

CASE STUDY – DESIGN MANIA

Case Study 1: Furniture, Appliances & Electronics Rental Platform

Problem: Students and young professionals need temporary items but buying is costly.

Goal: Create a platform to rent furniture, appliances, and electronics at affordable prices.

Key Features:

- Product browsing & filters
- Weekly/monthly rental plans
- Delivery & pickup slot booking
- Damage deposit system
- Track rental time & orders
- Renewal & return request

Case Study 2: Smart City Sambalpur App

Problem: Citizens and visitors struggle to access city services, public transport info, and local updates in Sambalpur.

Goal: Build a smart city app to provide real-time information and digital public services.

Key Features:

- Tourist places, culture & city guide
- Public transport routes & live tracking
- Emergency services (police, hospital, fire)
- Online complaint & service request portal
- City announcements & events section
- Cleanliness / waste complaint system

Case Study 3: Local Transport Tracker

Problem: People often waste time waiting for buses/autos due to no real-time tracking or route information.

Goal: Design an app to provide live location of local transport and best route suggestions.

Key Features:

- Live bus/auto GPS tracking
- Real-time arrival time & route map
- Fare estimation & travel time
- Bookmark frequently used routes
- SOS button for safety during night travel
- Feedback & report driver option

Case Study 4: Smart Class Timetable App

Problem: Students face class clashes, forget timings, and struggle to manage academic schedules and events.

Goal: Build an app that auto-organizes class schedules, labs, exams, and club activities.

Key Features:

- Auto timetable generation
- Clash detection (class/lab/club events)
- Reminders for classes & exams
- Sync with Google Calendar
- Class notes & assignment reminders
- Colour-coded weekly & monthly view

Case Study 5: Exam & Notes Buddy App

Problem: Students struggle to organize notes, track exam schedules, and access previous year papers.

Goal: Design an all-in-one study companion app for notes, exams, and revisions.

Key Features:

- Notes storage & sharing (PDF, images, docs)
- Previous year question papers
- Exam timetable & reminders
- Study planner & revision tracker
- Flashcards & quick summary mode

- AI-based doubt helper (optional)

Case Study 6: College Club Management Portal

Problem: Students find it difficult to discover clubs, join activities, and stay updated about events. Clubs struggle to manage members and communication.

Goal: Create a portal to manage college clubs, events, memberships, and announcements.

Key Features:

- Browse clubs & join requests
- Event announcements & registration
- Member profiles & role assignment
- Attendance tracking for club activities
- Certificate & points/leaderboard system
- Notification system for meetings & activities

Case Study 7: Mental Health Companion App

Problem: Students struggle with stress, anxiety, and loneliness but hesitate to seek help.

Goal: Create a safe space for mental wellness support, self-care, and emotional tracking.

Key Features:

- Mood tracker & emotion journal
- Guided meditation & breathing exercises
- Daily mental wellness tips
- Anonymous chat/counseling support
- Emergency helpline/SOS
- Progress dashboard & positive habit tracker

Case Study 8: Smart Parking Finder App

Problem: Finding parking in busy areas takes time and causes stress, especially near markets and campuses.

Goal: Design an app to locate nearby parking spots and reserve slots in advance.

Key Features:

- Real-time parking availability map
- Slot booking & time-based reservation
- QR-based entry/exit
- Parking fee calculator & online payment
- Vehicle details & saved slots
- Navigation to parking location

Case Study 9: Handloom & Tribal Craft Marketplace (Odisha Theme)

Problem: Odisha's handloom artisans and tribal craft makers struggle to reach buyers and get fair prices.

Goal: Build a marketplace to showcase and sell traditional art, handloom, and tribal crafts online.

Key Features:

- Artisan profiles & story highlights
- Product catalog (Sambalpuri sarees, tribal jewelry, crafts)
- Secure payment & delivery tracking
- Local language support (Odia)
- Cultural blog / craft learning section
- Artisan verification & fair trade badge

Case Study 10: Women Safety & SOS App

Problem: Women face safety concerns while traveling or walking alone, especially at night, and need quick emergency support.

Goal: Create an app that helps women alert trusted contacts and authorities instantly during emergencies.

Key Features:

- One-tap SOS alert
- Live location sharing with trusted contacts
- Emergency call to police/helpline
- Safe route navigation & danger zone alerts
- Fake call feature for risky situations
- Quick voice or shake-to-trigger SOS

Case Study 11: Digital Healthcare Kiosk UI

Problem: People in rural and crowded areas struggle to register for medical services, consult doctors, and access health info quickly.

Goal: Design a digital health kiosk interface for hospitals and rural centers to simplify medical registration and basic care access.

Key Features:

- Easy patient registration (Aadhaar/phone)
- Basic symptom checker
- Token & queue system
- Telemedicine video consultation
- Prescription print/download
- Multi-language support

Case Study 12: Lost & Found App for Campus

Problem: Students frequently lose items like ID cards, books, wallets, and headphones on campus but have no organized way to recover them.

Goal: Build a campus platform for reporting and retrieving lost and found items easily.

Key Features:

- Post lost or found items with photos & location
- Category filters (ID cards, books, electronics, bags, etc.)
- Identity verification for item claims
- Chat/contact feature between finder & owner
- Notification when matching item is found
- Admin moderation for genuine posts

Case Study 13: Food Donation & Waste Management App

Problem: Hostels, restaurants, and events often waste leftover food, while many people still face hunger.

