



You can choose any one problem statement out of given **three!**

All the best!

Problem Statement 1:- QuickCourt - A Local Sports Booking

Overview

QuickCourt is a platform that enables sports enthusiasts to book local sports facilities (e.g., badminton courts, turf grounds, tennis tables) and create or join matches with others in their area. Your goal is to build a full-stack web application that facilitates this end-to-end experience, ensuring a smooth user experience, booking accuracy, and community engagement.

Roles

- User
 - Facility Owner
 - Admin
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User Role

Features & Functionalities

Authentication

- Login with email and password
- Sign up with email, password, full name, avatar, and role
- OTP verification step after signup

Home Page

- Welcome banner or carousel
- Quick access to:
 - Popular venues
 - Popular sports

Venues Page

- List of all approved sports venues
- Search for a venue
- Filters: sport type, price, venue type, rating
- Pagination
- Each card displays:
 - Venue Name
 - Sport Type(s)
 - Starting Price per hour
 - Short Location
 - Rating (if reviews implemented)

Single Venue Page

- Full details of the selected venue:
 - Name, description, address
 - List of Sports available
 - Amenities
 - About Venue
 - Photo gallery
 - Reviews section
- Action: Book Now button

Court Booking Page

- 🕒 Select court and time slot
- 🕒 View price and total
- 🕒 Proceed to confirm and simulate payment
- 🕒 After success, redirect to "My Bookings"

Profile Page

- 🕒 Display user details: Name, Email
- 🕒 Allow edit/update info
- 🕒 Tabs: My Bookings

My Bookings Page

- 🕒 List of all court bookings
 - 🕒 Each booking card shows:
 - Venue name, sport type, court name
 - Date and time of booking
 - Status: Confirmed / Cancelled / Completed
 - Action: Cancel button (if in the future)
 - 🕒 Optional: Filters by date or status
-

Facility Owner Role

Features & Functionalities

Dashboard

- 🕒 Welcome message and KPIs:
 - Total Bookings
 - Active Courts
 - Earnings (simulated)
 - Booking Calendar
- 🕒 Charts to implement:
 - Daily/Weekly/Monthly Booking Trends (Line/Bar Chart)
 - Earnings Summary (Bar or Doughnut Chart)
 - Peak Booking Hours (Heatmap or Area Chart)

Facility Management Page

- Add/Edit facility details:
 - Name, location, description
 - Type of sports supported
 - Amenities offered
 - Upload multiple photos
- Court Management Page:
 - Court name, sport type
 - Pricing per hour
 - Operating hours
- Edit/delete existing courts

Time Slot Management

- Set availability for each court
- Block time slots for maintenance

Booking Overview Page

- View upcoming and past bookings
- Each record shows:
 - User name, court, time
 - Status: Booked / Cancelled / Completed

Profile Page

- Display owner details
 - Allow edit/update info
-

Admin Role

Features & Functionalities

Dashboard

- Global stats overview:
 - Total users
 - Total facility owners
 - Total bookings
 - Total active courts
- Charts to implement:
 - Booking Activity Over Time (Line or Bar Chart)
 - User Registration Trends
 - Facility Approval Trend
 - Most Active Sports
 - Earnings Simulation Chart

Facility Approval Page

- View list of pending facility registrations
- Approve or reject with optional comments
- See submitted facility details and photos

User Management Page

- List of all users and facility owners
- Search and filter by role or status
- Actions:
 - Ban/unban user
 - View user booking history

Reports & Moderation Page (Optional)

- View reports submitted by users
- Take action on flagged facilities or users

Profile Page

- 👁 Display admin profile
- 👁 Allow basic info update

mockups: <https://link.excalidraw.com/l/65VNwvy7c4X/AU4FuaybEgm>

Problem Statement 2:-

GlobeTrotter – Empowering Personalized Travel Planning

Overall Vision

The overarching vision for GlobeTrotter is to become a personalized, intelligent, and collaborative platform that transforms the way individuals plan and experience travel. The platform aims to empower users to dream, design, and organize trips with ease by offering an end-to-end travel planning tool that combines flexibility and interactivity.

It envisions a world where users can explore global destinations, visualize their journeys through structured itineraries, make cost-effective decisions, and share their travel plans within a community—making travel planning as exciting as the trip itself.

