Interview Coding Challenges

Software Engineer Track
AI-4AI's Graduate Training Program

January 26, 2025

Coding Challenges

A. JavaScript Coding Challenge

Problem Statement:

Write a function called `longestWord` that takes a string as an argument and returns the longest word in the string. If there are two or more words that are the same maximum length, return the first one. If the string is empty or does not contain any words, return an empty string.

Instructions:

- Complete the challenge on glot.io with your screen shared and camera on.

Code Template:

```
function longestWord(sentence) {
  // Your code here
}

// Test cases
console.log(longestWord("I love programming in JavaScript")); // Expected "programming"
console.log(longestWord("Hello world")); // Expected "Hello"
console.log(longestWord("")); // Expected ""
console.log(longestWord("One two three four five")); // Expected "three"
```

Listing 1: JavaScript: longestWord Function

B. React Coding Exercise

Problem Statement:

Create a simple To-Do list application in React. The user should be able to:

1. Enter a task in an input field.

2. Click an `Add` button to add it to a list.

3. See the tasks displayed in a list.

4. Click on a task to mark it as completed (toggle done/undone).

5. **(Optional for advanced)** Add a `Delete` button to remove a task from the list.

Instructions:

- Fork the provided code template.

- Complete the application as per the requirements.

- Share your screen and keep your camera on during the interview.

Code Template:
Access the starter code for the React To-Do application at the following link:
https://codesandbox.io/p/sandbox/c7965v