STŘEDNÍ PRŮMYSLOVÁ ŠKOLA ELEKTROTECHNICKÁ,
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TECHNICKÝ PROJEKT

MiniHotel

Návrh a realizace full-stack informačního systému MiniHotel pro správu ubytovacích zařízení

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Informační technologie

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User Manual and Setup Guide

System Administration and Daily Operations

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1. Installation

The MiniHotel Management System requires setting up both the backend API and the frontend client.

Backend Setup

1. Navigate to the `MiniHotel-backend` directory.
2. Install the required Python dependencies: `pip install -r requirements.txt`
3. Start the API server: `python main.py`
4. The backend will now run on `http://localhost:5000/api` .

Frontend Setup

1. Navigate to the `MiniHotel-frontend` directory.
2. Install Node.js dependencies: `npm install --legacy-peer-deps`
3. Start the development server: `npm run dev`
4. Open your browser and navigate to `http://localhost:3000` .

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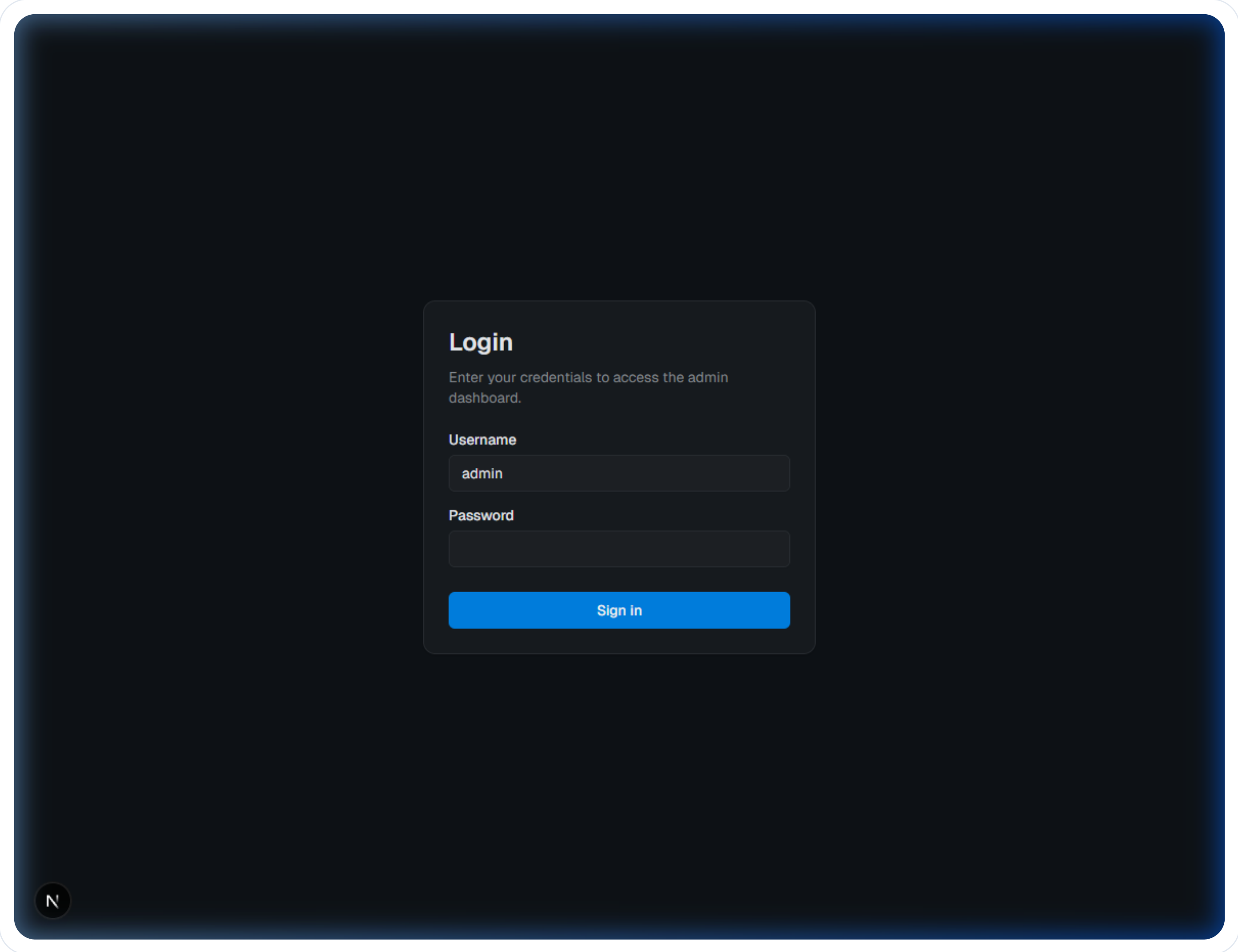
2. Getting Started

Before using the application daily, the system must be initialized by your IT administrator. This process includes creating the primary administrator account and setting up baseline data for your property so that your staff can immediately begin managing reservations.

1. Registration and Login

Navigate to the application URL in your web browser. If no admin account exists in the database, the system will automatically prompt you to create the initial master account.

