

# Streamlining Guest Communication in Hospitality

Devsinc collaborated with a **hospitality innovator** to develop an advanced web application that streamlines guest communication through automated responses. This innovative solution leverages **microservice architecture** to generate and route messages efficiently, significantly **enhancing** the guest experience in the hotel sector.





# Problem Statement

Hotels faced several challenges in managing guest communication effectively, including:

**Complex Guest Communication:**

- Delays and inefficiencies in addressing routine guest inquiries.

**System Reliability:**

- Communication disruptions during server downtime, negatively impacting guest satisfaction.

**Optimized Message Routing:**

- Inefficient routing of guest requests to appropriate departments or staff.

**Efficient Data Management:**

- Difficulty handling high volumes of messages while maintaining performance and data integrity.

**Campaign Management:**

- Challenges in managing and scheduling targeted text campaigns for diverse guest categories.

# Results Achieved

## **Enhanced Communication Efficiency:**

Automated responses and optimized routing reduced guest query resolution time by 40%.

## **System Resilience:**

Backup server ensured seamless communication during downtimes, improving guest satisfaction.

## **Improved Message Delivery:**

Optimized message queues facilitated timely and accurate message routing.



## **Targeted Campaigns:**

Precision text campaigns increased guest engagement, improving ROI by up to 30%.

## **Streamlined Data Management:**

Multi-tenancy architecture enabled efficient data processing, leading to faster insights and

## **Increased Guest Satisfaction:**

Prompt responses, targeted campaigns, and optimized communication channels boosted guest satisfaction, solidifying the platform's value in the hospitality sector.





# Devsinc's Technical Solutions

## **Automated Response Mechanism**

- Developed an AI-driven system to automatically generate replies to common guest queries.
- Implemented intelligent routing mechanisms to direct guest requests to the appropriate contacts, reducing response times by up to 50%.

## **System Resilience**

- Built a redundant backup server to ensure uninterrupted guest communication during main server downtime.
- Synchronized data seamlessly upon server recovery to maintain consistency.

## **Optimized Message Queues**

- Designed independent workers and queues to handle large message volumes efficiently.
- Ensured optimized routing and delivery for timely guest communication.

## **Text Campaign Module**

- Created a dedicated module for scheduling and managing targeted text campaigns, enabling precision messaging for various guest types.

## **Multi-Tenancy Architecture**

- Deployed a secure multi-tenancy database architecture, ensuring data segregation and up to 99% data integrity across multiple hotel clients.

## **Third-Party Integrations**

- Integrated Twilio for automated number assignment and advanced messaging capabilities.
- Incorporated Landbot.io and Dialogflow for dynamic message flows and guest confidence scoring.