HOTEL MANAGEMENT SYSTEM DATABASE BSIS 3102

#1: Reservation and Front desk Management.

Guests

```
CREATE TABLE guests (
   guest_id INT(11) AUTO_INCREMENT PRIMARY KEY,
   first_name VARCHAR(50) NOT NULL,
   last_name VARCHAR(50) NOT NULL,
   email VARCHAR(50) UNIQUE,
   first_phone VARCHAR(50),
   second_phone VARCHAR(50),
   status ENUM('regular', 'vip', 'banned') DEFAULT 'regular',
   created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
   updated_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);
```

Rooms

```
CREATE TABLE rooms (
   room_id INT(11) AUTO_INCREMENT PRIMARY KEY,
   room_number INT(11) NOT NULL UNIQUE,
   room_types VARCHAR(50) NOT NULL ('Single Room','Double Room','Twin Room','Deluxe Room','Suite','Family
Room','VIPRoom')),
   max_occupancy INT(11) NOT NULL
   room_price DECIMAL(10,2) NOT NULL,
   status ENUM('available','reserved','occupied','to be clean','under maintenance') DEFAULT 'available',
);
```

Bookings

```
CREATE TABLE bookings (
   booking_id INT AUTO_INCREMENT PRIMARY KEY,
   guest_id INT NOT NULL,
   room_id INT NOT NULL,
   booking_type ENUM('reservation','walk-in') NOT NULL,
   status ENUM('pending','confirmed','checked_in','checked_out') DEFAULT 'pending',
   remarks TEXT,
   check_in TIMESTAMP NULL,
   check_out TIMESTAMP NULL,
   booking_date DATE NOT NULL,
   created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
   updated_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,
);
```

#2. Housekeeping

Room Status

```
CREATE TABLE room_status (
   status_id INT AUTO_INCREMENT PRIMARY KEY,
   room_id INT NOT NULL,
```

```
    status ENUM('Clean','Dirty','In Progress','Out of Service') DEFAULT 'Dirty',
    last_cleaned DATETIME NULL,
    assigned_staff INT NULL,
    remarks TEXT,
);
```

Housekeeping Tasks

```
CREATE TABLE housekeeping_tasks (
    task_id INT AUTO_INCREMENT PRIMARY KEY,
    room_id INT NOT NULL,
    staff_id INT NOT NULL,
    task_date DATE NOT NULL,
    task_type ENUM('Cleaning','Laundry','Turn-down','Deep Cleaning') NOT NULL,
    status ENUM('Pending','In Progress','Completed') DEFAULT 'Pending',
    remarks TEXT,
);
```

Housekeeping Inventory

```
CREATE TABLE housekeeping_inventory (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    item_name VARCHAR(100) NOT NULL,
    category ENUM('Cleaning Supply','Linen','Toiletry') NOT NULL,
    quantity INT NOT NULL DEFAULT 0,
    unit VARCHAR(20) NOT NULL,
    reorder_level INT NOT NULL DEFAULT 0,
);
```

Maintenance Requests

```
CREATE TABLE maintenance_requests (
    request_id INT AUTO_INCREMENT PRIMARY KEY,
    room_id INT NOT NULL,
    reported_by INT NOT NULL,
    issue_description TEXT NOT NULL,
    priority ENUM('Low','Medium','High') DEFAULT 'Low',
    status ENUM('Pending','In Progress','Resolved') DEFAULT 'Pending',
    reported_date DATETIME DEFAULT CURRENT_TIMESTAMP,
);
```

Staff Performance Tracking

```
CREATE TABLE staff_performance (
    record_id INT AUTO_INCREMENT PRIMARY KEY,
    staff_id INT NOT NULL,
    task_id INT NOT NULL,
    date DATE NOT NULL,
    tasks_completed INT DEFAULT 0,
    average_completion_time TIME,
    quality_rating INT CHECK (quality_rating BETWEEN 1 AND 5),
);
```

#3. Point Of Sale

Restaurant / Buffet Billing

```
CREATE TABLE RestaurantBilling (
```

```
    order_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    staff_id INT,
    table_number VARCHAR(10),
    order_date DATETIME,
    total_amount DECIMAL(10,2),
    payment_id INT
);
CREATE TABLE RestaurantOrderItems (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    order_id INT,
    item_name VARCHAR(100),
    quantity INT,
    price DECIMAL(10,2)
);
```