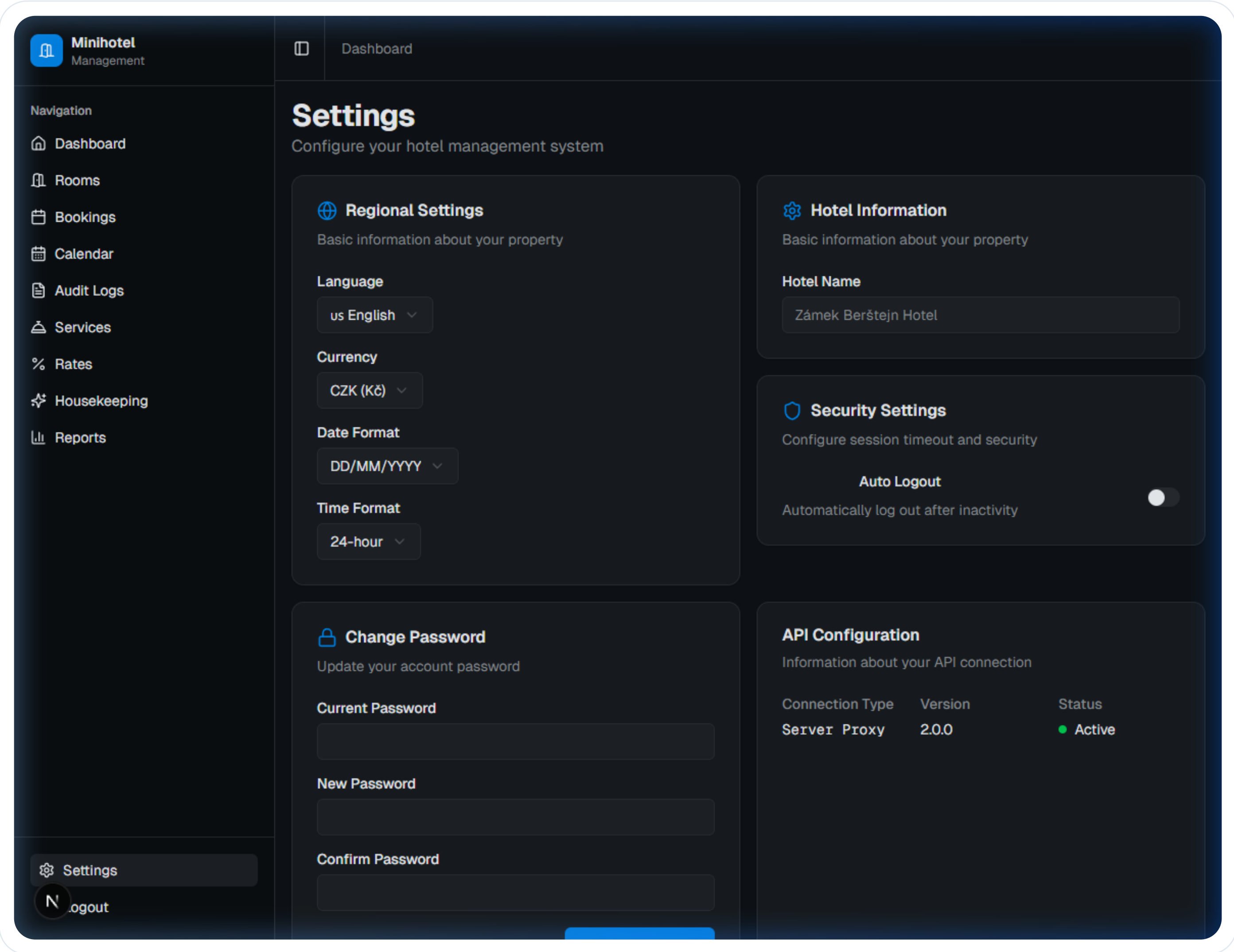
- **Username:** Choose a secure, standard admin username (e.g., `admin` or `manager`).
- **Password:** Ensure you use a strong password (minimum 8 characters, combining numbers, letters, and symbols). For local development environments, a simple password like `adminadmin` may be used, but this is highly discouraged for production networks.



2. Importing Example Data

If you are deploying this for demonstration or testing purposes, you can populate the system with placeholder rooms, seasonal rates, and simulated bookings. This is highly recommended during staff training phases to familiarize them with the UI without risking live data corruption.

1. From the main sidebar navigation on the left side of the screen, click on **Settings** (gear icon).
2. Scroll down to the **System Management** panel.
3. Locate and click the **Import Sample Data** button.
4. You will receive a success notification. Wait up to 5 seconds for background processing. The dashboard and all corresponding tables will now reflect the newly imported data.



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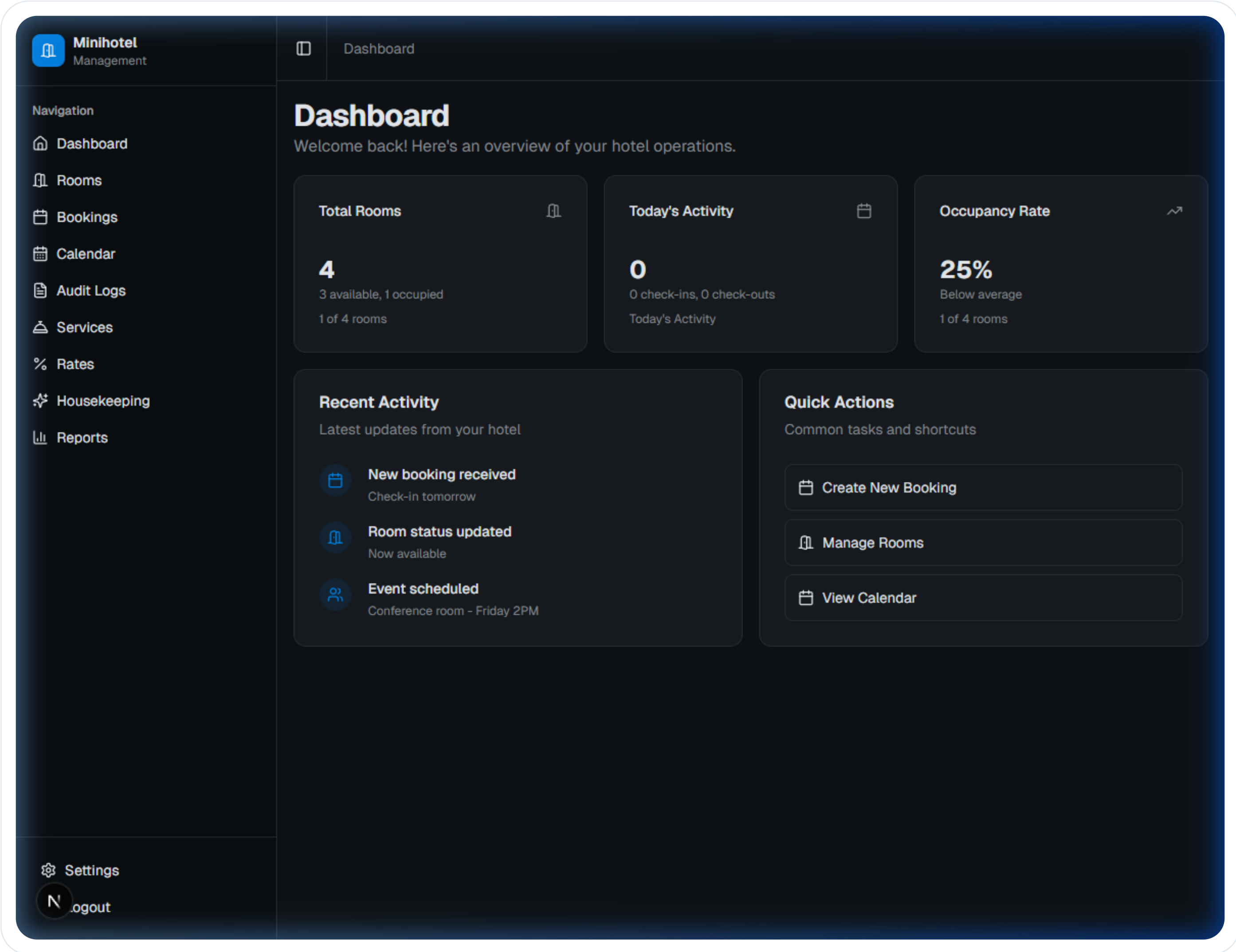
3. Dashboard

The Dashboard is the central hub of your MiniHotel system, offering an at-a-glance overview of your property's performance in real-time. Immediately upon logging in, front desk staff and managers can assess the daily state of the hotel.

