



SE HACKATHON

2G25

PROBLEM STATEMENTS

C.S.I. - S.P.I.T

2024-2025



WEB DEVELOPMENT

PAISA HI PAISA P2P RENTAL MARKETPLACE

In today's fast-paced world, everyday items such as tools, books, gadgets, and party equipment often lie unused for long periods. Meanwhile, others in the same community may be in need of those very items for temporary use. The platform aims to create a culture of sharing by enabling a peer-to-peer rental system that reduces waste, fosters local collaboration, and makes everyday items more accessible. However, challenges such as trust between users, tracking item usage, transparency in communication, and item availability pose barriers to adopting such a model. This project seeks to bridge these gaps by developing a robust, transparent, and community-driven web platform that simplifies borrowing and lending of everyday items while promoting sustainability.

Features

- Trust-Centered Identity System:** Offers multi-tiered sign-up with verified profiles, reputation scores, and transparent dashboards to build renter-owner trust.
- Smart Listing & Categorization:** Simplifies item uploads with structured forms, practical categories, and dynamic metadata like condition and rental limits.
- Discovery & Search Tools:** Helps users find the right items using filters, maps, personalized sorting, and saved alerts for future availability.
- Seamless Booking & Conflict Handling:** Enables direct booking, in-app chat, digital confirmations, and owner-defined return policies to streamline rentals.
- Bonus Features**
 - Secure Transactions & Reputation Signals: Integrated payments with smart deposit logic, dual-sided reviews, relevance-based scoring, and transparent financial and feedback records.
 - Platform Oversight & Blockchain Transparency: Robust admin tools for moderation and analytics, with optional blockchain-backed rental logs and smart contract support for trusted automation.



PADHLE BHAI

THE CAMPUS LMS

In today's hybrid education landscape, students face scattered materials, passive learning, and disengaging LMS platforms. This system addresses those gaps with a campus-focused LMS that combines structured courses, a centralized content hub, and real-time multiplayer quizzes to make learning engaging and competitive. To build a truly impactful platform, it also tackles challenges like content overload, live performance tracking, and equitable access - driving better engagement and academic outcomes.

Features

- **Role-Based Onboarding & Dashboards:** Simple login via campus email or Google, with dashboards tailored to each role-students can track progress, join quizzes, and view leaderboards, while instructors can manage courses and quizzes.
- **Structured Course Creation & Learning Pathways:** Instructors can design courses with multimedia content, including videos, PDFs, and slides. Sequential locking ensures structured learning with time estimates and prerequisites to guide student progress.
- **Centralized Content Hub:** A searchable library of course materials, community uploads, and versioned content, easily accessible through integrated viewers, ensuring students always have the latest resources at hand.
- **Multiplayer Quiz Battles:** Real-time peer quiz battles with instant feedback, live leaderboards, and adaptive scoring. Instructors curate quizzes, and departments can host inter-college quiz events, making learning competitive and fun.
- **Bonus Features**
 - Performance Dashboards: Detailed analytics for students to track accuracy, trends, and progress. Instructors gain insights into group and individual performance to address engagement and academic needs.
 - Seamless User Experience Across Devices: Fully optimized for both mobile and desktop, with offline access, responsive design, and light/dark mode options, ensuring accessibility in any environment.
 - Admin & Moderation Tools: A comprehensive admin panel for managing courses, users, and flagged content. Access reports, trends, and engagement data for better campus environment management and dispute resolution.



DORAEMON

A REAL-TIME, SCALABLE INVENTORY MANAGEMENT SYSTEM

Many SMBs struggle with inventory management across multiple warehouses, employees, and real-time stock changes from sales, returns, and dispatches. Existing solutions are often costly, outdated, or inflexible. Doraemon aims to solve this with a scalable, real-time, multi-user platform to track stock, manage warehouses, log item movements, trigger low-stock alerts, and generate custom reports-making inventory smarter and more collaborative.

