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JOHOR PORT INDUSTRIAL VISIT

NEWSLETTER



Introduction Johor Port

Johor Port is an important comprehensive multi-purpose port in southern Malaysia, located in Pasir Gudang, Johor State. It is one of the earliest ports in Malaysia to obtain the "Free Trade Zone" status and offers a wide range of services including container, bulk cargo, liquid goods, and warehousing.

It began operations in 1977 and is the earliest multi-purpose port in the southern part of Malaysia. It is operated by Johor Port Berhad (a subsidiary of the MMC Group)

● Technologies and Issues

1.JPBI

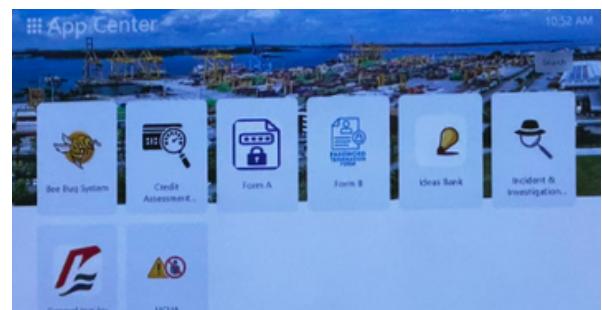
JPBI e-Community Is the main portal or gateway for accessing Johor Port's strategic application systems such as system for Container Terminal,Bulk & Break Bulk Terminal and Marine Services (MSIS).

2.ERP

ERP stands for enterprise resource planning it's a software system that includes all the tools and processes required to run a successful company including HR supply chain, finance , accounting and more.

3.PAMS

PAMS stands for Port Access Management System. It is an online, digital system used by Johor Port to manage access, permits, and security for vehicles and people entering the port area



4.Application

Application development uses two approaches: low-code platforms and traditional programming. To enable faster and more flexible development, we primarily use low-code platforms to build internal workflow and business process applications that are not handled by strategic or backend systems.

5. Data Analysis

Data analysis is the process of inspecting, cleaning, transforming, and modeling data to discover useful information, draw conclusions, and support informed decision-making in business, science, and research, turning raw numbers into actionable insights through various statistical and logical techniques.



● Reflection

We learned that innovation saves lives. The new automated verification system they discussed isn't just about being faster; it keeps human workers away from dangerous heavy trucks. It showed me that good IT systems can actually make a workplace safer for humans.

We realized that adaptability is key. Seeing them switch to Low-Code development to save time motivated me to keep learning new tools, not just stick to traditional coding. The speakers emphasized that soft skills matter. Even as IT professionals, we need to communicate well to solve problems. This visit motivated me to improve both my technical skills (like Java) and my ability to work with people.

6. Cybersecurity Challenges

With increased digitization comes increased risk. The speakers discussed their defense strategies, including "adversary rules," 24-hour SOC monitoring (outsourced), and regular penetration testing. The issue of migrating to the Cloud while managing legacy systems remains a current challenge they are actively addressing

● Summary

Our class recently conducted an insightful industrial visit to Johor Port. They explained that Information & Communication Technology (ICT) is vital to the ports and logistics industry in ensuring customers' and users' needs are constantly met or surpassed. Johor Port leverages on ICT to provide efficient, interactive, and fast user-friendly services. ICT is also crucial for the integration of planning and execution of day-to-day operational and management activities, thus an important business tool (like JPBI, ERP, PAMS and etc). We also were introduced to how the IT team supports the port's massive ecosystem, which includes a 300,000 sqft SQL database. It was a great opportunity to see the connection between the coding we learn in class and real-life industry applications.

