**Hotel Management System**

**(Project Requirements Analysis)**

**Project Number:**

**Group # 9**

**Submitted To:**

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**Project Team:**

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**Requirements Analysis for Hotel Management System (HMS)**

***1. Business Requirements***

These define the system’s high-level objectives to align with business goals.

* **Maximize Revenue**: Implement dynamic pricing and promotions based on demand and seasonality.
* **Streamline Operations**: Automate booking, check-in/check-out, and housekeeping for improved efficiency.
* **Enhance Guest Satisfaction**: Provide personalized services, self-service options, and prompt responses to guest requests.

***2. User Requirements***

**From Guest:**

* View available rooms based on dates, room type, and amenities.
* Book, modify, and cancel reservations online.
* Make secure payments using multiple methods.
* Check-in/check-out independently via a mobile app or kiosk.
* Request additional services (e.g., extra towels, room service) through the app.
* Access booking details, invoices, and payment status via a guest portal.

**From Manager:**

* Assign rooms based on preferences and availability.
* Track room statuses (clean, dirty, under maintenance) and manage housekeeping tasks.
* Oversee and resolve guest requests efficiently.
* Access detailed reports on occupancy, revenue, and guest satisfaction.
* Adjust room pricing dynamically based on demand.
* Ensure smooth staff workflows and guest interactions through a centralized system.

***3. Functional Requirements***

* Define the system’s essential actions to meet user and business needs.
* Allow guests to search for rooms based on date, type, and preferences.
* Enable online booking, modification, and cancellation.
* Send automated confirmation emails/notifications.
* Allow staff to update room status (clean, dirty, under maintenance).
* Manage room pricing dynamically.
* Generate invoices and process secure payments via multiple methods.
* Store guest preferences and history for personalized services.
* Provide real-time occupancy, revenue, and booking reports.
* Support self-check-in/out via kiosks or a mobile app.

***4. Non-Functional Requirements***

Define system qualities and constraints.

* **Scalability**: Handle peak booking traffic without performance issues.
* **Security**: Protect guest data through encryption and secure authentication, ensuring GDPR compliance.
* **Usability**: Provide an intuitive, responsive design for both mobile and desktop users.