



REMOTE MISJUDGMENT MONITORING SOLUTION

About the Client

A global company specializing in advanced mobility aims to revolutionize transportation for enhanced well-being. They supply automotive service parts to major Indian automakers like Tata and Toyota. With their own manufacturing facility, the company's testing centres evaluate Electronic Control Units (ECUs), yet occasionally errors occur due to diverse factors. Hence, there's a need for a solution to systematically track and categorize these errors by lines, models, and steps for effective management.

Summary

The client routinely tests Electronic Control Units (ECUs) for vehicles, but errors occur occasionally at testing centres. Continuous manual monitoring makes the process tedious. Thus, a solution is needed to aggregate error counts by categories (line, model, step) and presenting them in a web interface aims to streamline understanding and management.

The Challenge

Testing centres at the client's facility assess Electronic Control Units (ECUs), but occasional judgment errors occur. Digitizing the system is essential to aggregate error counts across categories (line, model, step). Additionally, robust protection is necessary for the entire system at the hardware edge.

Our Solution

The proposed solution is a system designed to categorize and present misjudgment errors by testing line, machine model, and specific test steps. Machine models are inferred from serial numbers. Access is restricted via login management. The system accepts data input from CSV files or a line server, allowing for labelling against specific test steps and generating downloadable tables. Daily, shiftily, or weekly log reports indicating test status (Pass/Fail) are generated. Weekly summary reports and email notifications are automated upon execution, requiring internet connectivity. An autorun function is scheduled for Sundays to ensure regular operation.

INDUSTRY

Automotive

KEY CHALLENGES

- Judgment Errors
- Digital Transformation
- Hardware Security

SOLUTION

- Error Categorization
- Access Control & Reporting

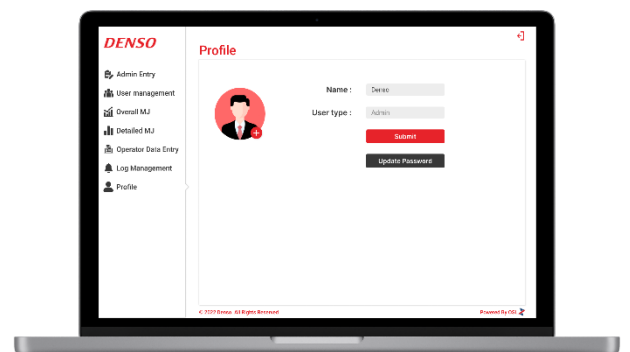
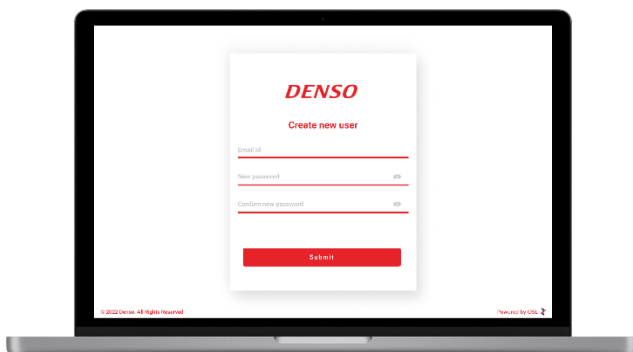
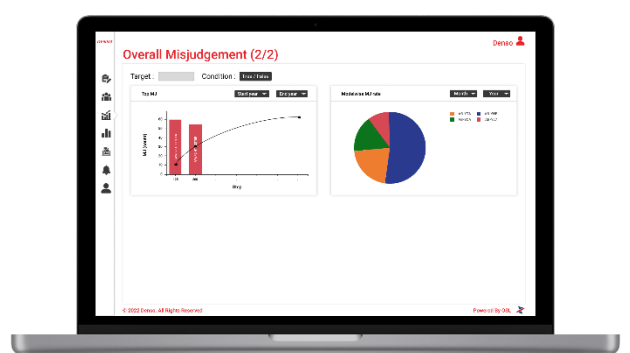
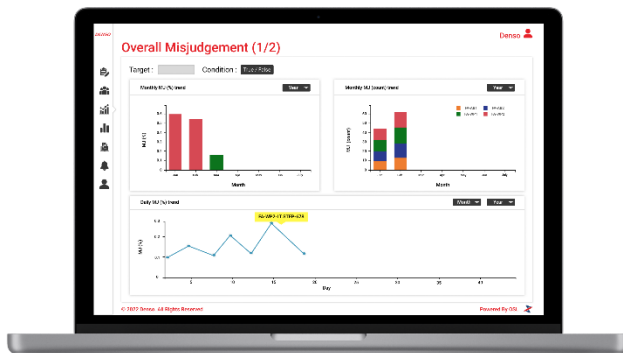
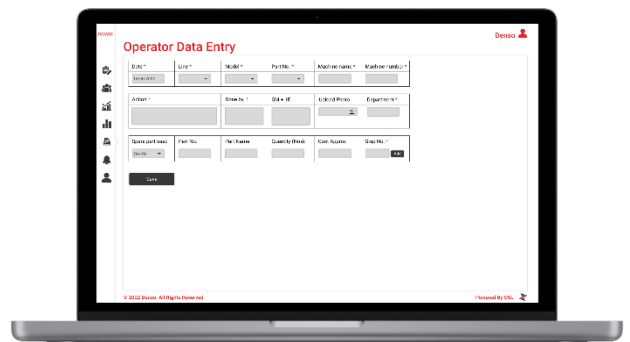
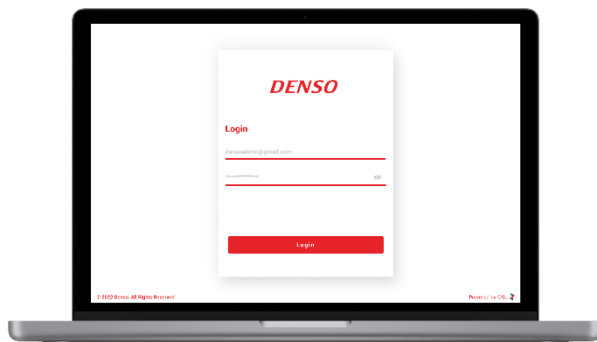
BENEFITS

- Streamlined Management
- Seamless Integration
- Proactive Notifications
- Scheduled Operations

Technical Architecture



Web Interface



Benefits

- Enhanced Error Tracking
- Streamlined Management
- Reduced Manual Effort
- Improved Accuracy
- Enhanced Security
- Customized Reporting
- Seamless Integration
- Proactive Notifications
- Scheduled Operations

Benefits Against Alternatives

Our solution offers unparalleled efficiency, accuracy, and cost-effectiveness compared to alternatives. By automating error tracking and management processes, it eliminates manual labour costs and minimizes the risk of human error. Providing real-time insights and comprehensive reporting, it ensures prompt decision-making and targeted improvements. With seamless integration and scalability, it adapts to evolving needs without disruption. Customizable and secure, our solution prioritizes client-specific requirements and data confidentiality, setting it apart as the optimal choice for enhancing error monitoring and management.

Our Value Addition

Optimized Solutions has delivered a tailored system leveraging customized cloud infrastructure and mobile application software. This solution efficiently manages and validates Electronic Control Units (ECUs) testing functionalities via a digital dashboard. The digital transformation simplifies the entire testing process, enabling users to monitor and analyse operations comprehensively, thus enhancing overall plant efficiency.