UNIVERSITI TEKNOLOGI PETRONAS

TFB1033 : OBJECT ORIENTED PROGRAMMING

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PUVAN

<div align="center">**PROPOSAL TITTLE : AIRLINE BOOKING SYSTEM**</div>

An airline booking system is a crucial component of the aviation industry, facilitating the process of making reservations, purchasing tickets, managing flight schedules, and handling other related tasks.

<div align="center">**APPLICATION : AIRLINE BOOKING SYSTEM**</div>

Ticket Sales: Customers can use booking systems to search for flights, compare prices, and purchase tickets online or through travel agencies.

Flight Management: Airlines utilise booking systems to monitor flight schedules, track aircraft availability, and coordinate with airports for departure and arrival times.

Inventory Management: The system helps airlines optimise seat availability and pricing strategies based on demand forecasts and market conditions.

Customer Relationship Management (CRM): Booking systems often integrate CRM functionalities to manage customer profiles, preferences, and loyalty programs.

Payment Processing: Secure payment gateways within the booking system handle transactions, ensuring a seamless and safe purchasing experience for customers.

Integration with Other Systems: Booking systems may integrate with airport systems, airline operations, and third-party services such as hotel bookings or car rentals to provide comprehensive travel solutions.

<div align="center">**MARKET POTENTIAL : AIRLINE BOOKING SYSTEM**</div>

Global Travel Industry: The airline booking system market caters to the global travel industry, which is consistently growing due to increasing disposable incomes, business travel, and tourism.

Digital Transformation: The shift towards digital channels for travel bookings is driving demand for advanced booking systems that offer user-friendly interfaces, mobile compatibility, and personalised experiences.

Emerging Markets: Emerging economies with expanding middle-class populations are witnessing a surge in air travel demand, presenting significant growth opportunities for airline booking system providers.

Airline Efficiency: Airlines are continually seeking ways to improve operational efficiency, reduce costs, and enhance customer satisfaction. Advanced booking systems with features like dynamic pricing, predictive analytics, and automation help achieve these goals.

COVID-19 Recovery: While the travel industry faced challenges during the COVID-19 pandemic, there's potential for recovery and growth as travel restrictions ease and consumer confidence rebounds. Booking systems play a vital role in facilitating safe and convenient travel experiences post-pandemic.

Airline Partnerships: Airlines often collaborate with technology providers for innovative booking solutions, driving market expansion and product development.

Market Consolidation: The airline booking system market is witnessing consolidation through mergers and acquisitions, with larger players seeking to expand their market share and capabilities.