Mission

The mission for the hackathon team is to build a user-centric, responsive application that simplifies the complexity of planning multi-city travel. The platform should provide travelers with intuitive tools to:

- Add and manage travel stops and durations
- Explore cities and activities of interest
- Estimate trip budgets automatically
- Visualize timelines and plans
- Share trip plans with others

This involves constructing a solution that is both functional and insightful, powered by a well-designed relational database and a smooth frontend experience. Teams must focus on enabling users to organize personalized trips efficiently, stay within budget, and enjoy full visibility of their journey.

Problem Statement

Dashboard

Design and develop a complete travel planning application where users can:

- 🕒 Create customized multi-city itineraries
- 🕒 Assign travel dates, activities, and budgets
- 🕒 Discover activities and destinations through search
- 🕒 Receive cost breakdowns and visual calendars
- 🕒 Share their plans publicly or with friends

The application must demonstrate proper use of relational databases to store and retrieve complex travel data such as user-specific itineraries, stops, activities, and estimated expenses. The system should also support dynamic user interfaces that adapt to each user's trip flow.

Features:

The application for GlobalTrotters will include the following comprehensive set of features, ensuring a rich and user-friendly experience across desktop or mobile platforms:

1. Login / Signup Screen

- **Description:** Entry point of the app allowing users to create or access their account.
 - **Purpose:** Authenticate users to manage personal travel plans.
 - **Key Functionality/Components:**
Email & password fields, Login button, Signup link, "Forgot Password", basic validation.
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2. Dashboard / Home Screen

- **Description:** Central hub showing upcoming trips, popular cities, and quick actions.
 - **Purpose:** Allows users to navigate to their trips and explore inspiration.
 - **Key Functionality/Components:**
Welcome message, list of recent trips, “Plan New Trip” button, recommended destinations, budget highlights.
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3. Create Trip Screen

- **Description:** Form to initiate a new trip by providing a name, travel dates, and a description.
 - **Purpose:** Begins the process of creating a personalized travel plan.
 - **Key Functionality/Components:**
Trip name, start & end dates, trip description, cover photo upload (optional), save button.
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4. My Trips (Trip List) Screen

- **Description:** List view of all trips created by the user with basic summary data.
 - **Purpose:** Easily access and manage existing or upcoming trips.
 - **Key Functionality/Components:**
Trip cards showing name, date range, destination count, edit/view/delete actions.
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5. Itinerary Builder Screen

- **Description:** Interface to add cities, dates, and activities for each stop.
- **Purpose:** Construct the full day-wise trip plan in an interactive format.
- **Key Functionality/Components:**
“Add Stop” button, select city and travel dates, assign activities to each stop, reorder cities.

6. Itinerary View Screen

- **Description:** Visual representation of the completed trip itinerary.
 - **Purpose:** Review the full plan in a structured format (timeline or grouped by cities).
 - **Key Functionality/Components:**
Day-wise layout, city headers, activity blocks with time and cost, view mode toggle (calendar/list).
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7. City Search

- **Description:** Search interface to find and add cities to a trip, with info like country, cost index, and popularity.
 - **Purpose:** Discover and include relevant cities in the itinerary.
 - **Key Functionality/Components:**
Search bar, list of cities with meta info, "Add to Trip" button, filter by country/region.
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8. Activity Search

- **Description:** Browse and select things to do in each stop, categorized by interest or cost.
 - **Purpose:** Enrich trips with experiences like sightseeing, food tours, or adventure activities.
 - **Key Functionality/Components:**
Activity filters (type, cost, duration), add/remove buttons, quick view of description and images.
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9. Trip Budget & Cost Breakdown Screen

- **Description:** Summarized financial view showing estimated total cost and breakdowns.
- **Purpose:** Helps travelers stay informed and within budget.
- **Key Functionality/Components:**
Cost breakdown by transport, stay, activities, meals; pie/bar charts, average cost per day, alerts for overbudget days.

10. Trip Calendar / Timeline Screen

- **Description:** Calendar-based or vertical timeline view of the full itinerary.
 - **Purpose:** Helps users visualize the journey and daily plan flow.
 - **Key Functionality/Components:**
Calendar component, expandable day views, drag-to-reorder activities, quick editing options.
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11. Shared/Public Itinerary View Screen

- **Description:** Public page displaying a sharable version of an itinerary.
 - **Purpose:** Allows others to view, get inspired, or copy the trip.
 - **Key Functionality/Components:**
Public URL, itinerary summary, "Copy Trip" button, social media sharing, read-only view.
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12. User Profile / Settings Screen

- **Description:** User settings page to update profile information and preferences.
 - **Purpose:** Enables users to control their data, preferences, and privacy.
 - **Key Functionality/Components:**
Editable fields (name, photo, email), language preference, delete account, saved destinations list.
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13. Admin / Analytics Dashboard (Optional)

- **Description:** Admin-only interface to track user trends, trip data, and platform usage.
- **Purpose:** Helps in monitoring app adoption, popular cities, and user behavior.
- **Key Functionality/Components:**
Tables and charts of trips created, top cities/activities, user engagement stats, user management tools.