Key Features

- **Total Rooms Overview:** Quickly see the exact count of available, occupied, and out-of-order rooms for the current operational day. This helps receptionists know instantly if walk-in guests can be accommodated.
- **Today's Activity:** A summary of all scheduled check-ins and check-outs for the day, allowing front desk staff to anticipate busy periods and coordinate with housekeeping to prioritize room turnaround.
- **Occupancy Rate:** A clear percentage indicator showing current room utilization compared against historical averages, enabling managers to make quick pricing and availability decisions.
- **Recent Activity Feed:** A chronologically sorted feed of the latest events in the system. This tracks real-time updates including new bookings received across all channels, room status updates from housekeeping, and events scheduled in your conference facilities.
- **Quick Actions Panel:** Convenient, large shortcut buttons to perform the most common operations without navigating through deep menus: Create New Booking, Manage Rooms, and View Calendar.



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4. Bookings

Manage all guest reservations in the Bookings module. This comprehensive data table is the primary tool for front desk agents managing the daily flow of guests.

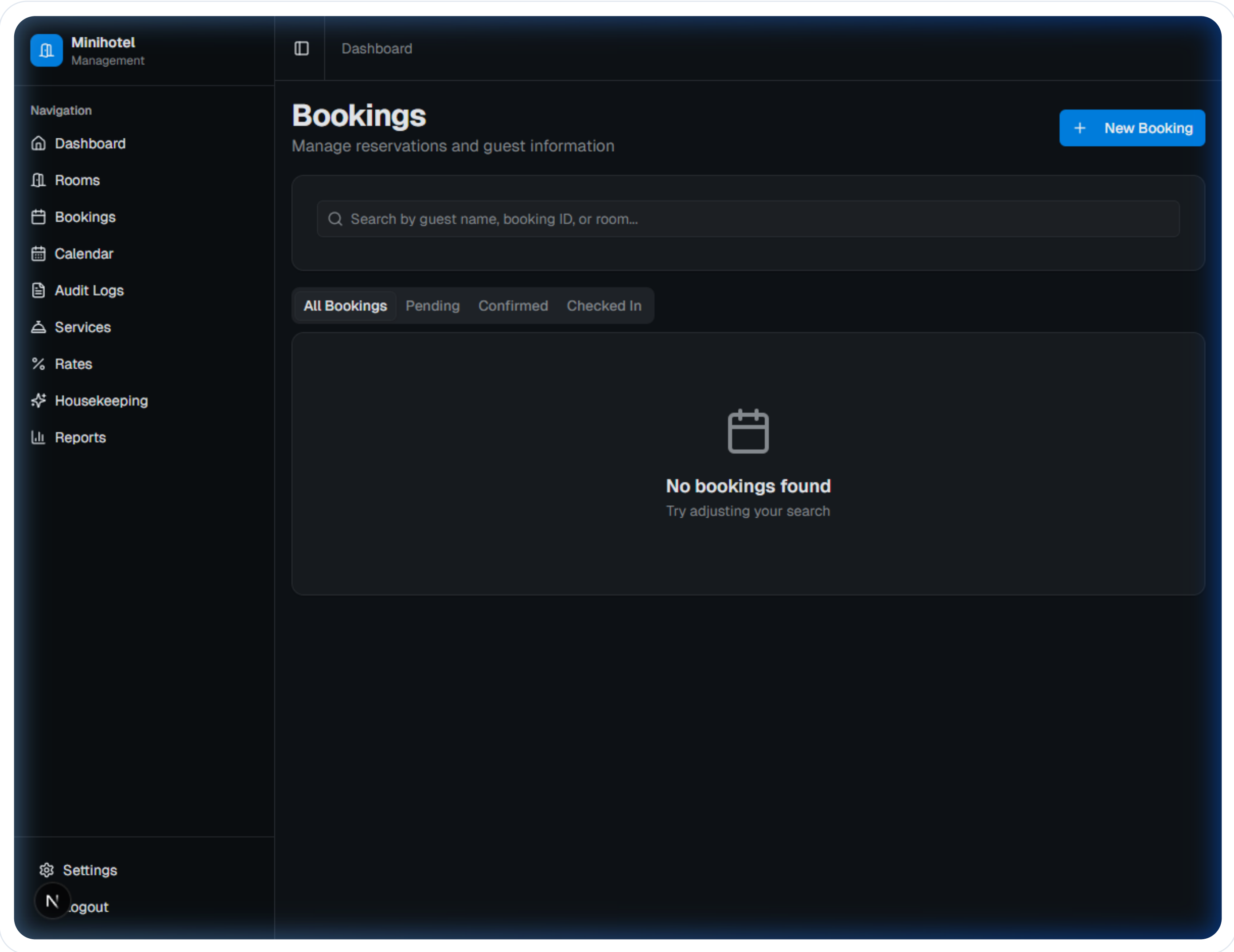
How to Create a New Booking

1. Navigate to the **Bookings** page from the sidebar.
2. Click the **New Booking** button to open the reservation form.
3. **Select a Guest:** Search for an existing guest in the dropdown, or click **New Guest** to add their First Name, Last Name, Email, Phone, and Address.
4. **Select a Room:** Choose the desired room from the dropdown list.
5. **Set Dates & Guests:** Pick the Check-In and Check-Out dates, and specify the Number of Guests.
6. **Add Services:** (Optional) Check any additional services requested by the guest. The system will automatically calculate the Total Amount based on the room's base rate, duration, and services.
7. **Status & Payment:** Set the Booking Status (e.g., Pending, Confirmed, Checked-in) and Payment Status (Pending, Paid, Partial, Refunded).
8. **Payment Method:** Select how the guest is paying (Cash, Card, Bank Transfer, Online).
9. Click **Create Booking** to save the reservation.

How to Edit or Delete a Booking

1. Click on any booking card in the list to open its detailed view.
2. To update the status, use the dropdown menus at the bottom of the window to change the **Booking Status** or **Payment Status**. The system will save this automatically.

