Welcome to AWS Elemental
aws elemental
LIVE

MediaLive
Media Services

- Amazon Elastic Transcoder
- AWS Elemental MediaConvert
- AWS Elemental MediaLive
- AWS Elemental MediaPackage
- AWS Elemental MediaStore
- AWS Elemental MediaTailor
Notable AWS Elemental Media Services customers:

• Amazon Prime Video
• British Telecom
• FOX SPORTS Australia
• fuboTV
• BBC
• Comcast
• Globosat
• MSNBC
• Qatar TV
• Red Bull Media House
• Sky
• Telstra
• U.S. House of Representatives
• Viocorp

Over 1000 more!
HOW TO ACE YOUR NEXT TECHNICAL INTERVIEW

ACE TECHNICAL INTERVIEWS
Behavioral Interviews vs Technical Interviews
Before the Interview
Common Misconceptions

They’re just going to ask about prior work
Buzzwords will help me bluff though weak areas
I should work through problems quietly
If I don’t know the right answer, I fail
It is a one-way interview
Preparing for the Interview

Research the company

Ask the recruiter about the interview structure

Schedule the interview a couple of weeks out if you need time to prepare.

Ask about the dress code. Dress comfortably

Get a good night’s sleep before the interview

For a phone interview, find a quiet place. Have a computer and/or notebook handy.
Practicing for a Coding Interview

Practice coding the same way as you would in the interview

Practice sample questions that are novel to you
(hackerrank is one resource)

Work with a partner to practice, if possible
Whiteboard, Paper, or Laptop?

May not be a laptop available, ask the recruiter
Practice if not used to writing on a whiteboard
Use of space and legibility are considerations
Probably no IDE on the laptop
During the Interview
Topics for Coding Interviews

Data Structures and Algorithms
Clear and Maintainable Code
Problem Solving
General Strategy for Coding Interviews

- Rephrase the question
- Ask clarifying questions
- Build test cases
- Start with the simplest answer
- Optimize or expand your solution
- Verify your work
Given an array of numbers, identify if any two elements in the array add to 10
Given an array of numbers, identify if any two elements in the array add to 10.
Given an array of unsigned ints, identify if any two elements in the array add to 10
2 for loops

```java
public boolean sumTo10(int[] a) {
    for (int i=0; i<a.length; ++i) {
        for (int j=0; j<a.length; ++j) {
            if (a[i] + a[j] == 10)
                return true;
        }
    }
    return false;
}
```
2 for loops

```java
public static boolean sumTo10(int[] a) {
    for (int i = 0; i < a.length; ++i) {
        for (int j = i + 1; j < a.length; ++j) {
            if (a[i] + a[j] == 10)
                return true;
        }
    }
    return false;
}
```
use an additional data structure

```java
public boolean sumTo10(int[] a) {
    HashSet<Integer> complemenets = new HashSet<Integer>();
    for (int i=0; i<a.length; ++i) {
        int val = a[i];
        if (complemenets.contains(10 -val)) return true;
        complemenets.add(val);
    }
    return false;
}
```
public boolean sumToN(int[] a, int n) {
    HashSet<Integer> complemenets = new HashSet<Integer>();
    for (int i=0; i<a.length; ++i) {
        int val = a[i];
        if (val > n) continue;
        if (val < 0) throw new IllegalArgumentException("Negative numbers are not supported");
        if (complemenets.contains(n - val)) return true;
        complemenets.add(val);
    }
    return false;
}
General Strategy for Design Interviews

- Ask clarifying questions and collect requirements
- Work backwards from the customer
- Think about how to monitor the system (operational excellence)
- Be flexible in your design as you learn new requirements
How would you build a service like TinyURL?
• Working Backwards

• Who are our customers?
• Ask Clarifying Questions
• Collect Requirements
- Functional Requirements
  - What do shortened URLs look like?
  - Do we re-use shortened URLs or make new ones? (1:1 or 1:n)
  - How long are shortened URLs valid?
• Scaling Requirements
  • What TPS?
  • How many reads vs. writes?
  • How many shortened URLs to store?
• Operation Excellence
  • Is my service up and running?
  • Key Metrics
  • Canaries
• Actual Design
  • System Components
    • Webservers
    • Database
TINYURL

• Use Cases
  • Creating a new tiny URL
  • Using a tiny URL
  • Exception conditions
  • Scalability
NEVER GONNA GIVE YOU UP
TINYURL

• Changing Requirements
  • How do we prevent Rick Roll?
  • Banned long URLs
  • Preview Feature
What is it like to interview at AWS Elemental?
Online Screening

https://www.myamcat.com/amazon-lateral-demo
The Anatomy of an On-Site Loop
Typically, 5-6 Interviews
3 Coding interviews
1-2 System Design Interview
1 Behavioral Focused Interview

Behavioral assessment in each interview
Behavioral Interview

Amazon Leadership Principles
https://www.amazon.jobs/principles
Gayle Laakmann McDowell

Gayle Laakmann McDowell has a strong background in software development with extensive experience on both sides of the hiring table.

She has worked for Microsoft, Apple, and Google as a software engineer. She spent three years at Google, where she was one of the top interviewers and served on the hiring committee. She interviewed hundreds of candidates in the U.S. and abroad, assessed thousands of candidate interview packets for the hiring committee, and reviewed many more resumes.

As a candidate, she interviewed with—and received offers from—twelve tech companies, including Microsoft, Google, Amazon, IBM, and Apple.

Gayle founded CareerCup to enable candidates to perform at their best during these challenging interviews. CareerCup.com offers a database of thousands of interview questions from major companies and a forum for interview advice.

In addition to *Cracking the Coding Interview*, Gayle has written other two books...
For more Detailed Refreshers….


http://highscalability.com/


Questions?
Thank You!