



**System Analysis**

**Course Code: CSE 318**

**Report, Week 02**

**Submitted To**

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**Existing System of the Company:**

MA Tours & Travels in Mirpur 2, Dhaka, Bangladesh operates in the travel industry. They offer travel services such as flight bookings, tour packages, and hotel reservations to their customers. Currently, they rely on a traditional manual reservation system, where customers visit their office or contact them via phone to make flight bookings and other travel arrangements. This manual process involves paper-based records, making it time-consuming and prone to errors. The lack of an automated system also hinders their ability to efficiently manage flight schedules, seat availability, and customer bookings.

**Problem Identification:**

MA Tours & Travels faces several challenges with their existing manual reservation system. The major problems identified are:

**Time-Consuming and Inefficient Processes**: The current manual system requires significant time and effort from the staff to process flight bookings, tour packages, and hotel reservations. This inefficiency hampers their ability to handle a large number of bookings promptly, leading to delays in customer responses.

**Risk of Errors and Data Loss:** Relying on paper-based records increases the risk of errors in customer bookings and the loss of important travel information. This not only affects the accuracy of booking details but also tarnishes the company's reputation for reliability.

**Inadequate Data Management:** The absence of a centralized database makes it challenging for MA Tours & Travels to efficiently store and manage customer information, flight schedules, and booking records. This impedes their ability to generate comprehensive reports for business analysis and strategic decision-making.

**Limited Customer Engagement:** The lack of a user-friendly digital interface limits customer engagement and satisfaction. The manual booking process may deter potential customers seeking a more seamless and convenient experience.

**Difficulty in Tracking and Managing Bookings:** Managing a large volume of bookings manually can lead to confusion and difficulties in tracking and organizing reservations effectively. This could result in overbooking or under booking of flights and other travel services.

**Objectives:**

**Efficient Reservation System:** We want to create an automated system that makes booking flights and other travel arrangements easier and faster for MA Tours & Travels' staff.

**Real-time Updates:** The new system will provide instant updates on flight schedules and available seats. This way, they can respond quickly to customers and manage resources better.

**Comprehensive Database:** We'll build a secure database where all customer information, flight details, and bookings will be stored. This will make it easy to access information and generate useful reports.

**Enhanced Customer Satisfaction:** Our goal is to improve the booking experience for customers by offering a user-friendly system with quick responses and accurate information.

**Development Model:**

We use Agile for this project because it offers several advantages that align well with the needs of MA Tours & Travels:

* **Customer-Centric Approach:** Agile focuses on customer collaboration and continuous feedback. This ensures that the developed system meets the specific needs and expectations of MA Tours & Travels, leading to a more satisfying end product.
* **Adaptability to Changes:** In the travel industry, requirements can change frequently. Agile allows us to be flexible and adapt to evolving needs, ensuring that the system remains up-to-date and responsive throughout its development.
* **Incremental Development:** Agile's iterative approach allows us to deliver working software in short phases. This enables MA Tours & Travels to start utilizing the system sooner and provide feedback for continuous improvement, enhancing the system's overall effectiveness.
* **Continuous Testing and Quality Assurance:** Agile places a strong emphasis on continuous testing throughout the development process. This ensures that the airline reservation system will be robust, secure, and of high quality, providing a reliable platform for MA Tours & Travels and their customers.
* **Collaboration and Communication:** Agile promotes close collaboration between the development team and stakeholders. Regular meetings and effective communication channels keep everyone informed about the project's progress, fostering a strong sense of teamwork and shared responsibility.
* **Faster Time-to-Market:** Agile's incremental delivery approach enables us to swiftly deliver core features, accelerating the system's time-to-market. This allows MA Tours & Travels to start benefiting from the system sooner and gain a competitive advantage in the travel industry.
* **Risk Mitigation:** Agile facilitates early identification and mitigation of potential risks. By proactively addressing challenges, we can minimize the likelihood of encountering major obstacles during the development process, ensuring a smooth and successful implementation.

By leveraging the Agile methodology, we aim to deliver a successful and user-friendly airline reservation system that meets MA Tours & Travels' unique requirements while enhancing their operational efficiency and customer experience.