3. To cancel and remove the booking entirely, click the red **Delete Booking** button at the bottom of the dialog. Note that this action cannot be undone.



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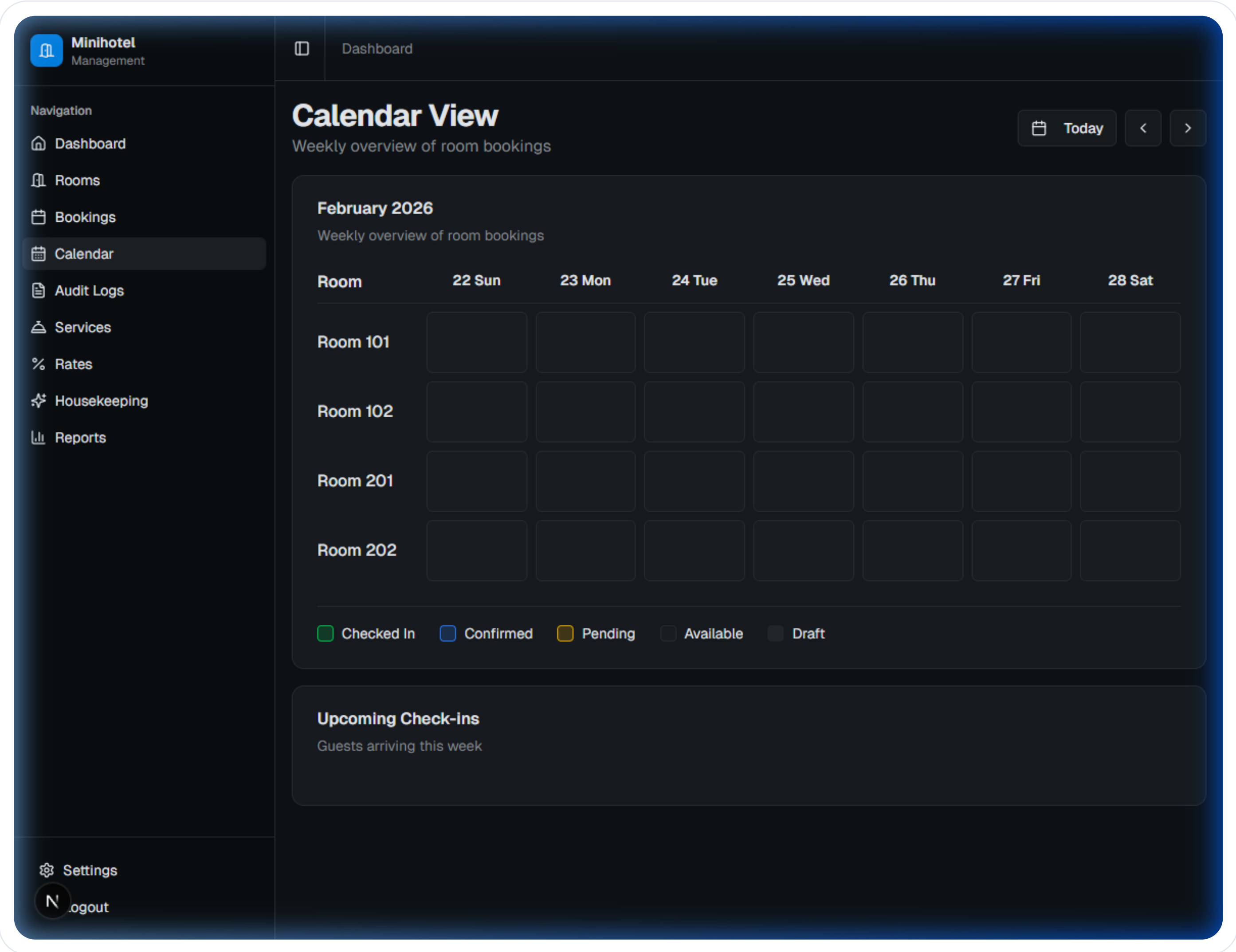
5. Calendar

The Calendar provides a highly visual timeline of all reservations across your physical room inventory. It is the most intuitive way to spot availability gaps, manage overlapping bookings, and plan for long-term capacity.

Understanding the Interface

- **Timeline View:** The horizontal axis represents dates (viewable in weekly or monthly formats), while the vertical axis lists all your property's rooms, organized by room groupings (e.g., First Floor, Suites, Annex).
- **Color-Coded Blocks:** Each booking is represented as a solid block spanning its respective dates. Colors represent the booking's current status (e.g., Green for Confirmed, Yellow for Pending Payment, Gray for Checked Out), allowing you to assess the state of the hotel visually.
- **Interactive Blocks:** Clicking on a timeline block opens a detailed modal with the guest's information, showing total payment dues, contact info, and special notes without forcing you to switch to the Bookings page.
- **Drag and Drop functionality:** Swiftly reassign a guest from one physical room to another within the same tier by clicking and dragging the booking block up or down. You can also adjust the length of stay by dragging the edges of the block.
- **Availability Scanning:** Empty white space on the calendar instantly confirms availability, drastically speeding up the process of answering phone inquiries regarding room vacancies.



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6. Rooms Management

Configure your physical property inventory. In this section, you define the exact physical rooms available for booking, ensuring your software perfectly matches your building's layout.

