END-TO-END PROJECT ABSTARCT

Team Members:	Project Guide
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21BQ1A05H3 – TM8	
21BQ1A05H8-TM9	
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21BQ1A05I7—TM11	
21BQ1A05I8 TM12	
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Abstract:

Title: Hotel Central Reservation System

The "HAPPY STAY" Hotel Reservation System is a robust and user-friendly web application developed to streamline the booking process and enhance the overall experience for both guests and hotel administrators. This system is tailored to meet the dynamic needs of modern hospitality, providing a comprehensive platform that integrates room reservations, payment processing, and administrative management.

User Features:

- **User Registration and Login:** Guests can easily create an account and log in to access personalized features. The registration process is straightforward, allowing users to quickly set up their profiles and manage their bookings.
- Room Browsing with Filters: The application offers an intuitive interface for browsing available rooms. Users can apply filters such as check-in and check-out dates, room type, and price range, making it easier to find the perfect accommodation for their stay.
- Online Booking: Once a room is selected, users can seamlessly book their stay through the application. The booking
 process is designed to be quick and efficient, ensuring a hassle-free experience.
- **Payment Integration via Paytm Gateway:** The system integrates with the Paytm payment gateway, enabling users to securely complete their transactions online. This feature supports a range of payment options, providing flexibility and convenience.
- Booking Management: Users can view and manage their bookings through their accounts. This includes the ability
 to cancel reservations if plans change, ensuring that guests have control over their stay.

- **Facility Viewing:** The application provides detailed information on the hotel's facilities, including amenities, services, and on-site activities. Guests can explore these offerings before making a reservation, helping them make informed decisions.
- **Communication with Hotel Management:** Users can directly contact the hotel management team via the email. An integrated email feature allows guests to send inquiries or requests to the hotel manager, enhancing communication and customer service.

Admin Features:

- **Booking Management:** Hotel administrators can access a comprehensive dashboard that displays all current and upcoming bookings. This feature allows them to manage reservations efficiently, including accepting or canceling bookings as needed.
- **Order Acceptance:** The system allows administrators to review and accept room bookings. This ensures that the hotel can manage occupancy effectively and provide guests with a smooth check-in experience.
- Cancellation Handling: Administrators can easily handle booking cancellations, ensuring that the hotel can promptly free up rooms for other potential guests.
- Room Management: The application provides tools for administrators to update room details, including pictures, features, and descriptions. This ensures that the hotel's online presence accurately reflects its offerings, attracting potential guests.
- **Front-End Updates:** Administrators can make real-time changes to the hotel's website through the application. This includes updating room availability, pricing, and special offers, ensuring that the hotel's online content is always current and appealing.

Software Tools Required:

1.UI design: Figma

2. Server-Side Scripting: PHP

3. Database Management: MySQL

4. Data Formats: XML AND JSON

5. Programming Languages: JavaScript, SQL, HTML/CSS, PHP, Bootstrap

Frame Work:

Front-End:

- JavaScript (JS)
- HTML & CSS

Back-End and Databases:

- MySQL
- PHP

Development Environments:

• Visual Studio Code (VS Code)