Full Stack Developer Interview Summary

Q1. Explain your project folder structure.

This screenshot is the directory structure in my own employee management project. It includes:

- controllers for logic

- routes for navigation

- models for data schema

- public for static files

- seeds for dummy/reset data

- utils for middleware functions

- views for frontend rendering

- app.js as server configuration

- package.json to define dependencies and start commands.

Q2. Explain the logic flow of employee attendance confirmation.

It begins in `controller/attendance.js` with logic for admin and manager to approve or decline attendance. It relies on `models/attendance.js`, routes/attendance.js`, and ends in the rendered `views/attendance/log.ejs`. The attendance status and check-in/out times are updated accordingly.

Q3. Explain how the QR scan system works.

The flow starts in `controller/attendance.js` with `scanQR` function. Admin or manager prints the QR code based on `models/QRCode.js`. The route passes via `routes/attendance.js`, and is rendered in `views/attendance/scan.ejs`. QR codes expire after 24 hours for security purposes.

Q4. How do you secure the attendance system?

I use middleware `isAuth.js` and `checkRole.js` to restrict access to the `attendance/log` page. If unauthorized access still occurs, I'll shutdown the server and implement stronger security such as 2FA login.

Q5. Have you deployed a project to production?

Yes. I have deployed a frontend project to GitHub and Vercel with a purchased `.com` domain. For backend projects, I encountered issues due to needing a hosted cloud database. I'm preparing to invest in hosting infrastructure to support full deployments.

Q6. How do you handle system failure or downtime?

I have implemented a global error handler in `app.js` and a custom error class in `utils/ExpressError.js`. For scalability and DDoS resilience, I plan to audit comprehensively and apply techniques such as 2FA, email verification, and prepare for cloud infrastructure upgrades.

Let Astralis Light the Unknown ✦　*~Rei Reltroner*