ABYTECH-HUB

🔍 **Work Progress Report**
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📝 **Introduction**

This report outlines the backend development tasks completed on the ABY HR Management System, with the main focus on implementing and refining **guards** to strengthen system security and enforce access control across the platform.

🔎 **Task Focus**

Implementation and enhancement of backend guards for secure access management.

✅ **What Was Done**

● Designed and implemented custom guards to validate JWT tokens.
● Added role-based guards to restrict access based on admin, manager, and employee privileges.
● Configured global authentication guards to secure sensitive routes.
● Improved error handling within guards for unauthorized or expired sessions.
● Conducted tests to confirm guard functionality across different modules.
● Fixed edge-case issues with token expiration handling.

⚠️ **Current Status**

● Guard system is fully integrated and operational.
● All restricted routes are now protected using layered guards.
● Pending: Coordination with the frontend team to finalize error feedback messages.

📌 Next Steps
- Implement additional guards for multi-factor authentication support.
- Optimize guard logic for performance under high request loads.
- Conduct a full security review of guard and middleware flows.

📚 Summary

The work centered on implementing and refining guards within the ABY HR Management System to provide robust security and precise access control. With guard functionality now stable and tested, the system has a reliable layer of defense against unauthorized access, paving the way for final optimization and security audits.