How to Add a New Room

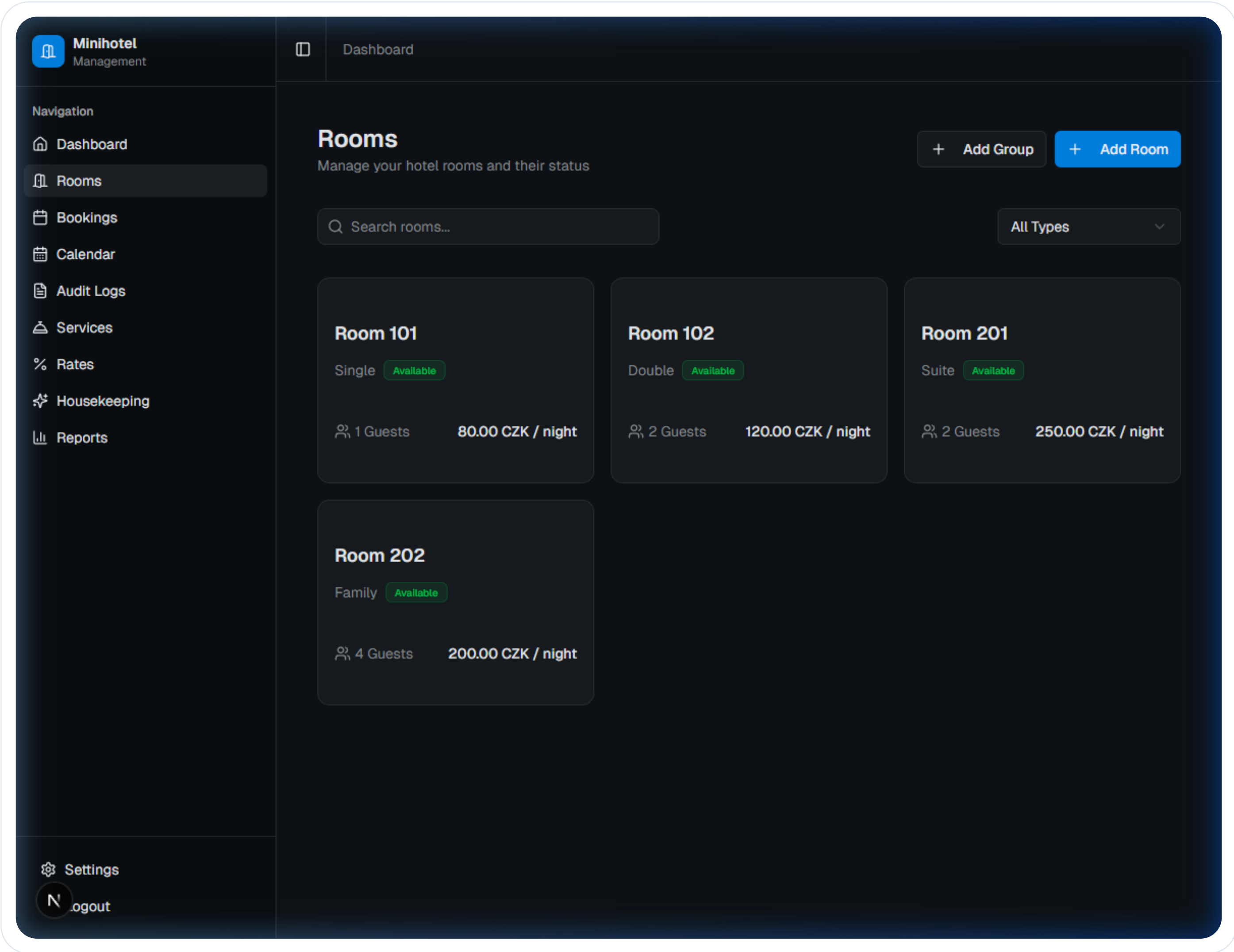
1. Navigate to the **Rooms** page and click the **Add Room** button.
2. Enter the **Room Number** and select the **Room Type** (Single, Double, Suite, Deluxe).
3. Set the maximum **Capacity** of guests.
4. Enter the **Base Price** per night.
5. (Optional) Assign the room to a **Room Group** or provide a text **Description**.
6. Click **Save Room**.

How to Edit or Delete a Room

1. Locate the room you want to modify in the grid.
2. Hover your mouse over the room card to reveal the **Actions Menu** (three horizontal dots) in the top right corner of the card.
3. Click the menu and select **Edit** to modify its details or **Delete** to remove it from the system entirely.

Managing Room Groups

If you have a large property, you can organize rooms into hierarchies (e.g., "First Floor", "North Wing"). Click the **Add Group** button to create a new category. You can even assign a group to a "Parent Group" to create a nested structure.



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7. Rates & Pricing

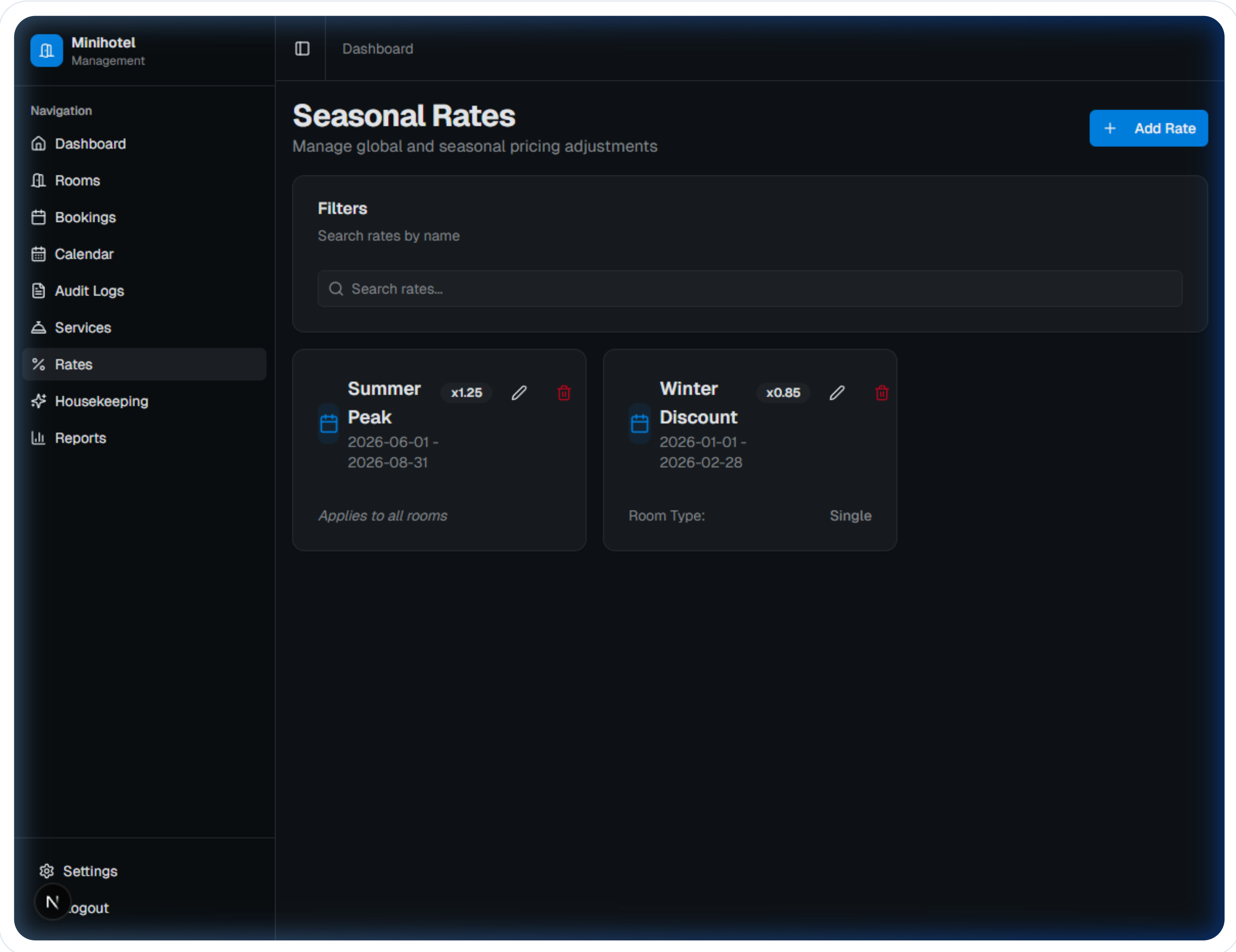
The Rates module is your primary financial tool for yield management, allowing you to maximize revenue through dynamic pricing models based on varying demand periods.