Goal: Create an app that connects food donors with volunteers & NGOs to safely distribute extra food.

Key Features:

- Post leftover food availability (photos, qty, location)

- Volunteer pickup request & tracking
- Hygiene and food safety checklist
- Notifications to nearby NGOs & volunteers
- Donation history & impact tracking
- Rating & feedback system

Case Study 14: Language Learning + Culture App

Problem: Traditional language learning feels boring, and learners struggle to connect with real cultural context.

Goal: Design an engaging app to learn a new language along with its culture, traditions, and speaking practice.

Key Features:

- Vocabulary lessons & flashcards
- Speaking practice & pronunciation guide
- Daily conversational exercises
- Cultural content (festivals, etiquette, food, places)
- Gamified challenges & progress rewards
- Community practice rooms / partner chat

Case Study 15: App for Rural Farmers

Problem: Farmers lack quick access to crop guidance, weather info, and market prices, leading to losses and wrong decisions.

Goal: Build an easy-to-use app to support farmers with agriculture help, crop advice, and real-time market data.

Key Features:

- Crop disease detection (upload photo)
- Weather forecast & farming tips
- Mandi price updates for crops
- Voice-based input & regional language support
- Fertilizer & pesticide usage guide
- Helpline support for experts / government schemes

Case Study 16: Eco-Travel Planner

Problem: Many travelers want eco-friendly trips but struggle to find sustainable transport, stays, and activities.

Goal: Design a platform to plan eco-friendly vacations with low-carbon travel options and responsible tourism suggestions.

Key Features:

- Carbon-friendly route suggestions (bus/train/walk/car-pool)
- Eco-stay recommendations (hostels, homestays, green hotels)
- Local cultural & nature experiences
- Packing checklist for eco-travel
- Carbon footprint calculator
- Trip planner & itinerary builder

Case Study 17: Student Subscription Manager

Problem: Students subscribe to OTT, cloud tools, courses, gym, etc., but forget renewals and overspend.

Goal: Create an app to track subscriptions, payments, and due dates for better financial control.

Key Features:

- Add/manage subscriptions (OTT, gym, software, mess fees)
- Renewal reminders & auto alerts
- Monthly spending dashboard
- Subscription sharing suggestions (split with friends)
- Track card/UPI auto-debits
- Cancel subscription & refund info

Case Study 18: Cafeteria Management App

Problem: College cafeterias/hostels face long queues, unclear menus, and slow order handling, causing delays and food waste.

Goal: Build a system to manage cafeteria menus, orders, payments, and crowd flow efficiently.

Key Features:

- Daily/weekly menu display (veg/non-veg pricing)

- Pre-order & digital token system
- Live order status & pickup time
- Meal feedback & rating
- Wallet/UPI payment option
- Mess subscription & meal pass QR

Case Study 19: Freelancer Matchmaking App for Students

Problem: Students want freelance work but lack a platform that matches them with suitable projects and verifies skills.

Goal: Build an app that connects students to clients based on skills, portfolio, and ratings.

Key Features:

- Skill-based project matchmaking
- Student portfolio & past work showcase
- Project bidding & proposal submission
- Chat & milestone-based payments
- Ratings & skill badge system
- Internship + freelance hybrid opportunities

Case Study 20: Society / Apartment Complaint Automation

Problem: Residents face delays in fixing society issues like water leaks, electricity faults, and security concerns due to manual complaint handling.

Goal: Create a digital platform for raising, tracking, and resolving apartment/society maintenance complaints.

Key Features:

- Raise complaint with photo & category (plumbing, electric, security, cleaning)
- Track complaint status (Pending → In Progress → Resolved)
- Assign maintenance staff with timelines
- Visitor entry/exit log
- Monthly maintenance bill dashboard
- Emergency alert button (fire, security issue)

Case Study 21: Smart Library App

Problem: Students face difficulty in finding available books, tracking due dates, and accessing digital study resources easily.

Goal: Create an app that modernizes the library system with easy book search, borrowing, and digital reading features.

Key Features:

- Book availability checker & search filters
- QR-based book issue & return
- Due date reminders & fine calculator
- E-book & PDF reading corner
- Seat booking in reading hall

Case Study 22: College Feedback & Suggestion Portal

Problem: Students have valuable feedback and suggestions for improvement, but colleges lack a structured & transparent system to collect and act on them.

Goal: Build a platform where students can give feedback or suggestions anonymously and track responses from faculty/administration.

Key Features:

- Anonymous feedback & suggestion submission
- Category-wise feedback (academics, cafeteria, transport, hostel, events, facilities)
- Ticket system with status (Received → In Review → Resolved)
- Admin/faculty response panel
- Upvote feature to highlight common issues
- Monthly feedback reports for administration

Case Study 23: Digital Notice Board

Problem: Students often miss important updates due to scattered physical notices, WhatsApp groups, and manual announcements.

Goal: Build a centralized digital notice board to display official college notices in real-time.

Key Features:

- Real-time notice updates (events, exams, holidays)
- Category filters (department-wise, club, exam cell, hostel)
- Push notifications for important alerts
- Downloadable circulars & PDFs
- Expiry-based auto-remove system
- Admin panel for faculty/departments to post notices