Mini-bar Tracking

```
CREATE TABLE MinibarTracking (
    minibar_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    room_number VARCHAR(10),
    item_name VARCHAR(100),
    quantity INT,
    price DECIMAL(10,2),
    usage_date DATETIME,
    payment_id INT
);
```

In-room Dining Orders

```
CREATE TABLE InRoomDiningOrders (
    service_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    staff_id INT,
    room_number VARCHAR(10),
    order_date DATETIME,
    total_amount DECIMAL(10,2),
    payment_id INT
);
CREATE TABLE RoomServiceItems (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    service_id INT,
    item_name VARCHAR(100),
    quantity INT,
    price DECIMAL(10,2)
);
```

Gift Shop Sales

```
CREATE TABLE GiftShopSales (
    sale_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    staff_id INT,
    sale_date DATETIME,
    total_amount DECIMAL(10,2),
```

```
    payment_id INT
);
CREATE TABLE GiftShopItems (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    sale_id INT,
    item_name VARCHAR(100),
    quantity INT,
    price DECIMAL(10,2)
);
```

Lounge / Bar POS

```
CREATE TABLE BarPOS (
    bar_order_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    staff_id INT,
    table_number VARCHAR(10),
    order_date DATETIME,
    total_amount DECIMAL(10,2),
    payment_id INT
);
CREATE TABLE BarOrderItems (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    bar_order_id INT,
    item_name VARCHAR(100),
    quantity INT,
    price DECIMAL(10,2)
);
```

#4. Billing & Payment Management

Invoices

```
CREATE TABLE invoices (
    invoice_id INT AUTO_INCREMENT PRIMARY KEY,
    booking_id INT,
    invoice_date DATE,
    invoice_time TIME,
    total_amount DECIMAL(10,2),
    status ENUM('paid', 'cancelled', 'refunded')
);
```

Folio Transactions

```
CREATE TABLE folio_transactions (

    transaction_id INT AUTO_INCREMENT PRIMARY KEY,
    invoice_id INT,
    service_type ENUM('inroom','restaurant','minibar','giftshop','bar'),
    description VARCHAR(255),
    transaction_date DATE,
    transaction_time TIME,
    amount DECIMAL(10,2)
);
```

Group Billing

```
CREATE TABLE group_billing (
   group_billing_id INT AUTO_INCREMENT PRIMARY KEY,
   group_name VARCHAR(100),
   total_group_amount DECIMAL(10,2),
   date DATE,
   time TIME
);
```

Group Billing Members

```
CREATE TABLE group_billing_members (
   group_billing_id INT,
   invoice_id INT,
   share_amount DECIMAL(10,2),
);
```

Payments

```
CREATE TABLE payments (
   payment_id INT AUTO_INCREMENT PRIMARY KEY,
   invoice_id INT,
   group_billing_id INT,
   payment_method ENUM('cash','credit_card','debit_card','gcash','bank_transfer'),
   amount_paid DECIMAL(10,2),
   payment_date DATE,
   payment_time TIME
);
```

Payment Gateway Transactions

```
CREATE TABLE payment_gateway_transactions (
   transaction_id INT AUTO_INCREMENT PRIMARY KEY,
   payment_id INT,
   gateway_name VARCHAR(50),
   response_code VARCHAR(20),
   response_message TEXT,
   created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Refunds

```
CREATE TABLE refunds (
   refund_id INT AUTO_INCREMENT PRIMARY KEY,
   payment_id INT,  -- which payment is being refunded
   invoice_id INT,  -- optional: link to invoice for clarity
   refund_amount DECIMAL(10,2),
   refund_method ENUM('cash','credit_card','debit_card','gcash','bank_transfer'),
   refund_reason VARCHAR(255),
   refund_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
   processed_by INT -- staff_id (HR system link)
);
```

#5. Guest Relationship Management

Guest Preferences

```
CREATE TABLE guest_preferences (
   preference_id INT AUTO_INCREMENT PRIMARY KEY,
```

```
    guest_id INT,
    room_type_preference VARCHAR(50),
    bed_type_preference VARCHAR(50),
    food_allergies TEXT,
    favorite_dishes TEXT,
    smoking_preference BOOLEAN
);
```

Loyalty Programs