How to Create a Seasonal Rate

1. Navigate to the **Rates** page and click **Add Rate**.
2. Enter a **Rate Name** (e.g., "Summer Peak Season").
3. Select the **Start Date** and **End Date** for when this price change applies.
4. Set the **Multiplier**. (e.g., Entering `1.0` keeps the base rate, `1.2` increases the price by 20%, and `0.8` applies a 20% discount).
5. (Optional) Apply the rate to a specific **Room Type** or **Room Group**. If left unselected, the rate multiplier applies to all rooms in the hotel.
6. Click **Create Rate**.

Editing and Deleting Rates

On the Rates page, you will see cards for all active pricing rules. Click the **Edit (Pencil)** icon on a card to modify the dates or multipliers, or click the **Delete (Trash)** icon to remove the pricing rule.



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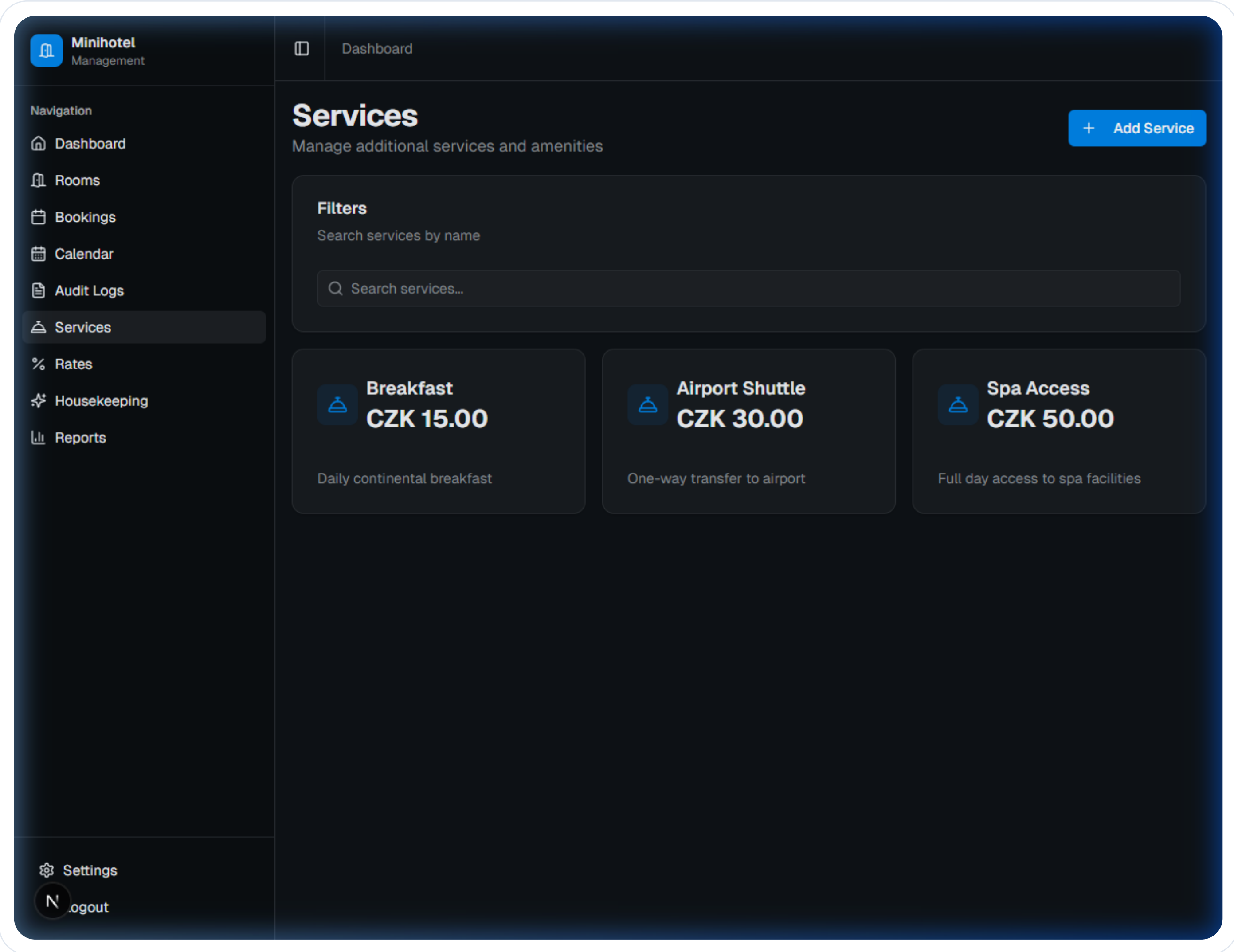
8. Services & Add-ons

Increase your RevPAR by managing supplemental items and experiences that guests can purchase during their stay. The Services module tracks all non-room revenue streams.

How to Add a Service

1. Navigate to the **Services** page and click **Add Service**.
2. Enter the **Service Name** (e.g., "Airport Shuttle", "Breakfast").
3. Enter the **Price** in your base currency.
4. Provide an optional **Description** so staff knows what the service entails.
5. Click **Create Service**.

Once created, these services will appear as selectable checkboxes whenever your front desk staff creates a new booking. Checking a service automatically adds its cost to the booking's Total Amount.



