

Full-Stack Development Assessment

1. Coding Challenge

Question: Write a function in JavaScript that takes an array of integers and returns the largest sum of any contiguous subarray. Explain your approach and the time complexity of your solution.

Example:

```
```javascript
function maxSubArray(nums) {
 // Your code here
}

console.log(maxSubArray([-2,1,-3,4,-1,2,1,-5,4])); // Output: 6 (subarray [4,-1,2,1] has the largest sum)
...
```
```

2. API Integration

Question: Describe the steps you would take to integrate a third-party payment gateway API into an e-commerce application. Provide an example of how you would handle error responses from the API in your code.

3. Security and Compliance

Question: Explain how you would ensure the security and compliance of a web application handling sensitive user data. Discuss specific measures you would implement to protect against common security vulnerabilities such as SQL injection, XSS (Cross-Site Scripting), and CSRF (Cross-Site Request Forgery).

4. Database Design

Question: Design a database schema for a simple blog application where users can create, read, update, and delete posts. Each post should have a title, content, author, and timestamps for creation and updates. Provide the SQL queries to create the necessary tables and indexes.

5. Cloud Services

Question: Describe your experience with deploying web applications using cloud services (AWS, Azure, or Google Cloud). Choose one of the cloud providers and outline the steps you would take to deploy a full-stack application, including setting up the server, database, and any other necessary services.