Mockup: <https://link.excalidraw.com/l/65VNwvy7c4X/6CzbTgEeSr1>

Problem Statement 3:-

Rental Management

Rental application streamlines the entire rental process. It provides a unified platform to manage products, schedule pickups.

Online booking and reservations are done through a website portal, Customers can shop available products, reserve their selected dates, and checkout right on the website.

Whether you rent by the hour, week, month or year, create customized pricing for every product based on different time frames.

Roles

- 👤 Customer
- 👤 End user

Core Rental Features

1. Rental Product Management

- **Define Rentable Products:** Mark products as rentable and configure units (e.g., per hour, day, week).
- **Custom Rental Duration:** Supports short-term and long-term rentals with flexible durations.
- **Product Availability:** View product availability in calendar or list view to avoid overbooking.

Order and Rental Flow

2. Rental Quotations & Orders

- Create **rental quotations**, confirm them into **rental orders**, and generate **rental contracts**.
- Customers can **review, confirm, and pay** online through the **customer portal**.
- **Pickup/Return Scheduling:** Track and schedule pickup and return with precise timing.

○ **Notifications**

The system sends timely reminders to both customers and internal users:

- **Customer Notifications** – Automated reminders via email and/or portal alerts, sent N days before the scheduled rental return date.
- **End User Notifications** – Email notifications to the end users N days before the scheduled rental return date, allowing them to prepare for pickup or follow-up.

Customizable N value for notification lead time to match business needs.

Payment Gateway Integration

At least one secure payment gateway must be configured, enabling customers to make online payments directly from the rental quotation or order. Popular gateways (e.g., PayPal, Stripe, Razorpay, etc.) can be integrated as per business requirements.

3. Delivery Management

When you rent out products, the system automatically takes care of moving them through three main stages:

- **Reservation (Order Confirmed)**
 - **As soon as you confirm a rental order, the system “reserves” the required items.**
 - **This means those products are set aside and cannot be given to anyone else.**
 - **It ensures you always have the right items ready for that customer.**
- **Pickup (Delivery to the Customer)**
 - **The system creates a pickup document telling your pickup team which items need to be delivered.**
 - **This makes it easy to prepare and hand over the products to the customer.**
 - **The stock records are updated to show that the items are now with the customer.**

🕒 Return (Collecting Back from the Customer)

- When the rental period ends, the system generates a return document.
 - This guides your pickup team to collect the rented products from the customer.
 - Once returned, the stock records are updated so the items are available for the next rental.
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4. Flexible Invoicing

When the Order is Confirmed, The user can create an initial invoice.

- **Full upfront payment** – Charge the total rental amount before the customer picks up the goods.
- **Partial payment / deposit** – Take a security deposit or first installment now, and charge the rest later.
- **Late Return Fees:** Automatically calculate late fees based on predefined rules.

5. Pricelist Management

Integrates its **Pricelist** system into the rental module to offer **customized and flexible pricing**:

🕒 Multiple Pricelists:

- Create different pricelists for different customer segments, regions, or rental durations.
- E.g., Corporate clients, VIP customers, or seasonal discounts.

🕒 Time-Dependent Pricing:

- Set variable pricing based on rental duration.
- Example: ₹10/hour, ₹60/day, ₹300/week – automatically applied based on rental period.

🕒 Discount Rules:

- Apply percentage discounts, fixed discounts, or promotional offers to rental products.

🕒 Product Category or Customer-Specific Rules:

- Define pricing rules per product category or specific customer groups.

🕒 **Validity Periods:**

- Set date ranges for seasonal or promotional pricelists (e.g., “Holiday Rental Rates”).
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6. Returns & Delays Handling

- Get alerts for **late returns**.
 - Configure automatic **late fees** or **penalties**.
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7. Reports and Dashboards

- Get alerts for **late returns**.
- Configure automatic **late fees** or **penalties**.

Downloadable Reports

All reports can be exported in multiple formats (PDF, XLSX, or CSV) for analysis, sharing, or record-keeping.

🕒 **Tracking based on the given period:**

- Most rented products
- Total rental revenue
- Top Customer

Mockup: <https://link.excalidraw.com/l/65VNwvy7c4X/1C10DktExEQ>