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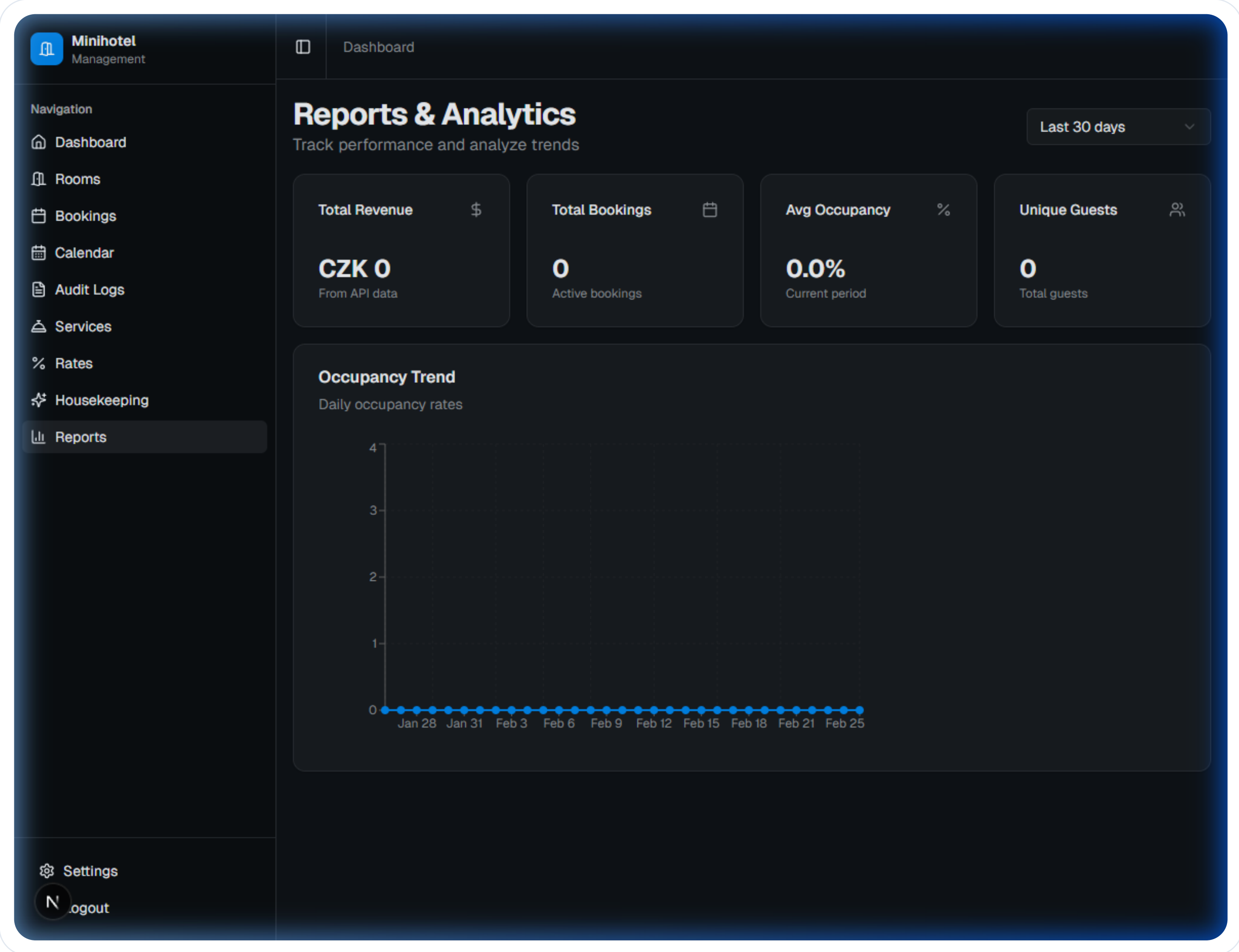
9. Reports

Data-driven decision making starts here. The Reports module synthesizes your property's raw data into digestible, actionable intelligence for management and ownership teams.

Available Analytics

- **Financial Summaries:** Generate detailed breakdowns of revenue generated over custom date ranges, splitting income by room rates versus ancillary services. Quickly audit collected payments versus pending balances to manage cash flow.
- **Occupancy & Yield Trends:** Trace historical occupancy percentages alongside Average Daily Rate (ADR) and RevPAR statistics. Identify underperforming weeks and plan future marketing efforts accordingly.
- **Housekeeping Efficiency:** Audit the turnaround times and daily workloads of housekeepers.
- **Tax and Accounting Exports:** Simplify end-of-month reconciliations by exporting standardized revenue and collected tax figures directly to CSV formats compatible with standard accounting software.



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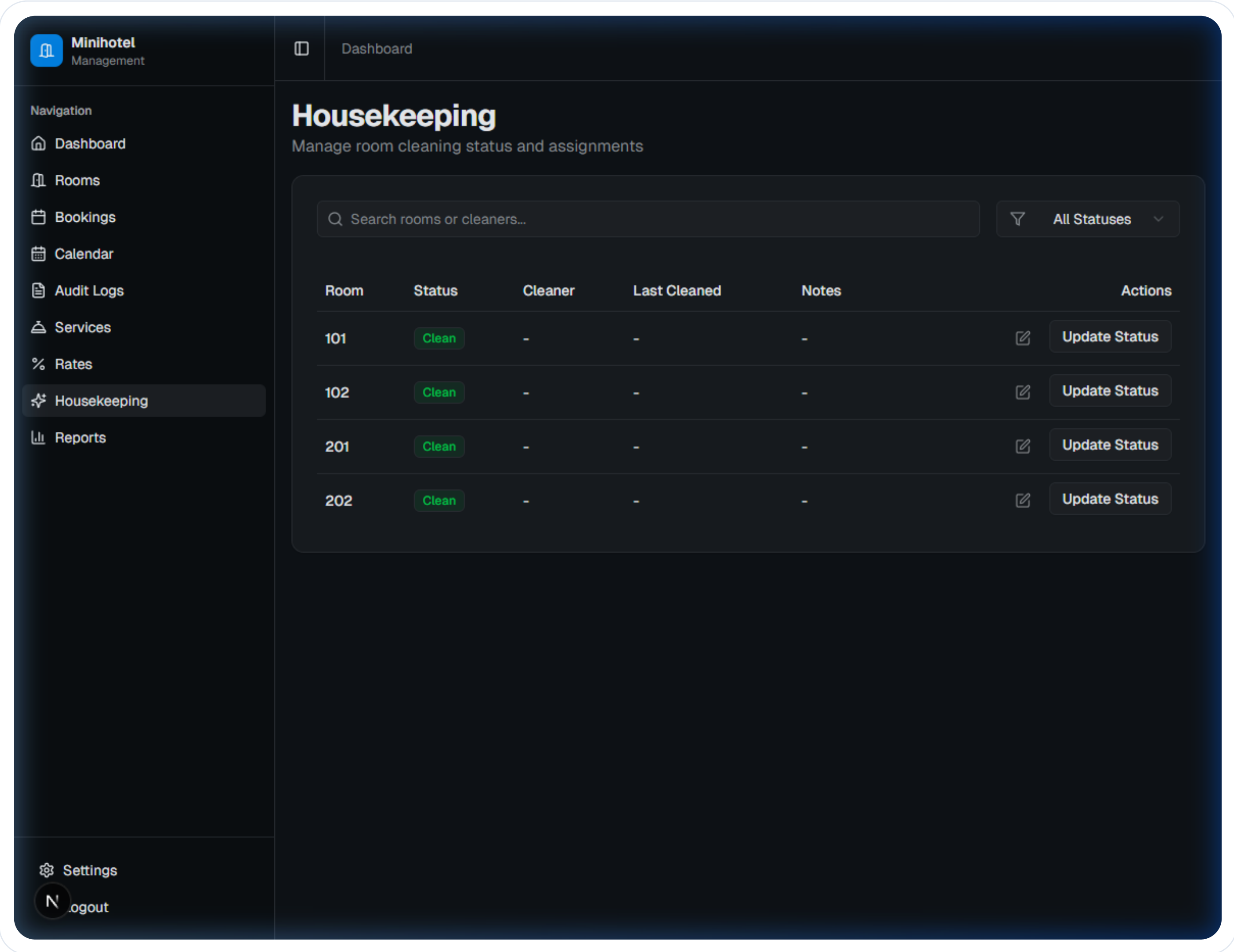
10. Housekeeping

