**1. User Roles**

* **Admin**: Full access to all properties, calendars, and settings.
* **Host/Property Manager**: Restricted access to assigned properties or features.

**2. Core Features**

1. **Property Management**
   * Add/Edit/Delete properties.
   * Sync property details (e.g., photos, descriptions) with Airbnb and Vrbo.
2. **Calendar Management**
   * Unified calendar view for all properties.
   * Real-time syncing of bookings across platforms.
   * Block dates manually or automatically based on availability.
3. **Reservation Management**
   * View upcoming reservations.
   * Add manual bookings.
   * Sync booking details from Airbnb and Vrbo.
4. **Channel Manager Integration**
   * Integrate with APIs from Airbnb and Vrbo for two-way syncing.
   * Automatic price and availability updates.
5. **Reporting & Analytics**
   * Monthly/yearly booking trends.
   * Revenue reports.
   * Property performance metrics.
6. **Messaging System (Optional)**
   * Unified inbox for Airbnb and Vrbo messages.
   * Auto-replies to inquiries using AI.

**3. Technologies to Use**

* **Backend**: Laravel or Django (depending on your preference).
* **Frontend**: React, Vue.js, or traditional Blade templates.
* **Database**: MySQL
* **API Integration**: Use Airbnb and Vrbo APIs for syncing data.
* **Hosting**: Cloud-based (Hetzner, or DigitalOcean).

**4. Implementation Flow**

1. **Setup Property Listing Module**
   * Allow users to add property details.
   * Fetch and sync data from Airbnb/Vrbo APIs.
2. **Calendar Integration**
   * Build a calendar interface to manage availability.
   * Sync bookings using direct API.
3. **Channel Manager Integration**
   * Implement Airbnb and Vrbo APIs for two-way syncing.
   * Automate price and availability updates.
4. **Admin Panel**
   * Provide tools to manage users, properties, and bookings.
5. **Notifications**
   * Email/SMS notifications for new bookings or cancellations.
6. **Future Enhancements**
   * AI auto-replies for inquiries.
   * Integration with other platforms (e.g., Booking.com).

**Next Steps**

1. **Research Airbnb and Vrbo API documentation**.
2. **Create a database schema** for properties, bookings, and users.
3. **Design wireframes** for the calendar and admin panel.
4. Start development in small milestones:
   * Property listing.
   * Calendar management.
   * API integration.