Features

- **Role-Based Access Control:** Empower your team with clear boundaries-admins control everything, managers focus on strategy, and staff handle day-to-day operations, all secured through streamlined user authentication (JWT or sessions).
- **Dynamic Inventory Dashboard:** A live feed of stock levels, recent movements, and alerts right at your fingertips. Real-time insights keep your operations running smoothly, while alerts for low stock and expiries prevent nasty surprises.
- **Comprehensive Stock Movement History:** Every change in your inventory is logged, whether it's a purchase, a sale, or an internal transfer. Timestamped transactions are reversible, with full traceability and easy-to-navigate history logs for quick auditing and accountability.
- **Advanced Reporting & Analytics:** Dive deep into your inventory with custom reports that track stock trends, identify fast-moving vs slow-moving items, and visualize inventory valuation over time. Export reports as CSV or PDF for easy sharing and decision-making.
- **Bonus Features**
 - Multi-Warehouse Flexibility: Assign products to different warehouses, seamlessly transfer stock, and track it all without losing sight of the bigger picture-because inventory doesn't stop at one location.
 - Low Stock & Expiry Alerts: Automatically trigger alerts when stock drops below a threshold or products approach expiry, with optional push/email notifications to keep everyone in the loop.
 - Bulk Import/Export Efficiency: Manage inventory in bulk with ease, thanks to intuitive CSV import/export. Perfect for managing large datasets without friction, whether you're onboarding new stock or updating existing quantities.



APP DEVELOPMENT

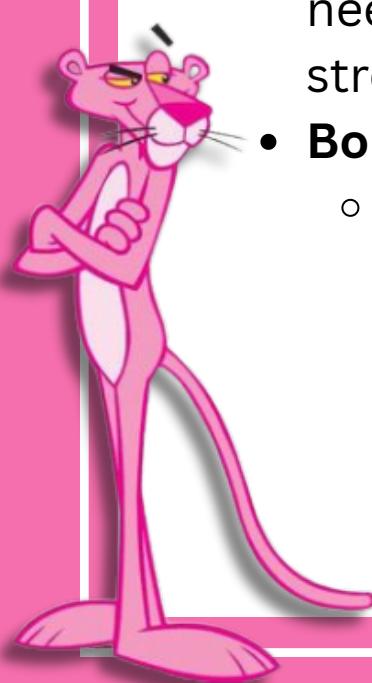
KHANA KHAZANA

MUMBAI STREET FOOD SAFETY MISSION

Mumbai's vibrant street food culture is an integral part of the city's identity, offering diverse culinary experiences to millions daily. However, food safety concerns often deter people from fully embracing this cultural treasure. The street food scene faces several key challenges: inconsistent hygiene practices among vendors, limited public information about food safety standards, difficulty in identifying safer food options, lack of incentives for vendors to improve safety practices, and variable vendor locations making reliable vendors hard to find. Your project will aim to bridge the gap between culinary adventure and food safety by creating a transparent, community-driven platform that helps consumers make informed choices while encouraging vendors to adopt better hygiene practices.

Features

- Hygiene-Based Rating System:** A transparent scoring framework that evaluates observable cleanliness, ingredient quality, and water safety to help users make informed food choices.
- Community Feedback Integration:** A verified review system that combines user experiences with professional assessments to create trustworthy vendor profiles.
- Vendor Discovery:** A structured process for users to document new vendors with precise location data, operating hours, and photo verification to build a comprehensive database.
- Personalized Recommendations:** Tailored suggestions based on dietary needs, health sensitivity, and previous preferences to help users discover street food aligned with their requirements.
- Bonus Feature**
 - Newcomer's Guide to Mumbai Street Food: Curated food trails with mapped routes, beginner-friendly recommendations, and cultural context to help tourists and new residents explore safely.



MANGALO

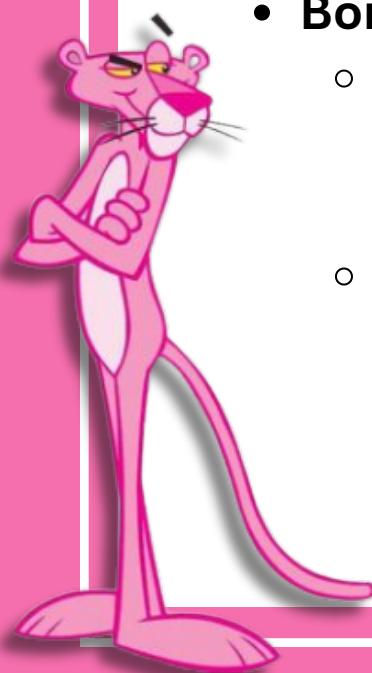
A CLEANER & SIMPLER WAY TO READ MANGA AND WEBTOONS

India has seen a rising interest in manga and webtoons, especially among young readers and digital content consumers. However, the reading experience is often compromised by poorly structured websites filled with distracting ads, intrusive pop ups, slow loading times, and inconsistent navigation systems. Content is fragmented across different sources, making it difficult for readers to track their favorite stories, find new content, or simply enjoy uninterrupted reading. These challenges discourage readers and create unnecessary barriers for a thriving manga/webtoon culture in India.