Streamline communication between the front desk and your cleaning staff. This module provides a constantly updating manifest of the physical state of every room.

How to Update Room Cleaning Status

1. Navigate to the **Housekeeping** page to view the list of all rooms.
2. Locate the room you want to update and click **Update Status** (or the Edit icon if a record already exists).
3. In the dialog, select the current **Status**: *Clean, Dirty, In Processing, or Maintenance*.
4. Enter the **Cleaner Name** of the staff member assigned to the room.
5. Add any relevant **Notes** (e.g., "Missing towels", "AC is making noise").
6. Click **Save Changes**.



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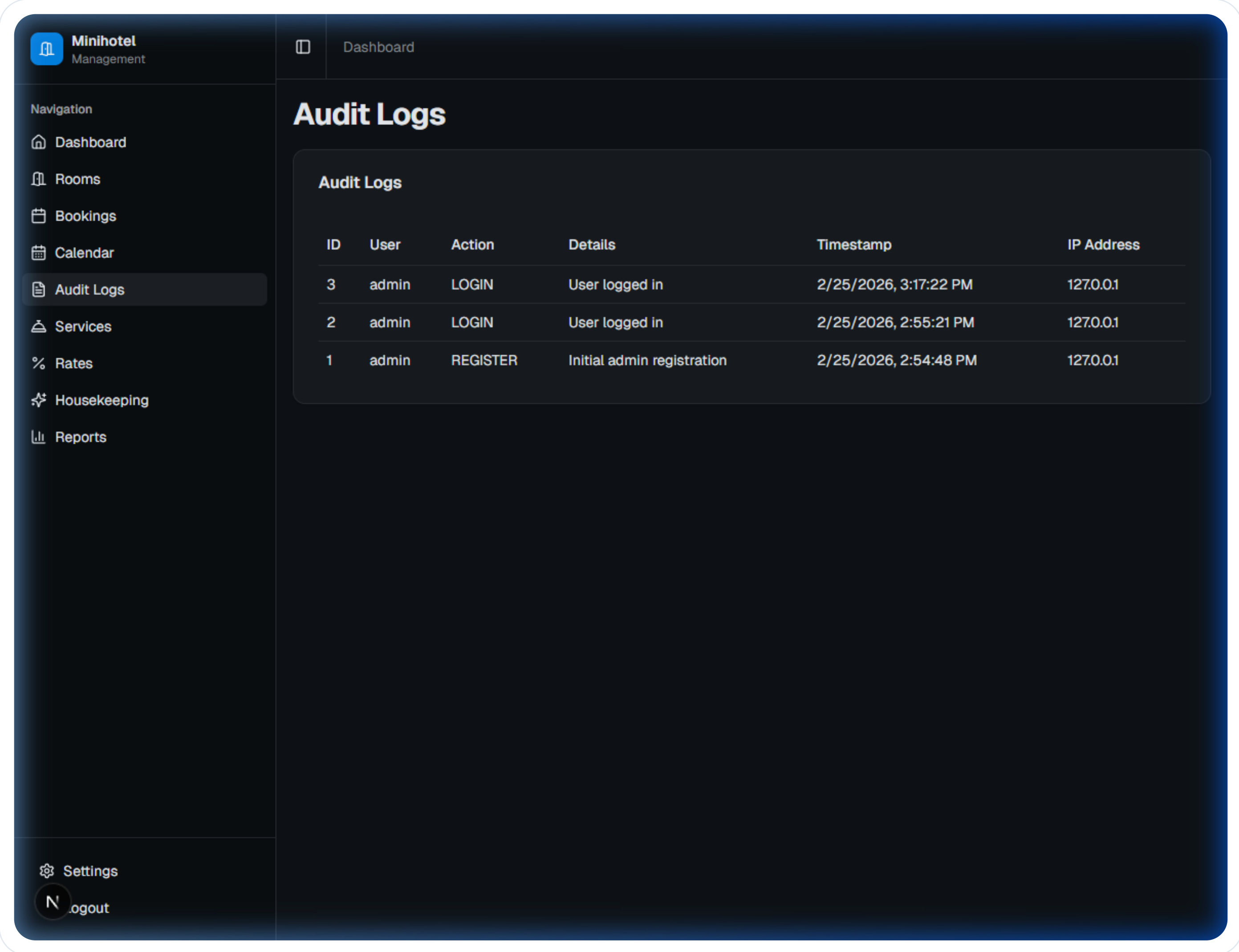
11. Audit Logs

Maintain absolute security, transparency, and accountability across your staff. The Audit Logs module serves as an immutable, chronological register of every significant action performed within the software environment.

Security Features

- **User Accountability:** Every major action (e.g., creating a booking, altering a room rate, refunding a payment, modifying settings) is logged alongside the specific username and a timestamp.
- **Troubleshooting:** If a reservation goes missing or a room is accidentally overbooked, administrators can trace exactly who modified the data and when it happened, reducing confusion and blame.
- **Access Monitoring:** Track login attempt histories to identify potential unauthorized access attempts or monitor employee clock-in habits based on system activity.
- **Filter and Search:** Rapidly sift through thousands of historical logs by filtering for specific event types (e.g., "Booking Deleted") or by specific staff members.



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