

Interview Environment Setup Instructions

VS Code Setup

1. Download and install the latest version of Visual Studio Code from the official website:
<https://code.visualstudio.com/>
2. Install the following extensions in VS Code:
 - **Live Share**: Allows for real-time collaboration and screen sharing during the interview.
 - **Code Time**: Tracks your coding activity and ensures you are not using any external resources during the interview.

Environment Preparation

1. Make sure you have a stable internet connection and a functioning webcam.
2. Close all unnecessary applications and browser tabs to avoid distractions and ensure optimal performance.
3. Create a new folder on your desktop named "Interview" and open it in VS Code.
4. Open the terminal in VS Code (**View -> Terminal**) and ensure you have the following installed:
 - Node.js (v14 or higher)
 - npm (v6 or higher)
 - git

Interview Process

1. Join the designated video call 5 minutes before the scheduled interview time.
2. Share your screen and grant access to the interviewer when prompted.
3. The interviewer will provide you with a set of coding challenges to complete within the allocated time.
4. You are expected to think out loud and explain your thought process while solving the challenges.
5. Feel free to ask clarifying questions if needed.

Study Questions

These questions are meant to give you an idea of the topics that may be covered during the interview. The actual questions may vary.

1. Explain the difference between `useState` and `useEffect` hooks in React.
2. How would you optimize the performance of a React application?
3. Describe the process of creating a RESTful API endpoint in Node.js.
4. What is the purpose of a smart contract in blockchain technology?
5. How would you ensure the security of sensitive data in a web application?
6. Explain the concept of responsive design and how you would implement it using CSS.
7. What is the difference between `localStorage` and `sessionStorage` in web browsers?
8. How would you handle asynchronous operations in JavaScript?
9. Describe your experience with version control systems like Git.
10. What are some best practices for writing clean and maintainable code?

Please ensure that your environment is set up correctly before the interview and be prepared to discuss your approach to problem-solving and your familiarity with the mentioned technologies. Good luck!