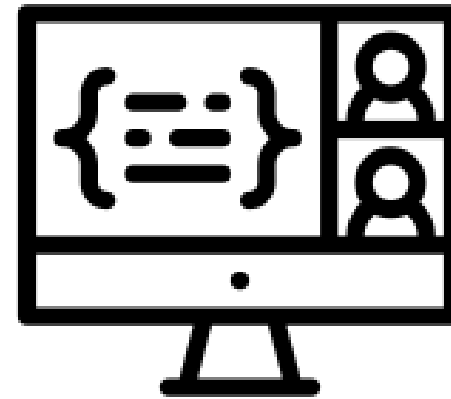
Expect “curve balls”

You never know!



“I have no doubt this is the best way
to choose our new associate.”

Quiz vs Exercise vs Live Session



“

Nothing is hard, just unfamiliar

”

A. Moore

Quiz

What is ... or Tell me about ...

Gauge some level of knowledge or experience



Coding Exercise

Can be taken as part of the application process

- Typically on your own – In office? Take home test?

Clear, direct questions – sometimes word problems

More of a task rather than an interview exercise

Can be recorded and/or timed



Live Session

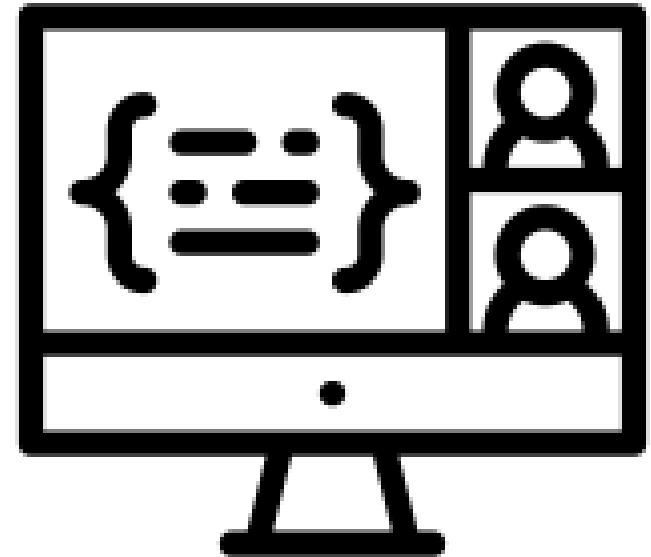
Typically open, vague questions

Meant for discussion/collaboration

Probably no absolute right or wrong answer, work to arrive at a solution/conclusion

Progressively challenging

It's about the journey, not the destination



Live Session - Framework

Goal is usually to work out a problem (teamwork)

- Don't jump straight into coding
- Three c's of teamwork – Communicate, Collaborate, Cooperate

Understand problem (it may appear simple)

- Restate, ask for clarification
- Examples

Talk through your approach

- Assumptions, gotchas, edge cases?

Decomposition – “rule of three”

Start simple, then detailed

Framework - cont

Don't work in silence

Write it down!

Manage your time

- "Parking Lot"

Lost? Stuck?

- 3c's – especially Communicate
- Restate, reclarify, ask questions – are you missing something?
- Try variation
- Noodle – or move on and come back

WHAT I SAY:

I'm a software developer

WHAT PEOPLE HEAR:

I can repair your computer, fix your internet, configure your printer, revive your phone, setup your email, build att billion dollar app, and hack into any system. For free. I am the IT god.

WHAT I MEAN:

I can search the web better than the average bear.

Strategies

Interview is not objective – EVERYTHING is part of the interview

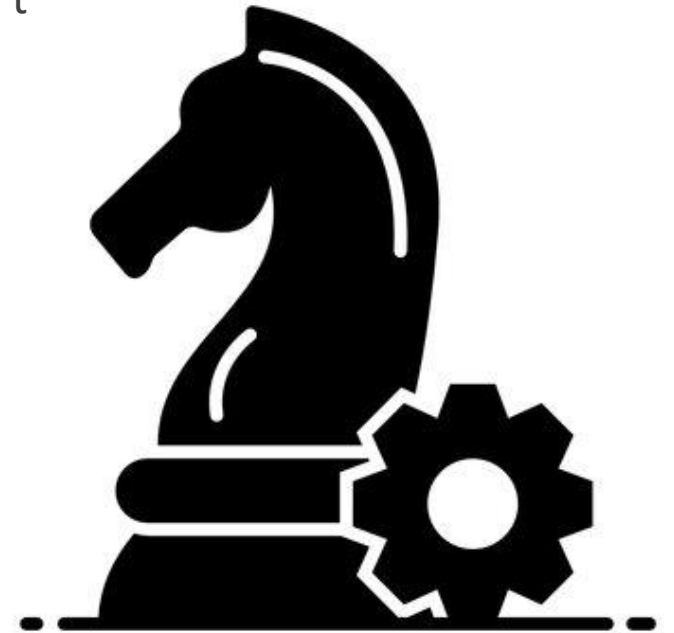
- They're paying attention to the questions you ask – and also the ones you don't ask