MangaLo aims to simplify and improve the reading experience by offering a unified, clutter-free, and customizable platform that aggregates content from multiple publicly available sources. It enables smooth reading, intuitive tracking, and flexible navigation across manga, manhwa, and webtoons - all while promoting user comfort, content organization, and discoverability.

Features

- Content Aggregation & Clean Viewing Interface:** An intelligent scraping system that removes ads and clutter while optimizing content for smooth, bandwidth-efficient reading with auto-sorting capabilities.
- Customizable Reading Modes:** Flexible viewing options (Right-to-Left, Left-to-Right, and Vertical Scroll) with orientation controls to accommodate different manga and webtoon formats for an optimal reading experience.
- Bookmarks, Downloads, and Library:** Comprehensive organization tools that allow users to save progress, create reading lists, and access content offline with auto-resume functionality.
- Minimal UI and Distraction-Free Experience:** A clutter-free design focusing solely on content with intuitive navigation controls that maximize reading immersion.
- Bonus Features**
 - Favorites and Discovery: Personalized update notifications and exploration tools based on genre, popularity, and user preferences to help readers find new content.
 - Safe and Lightweight for First-Time Readers: A beginner-friendly approach with helpful tips and minimal device requirements to welcome newcomers to digital manga.



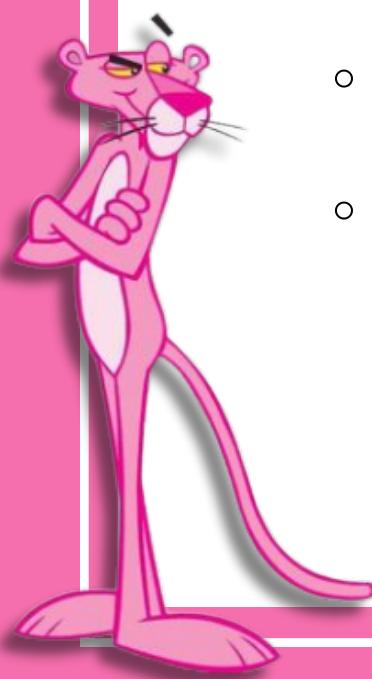
RICK&MORTY

A MOOD-DRIVEN HABIT TRACKER

In today's fast-paced world, habit tracking has become essential - but most apps don't match the vibe of the user. Whether you're in chill mode or beast mode, motivation feels different each day. Traditional habit trackers are often rigid, bland, or too task-focused to adapt to how we feel on the inside. For users who want to track habits without the pressure, or switch gears between relaxing growth and high-performance action, there's no flexible solution - until now. Rick&Morty reimagines habit tracking with a vibe-first design: two dynamic modes - Personal Growth and Action Mode - tailored to how users want to show up that day. With seamless app integrations, shareable goals, and a lightweight interface, this is habit tracking done your way.

Features

- **Dual Modes for Mood-Based Productivity:** A dynamic UI system offering both a calming "Personal Growth Mode" with soft aesthetics and an energizing "Action Mode" with bold visuals, allowing users to match their productivity environment to their current emotional state.
- **Flexible Habit Lists & Exporting:** Customizable habit creation with recurring options, routine grouping, and shareable exports that make organizing personal goals intuitive and collaborative.
- **Native App Integrations:** Seamless connectivity with device calendars, alarms, and messaging apps to bring habit tracking into users' existing digital ecosystem for better accountability.
- **Lightweight and Beginner-Friendly:** A streamlined, login-optional experience with animated guidance that works well on any device, making habit tracking accessible to newcomers.
- **Bonus Features**
 - Minimalist Widgets & Daily Boosts: At-a-glance home screen tools paired with surprise micro-challenges that complement the user's current mode selection.
 - Simple Progress Insights: Non-judgmental streak tracking and gentle reminder systems that focus on encouragement rather than guilt.
 - Custom Themes and Personalization: Achievement-based theme unlocks that allow visual customization aligned with user preferences and current productivity mode.