```
CREATE TABLE loyalty_programs (
    loyalty_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    membership_tier VARCHAR(50), -- e.g., Silver, Gold
    points_earned INT DEFAULT 0,
    enrollment_date DATE,
    last_updated DATETIME DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);
```

Guest Feedback

```
CREATE TABLE guest_feedback (
    feedback_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    booking_id INT,
    rating INT CHECK (rate stars BETWEEN 1 AND 5),
    feedback_text TEXT,
    submitted_at DATETIME DEFAULT CURRENT_TIMESTAMP
);
```

Complaints

```
CREATE TABLE complaints (
    complaint_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    complaint_date DATE,
    complaint_text TEXT,
    resolution TEXT,
    resolved_by VARCHAR(100),
    status ENUM('Open', 'In Progress', 'Resolved') DEFAULT 'Open'
);
```

Marketing Campaigns

```
CREATE TABLE marketing_campaigns (
    campaign_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    campaign_type ENUM('Email', 'SMS'),
    message_subject VARCHAR(150),
    message_body TEXT,
    sent_at DATETIME DEFAULT CURRENT_TIMESTAMP
);
```

#6. HR & Staff Management (sa 2 groups dito sa hr, magchat sa gc kung sino magiging 1 or 2 na part)

(1.) Staff Profiles , Staff Scheduling & Rosters

```
CREATE TABLE positions (
   position_id INT AUTO_INCREMENT PRIMARY KEY,
   position_name VARCHAR(50) NOT NULL,
   department VARCHAR(50) NOT NULL,
   base_salary DECIMAL(10,2) NOT NULL
);
CREATE TABLE staff (
   staff_id INT AUTO_INCREMENT PRIMARY KEY,
   position_id INT,
   first_name VARCHAR(50) NOT NULL,
   last_name VARCHAR(50) NOT NULL,
   email VARCHAR(100) UNIQUE,
   phone VARCHAR(20),
   address TEXT,
   hire_date DATE NOT NULL,
   employment_status ENUM('active','resigned','terminated') DEFAULT 'active',
   created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
);
CREATE TABLE staff_schedule (
   schedule_id INT AUTO_INCREMENT PRIMARY KEY,
   employee_id INT,
   shift_date DATE NOT NULL,
   shift_start TIME NOT NULL,
   shift_end TIME NOT NULL,
   role VARCHAR(50)
);
```

(2.) Staff Attendance, Payroll & Performance

```
CREATE TABLE attendance (
   attendance_id INT AUTO_INCREMENT PRIMARY KEY,
   employee_id INT,
   log_date DATE NOT NULL,
   time_in TIME,
   time_out TIME,
   status ENUM('present','absent','late','on_leave') DEFAULT 'present'
);
CREATE TABLE payroll (
   payroll_id INT AUTO_INCREMENT PRIMARY KEY,
   employee_id INT,
   pay_period_start DATE NOT NULL,
   pay_period_end DATE NOT NULL,
   base_salary DECIMAL(10,2) NOT NULL,
   overtime_pay DECIMAL(10,2) DEFAULT 0.00,
   deductions DECIMAL(10,2) DEFAULT 0.00,
   net_pay DECIMAL(10,2) NOT NULL,
   payment_status ENUM('unpaid','paid') DEFAULT 'unpaid'
);
CREATE TABLE performance_reviews (
   review_id INT AUTO_INCREMENT PRIMARY KEY,
```

```
    staff_id INT,
    review_date DATE NOT NULL,
    reviewer VARCHAR(100),
    rating INT CHECK (rating BETWEEN 1 AND 5),
    comments TEXT
);
```

#7. Inventory & Procurement Management

Stock / Items

```
CREATE TABLE inventory_items (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    item_name VARCHAR(100) NOT NULL,
    category ENUM('linen','food','drinks','supplies','others') NOT NULL,
    unit VARCHAR(20) NOT NULL, -- e.g., pcs, kg, liters
    quantity INT NOT NULL DEFAULT 0,
    reorder_level INT NOT NULL DEFAULT 10, -- when stock <= reorder_level, trigger alert
    unit_cost DECIMAL(10,2) NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Suppliers

```
CREATE TABLE suppliers (
    supplier_id INT AUTO_INCREMENT PRIMARY KEY,
    supplier_name VARCHAR(100) NOT NULL,
    contact_person VARCHAR(100),
    phone VARCHAR(20),
    email VARCHAR(100),
    address TEXT,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Purchase Orders (PO)