Leetcode practice questions – developing “chops” by solving problems

Critical few > trivial many

Remote vs In person

Embrace the vague



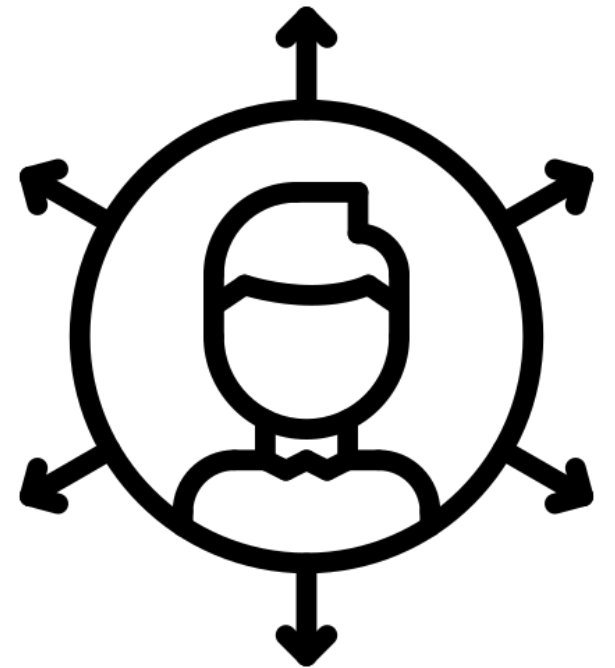
The Soft Skill

How you say is just as important as what you say

Remember 3 c's (Communicate, Collaborate, Cooperate)

More than code - Let them see "you"

We're not robots!



Evaluate

While you're interviewing them, they're interviewing YOU.

Want specific answer? Ask specific question

- Broad vs job related topics

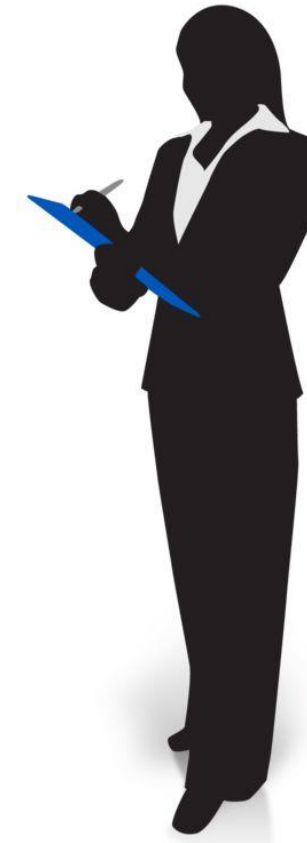
Accessibility

- Adjust for different personalities

Do they “think like a developer”

Technical topics and teamwork related topics

What was the experience?



Conclusion

Final thoughts?

Questions?



Summary

- ✓ Tech screening and things to think about
- ✓ Types of assessments
- ✓ Strategies for doing well
- ✓ Strategies for evaluating

For more information

URList - <https://www.theurlist.com/kalal-codetests>

Technical interview questions - <https://www.simplilearn.com/coding-interview-questions-article>

Leetcode - <https://leetcode.com/>

This slide deck – <https://github.com/mdkalal/CodeTestFoF>

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Thank you!

Feedback welcome

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	QUESTIONS	TYPE	ACTION
ALL	1. Count the Employees	Database	Solve
1	2. FizzBuzz	Coding	Solve
2			
3	3. Good URI Design	Multiple Choice	Solve

[Submit Test](#)

57m left



ALL



1

2

3

1. Count the Employees

The data for the number employed at several famous IT companies is maintained in the *COMPANY* table. Write a query to print the *IDs* of the companies that have more than *10000* employees, in ascending order of *ID*.

Input Format

COMPANY		
Name	Type	Description
ID	Integer	A company ID in the inclusive range [1, 1000]. This is the primary key.
NAME	String	A company name. This field contains between 1 and 100 characters (inclusive).
EMPLOYEES	Integer	The total number of employees in the company.

Output Format

The result should contain the *IDs* of all the companies that have more than *10000* employees, in ascending order in the following format:

COMPANY.ID

Sample Input

COMPANY		

Language MySQL

Autocomplete Ready



```
1 /*
2 Enter your query below.
3 Please append a semicolon ";" at the end of the query
4 */
```

Line: 4 Col: 3

Test Results

Run Query

Submit

56m left

ALL

1

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3

2. FizzBuzz

Given a number n , for each integer i in the range from 1 to n inclusive, print one value per line as follows:

- If i is a multiple of both 3 and 5, print *FizzBuzz*.
- If i is a multiple of 3 (but not 5), print *Fizz*.
- If i is a multiple of 5 (but not 3), print *Buzz*.
- If i is not a multiple of 3 or 5, print the value of i .

Function Description

Complete the function *fizzBuzz* in the editor below.

fizzBuzz has the following parameter(s):

- int n*: upper limit of values to test (inclusive)

Returns: NONE

Prints:

The function must print the appropriate response for each value i in the set $\{1, 2, \dots, n\}$ in ascending order, each on a separate line.

Constraints

- $0 < n < 2 \times 10^5$

Language C

Autocomplete Ready

```
1 > #include <assert.h>...
19
20 /*
21  * Complete the 'fizzBuzz' function below.
22  *
23  * The function accepts INTEGER n as parameter.
24  */
25
26 void fizzBuzz(int n) {
27
28 }
29
30 > int main()...
```

Line: 19 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit



ALL



1

2

3

3. Good URI Design

Which of the following are true regarding good *URI* design?

Pick **ONE OR MORE** options

- ☐ URIs should never be changed.

- ☐ URIs must be constructed by the client.

- ☐ URIs should be short in length.

- ☐ URIs should be case-sensitive.

☐ HTTP verbs should be used instead of operation names in URIs.

- ☐ Use spaces when designing a URI.

☐ Redirection must be used if a change in URI is required.

Clear Selection

Continue