```
CREATE TABLE purchase_orders (

    po_id INT AUTO_INCREMENT PRIMARY KEY,
    supplier_id INT,
    order_date DATE NOT NULL,
    status ENUM('pending','approved','received','cancelled') DEFAULT 'pending',
    total_amount DECIMAL(10,2) DEFAULT 0.00,
    FOREIGN KEY (supplier_id) REFERENCES suppliers(supplier_id) ON DELETE SET NULL
);
```

Purchase Order Items (details of each PO)

```
CREATE TABLE purchase_order_items (
    po_item_id INT AUTO_INCREMENT PRIMARY KEY,
    po_id INT,
    item_id INT,
    quantity INT NOT NULL,
    unit_cost DECIMAL(10,2) NOT NULL,
    subtotal DECIMAL(10,2) NOT NULL,
);
```

Goods Received Note (GRN)

```
CREATE TABLE goods_received (
```

```
    grn_id INT AUTO_INCREMENT PRIMARY KEY,
    po_id INT,
    received_date DATE NOT NULL,
    received_by VARCHAR(100),
    remarks TEXT,
);
```

Stock Usage (Housekeeping, Kitchen, POS consuming items)

```
CREATE TABLE stock_usage (
    usage_id INT AUTO_INCREMENT PRIMARY KEY,
    item_id INT,
    used_date DATE NOT NULL,
    used_by_module ENUM('housekeeping','kitchen','pos','maintenance') NOT NULL,
    quantity_used INT NOT NULL,
    remarks TEXT,
    FOREIGN KEY (item_id) REFERENCES inventory_items(item_id) ON DELETE CASCADE
);
```

Reorder Alerts

```
CREATE TABLE stock_status (
    status_id INT AUTO_INCREMENT PRIMARY KEY,
    item_id INT NOT NULL,
    current_stock INT NOT NULL,
    reorder_level ENUM('Low','Average','High') NOT NULL
);
```

#8. Kitchen & Restaurant Management (F\&B)

Menu Items

```
CREATE TABLE menu_items (
    item_id INT AUTO_INCREMENT PRIMARY KEY,
    item_name VARCHAR(100) NOT NULL,
    description TEXT,
    price DECIMAL(10,2) NOT NULL,
    category VARCHAR(50) -- e.g., Main, Dessert, Drink
);
```

Ingredients

```
CREATE TABLE ingredients (
    ingredient_id INT AUTO_INCREMENT PRIMARY KEY,
    ingredient_name VARCHAR(100) NOT NULL,
    quantity_in_stock DECIMAL(10,2),
    unit VARCHAR(20), -- e.g., kg, g, liters
    reorder_level DECIMAL(10,2)
);
```

Recipes

```
CREATE TABLE recipes (
    recipe_id INT AUTO_INCREMENT PRIMARY KEY,
    item_id INT NOT NULL,
    ingredient_id INT NOT NULL,
    quantity_required DECIMAL(10,2)
);
```

Restaurant Orders

```
CREATE TABLE restaurant_orders (
    order_id INT AUTO_INCREMENT PRIMARY KEY,
    table_number INT,
    order_time DATETIME DEFAULT CURRENT_TIMESTAMP,
    staff_id INT, -- assumes kitchen_staff table exists elsewhere
    total_amount DECIMAL(10,2)
);
```

Order Items

```
CREATE TABLE order_items (
    order_item_id INT AUTO_INCREMENT PRIMARY KEY,
    order_id INT NOT NULL,
    item_id INT NOT NULL,
    quantity INT NOT NULL
);
```

Damaged Foods

```
CREATE TABLE damaged_foods (
    damage_id INT AUTO_INCREMENT PRIMARY KEY,
    ingredient_id INT NOT NULL,
    reported_by_staff_id INT NOT NULL, -- staff who reported or handled the damage
    quantity DECIMAL(10,2) NOT NULL,
    damage_date DATE NOT NULL,
    reason TEXT
);
```

#9. Maintenance & Engineering

Equipment & Asset Register

```
CREATE TABLE equipment_assets (
    asset_id INT AUTO_INCREMENT PRIMARY KEY,
    asset_name VARCHAR(100) NOT NULL,
    asset_type VARCHAR(50),          -- e.g., AC, TV, Fridge
    location VARCHAR(50),            -- e.g., Room 101, Kitchen
    status ENUM('Operational','Under Maintenance','Out of Service') DEFAULT 'Operational',
    notes TEXT
);
```

Preventive Maintenance Scheduling

```
CREATE TABLE preventive_maintenance (
    schedule_id INT AUTO_INCREMENT PRIMARY KEY,
    asset_id INT NOT NULL,
    maintenance_date DATE NOT NULL,
    staff_id INT NOT NULL,           -- linked from HR
    maintenance_type VARCHAR(50),    -- e.g., Routine, Deep Check
    status ENUM('Scheduled','Completed','Missed') DEFAULT 'Scheduled',
    remarks TEXT
);
```

Staff Assignment for Requests

```
CREATE TABLE staff_assignments (
    assignment_id INT AUTO_INCREMENT PRIMARY KEY,
    staff_id INT NOT NULL,           -- staff from HR
    request_id INT NOT NULL,         -- links logically to maintenance_requests
```

```
    assigned_date DATETIME DEFAULT CURRENT_TIMESTAMP,
    status ENUM('Assigned','In Progress','Completed') DEFAULT 'Assigned',
    remarks TEXT
);
```

Breakdown History & Reporting

```
CREATE TABLE breakdown_history (
    breakdown_id INT AUTO_INCREMENT PRIMARY KEY,
    asset_id INT NOT NULL,
    reported_date DATETIME NOT NULL,
    resolved_date DATETIME,
    issue_description TEXT,
    action_taken TEXT,
    staff_id INT,                -- staff from HR who resolved the issue
    remarks TEXT
);
```

#10. Reporting & Analytics

Occupancy Reports

```
CREATE TABLE occupancy_reports (
    report_id INT AUTO_INCREMENT PRIMARY KEY,
    room_number VARCHAR(10),
    room_type VARCHAR(50),
    occupancy_status ENUM('available','reserved','occupied','filthy','under        maintenance,') NOT NULL,
);
```

Sales & Revenue Reports

```
CREATE TABLE sales_revenue_reports (
    sale_id INT AUTO_INCREMENT PRIMARY KEY,
    sale_datetime DATETIME NOT NULL,
    category ENUM('room','restaurant','bar','mini_bar','in_room_dining','gift_shop','other') NOT NULL,
    total_amount DECIMAL(12,2) NOT NULL,
    payment_method ENUM('cash','credit_card','debit_card','online','other') NOT NULL,
);
```

Guest Feedback Analytics

```
CREATE TABLE guest_feedback (
    feedback_id INT AUTO_INCREMENT PRIMARY KEY,
    guest_id INT,
    booking_id INT,
    rating INT CHECK (rate stars BETWEEN 1 AND 5),
    feedback_text TEXT,
    submitted_at DATETIME DEFAULT CURRENT_TIMESTAMP
);
```

Inventory & Cost Reports

```
CREATE TABLE inventory_cost_analytics (
    inventory_id INT AUTO_INCREMENT PRIMARY KEY,
    report_day VARCHAR(20) NOT NULL,
    total_inventory_value DECIMAL(12,2) DEFAULT 0.00,
    total_usage_cost DECIMAL(12,2) DEFAULT 0.00,
    total_purchases_cost DECIMAL(12,2) DEFAULT 0.00,
    most_used_item VARCHAR(100),
```

```
    lowest_stock_item VARCHAR(100),
    created_at DATETIME DEFAULT CURRENT_TIMESTAMP
);
```

Staff Performance

```
CREATE TABLE staff_performance_reports(
    review_id INT AUTO_INCREMENT PRIMARY KEY,
    staff_id INT NOT NULL,
    review_date DATE NOT NULL,
    reviewer VARCHAR(100),              -- who reviewed the staff
    rating INT CHECK (rating BETWEEN 1 AND 5),
    comments TEXT
);
```