AI / ML

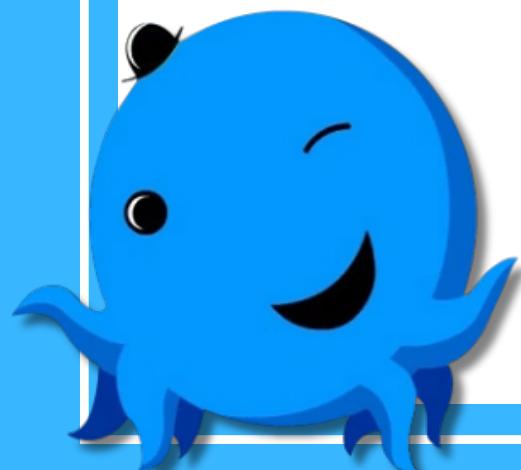
INSPECTOR CLOUSEAU

HAVE A LOOK AT IT

Residential hostels face persistent security challenges that traditional surveillance methods struggle to solve. Human monitoring is inconsistent—especially during overnight shifts—leaving blind spots in critical areas like entry points, common rooms, and hallways. Existing CCTV systems overwhelm staff with endless footage, making it nearly impossible to spot issues in real-time. As a result, incidents like altercations, unauthorized entries, and lapses in vigilance often go unnoticed until it's too late. Our solution harnesses AI-powered video analytics, leveraging tools like Roboflow for model training and datasets, and OpenCV for real-time video processing, to transform basic security camera infrastructure into an intelligent, always-on monitoring system—improving responsiveness, reducing blind spots, and strengthening overall hostel safety without costly hardware upgrades.

Features

- **Real-Time Altercation Detection:** Detects physical fights by analyzing motion, posture, and spatial patterns. Differentiates real threats from playful behavior using context and audio (when available), sending alerts instantly with severity levels for quicker response.
- **Unauthorized Access Monitoring:** Flags tailgating, unusual entry methods, and late-night access through intelligent activity tracking. Recognizes patterns in regular residents and detects unfamiliar or suspicious individuals near perimeters or doors.
- **Behavioral Anomaly Recognition:** Identifies unusual actions like loitering in restricted zones, door-checking, or interacting with unattended belongings. Customizes sensitivity for nighttime, minimizing false alarms while staying alert to real threats.



INSPECTOR CLOUSEAU

HAVE A LOOK AT IT

- **Security Staff Vigilance Tracker:** Monitors guard presence and attention levels, detecting inactivity, absence from post, or signs of sleep. Logs data for performance insights and escalates alerts if inaction persists during critical moments.
- **Bonus Features**
 - Smart Communal Area Surveillance: Adapts to changing usage patterns in kitchens, lounges, and restricted rooms. Spots hazards, uncharacteristic behavior, and rule violations in shared spaces with precision-tuned detection models.
 - Alert Prioritization & Response Dashboard: Converts detections into categorized, severity-ranked alerts. Sends rich mobile notifications with timestamps, incident previews, and map-based location tagging. Tracks response status via an interactive dashboard.
 - Privacy-Conscious Monitoring: Balances surveillance and privacy with zone-specific masking, anonymized alerting, and role-based access to sensitive footage-ensuring safety without overstepping boundaries.



RACE

RESUME ACCELERATION AND CAREER ENHANCEMENT

In today's competitive job market, a compelling resume is the crucial first step toward career advancement. However, most job seekers struggle to create resumes that effectively showcase their qualifications while also passing increasingly sophisticated Applicant Tracking Systems (ATS). The process of crafting, optimizing, and maintaining professional documents requires specialized knowledge that many candidates lack. Additionally, the job application process itself remains fragmented and time-consuming, with applicants manually customizing documents and navigating numerous application systems. RACE addresses these challenges by leveraging advanced AI to transform resumes into professionally formatted documents, provide data-driven optimization, generate tailored application materials, and streamline the job application process - empowering candidates to present their qualifications effectively and efficiently pursue career opportunities.

Features

- **Smart Resume Conversion Engine:** Automatically transforms resumes from any format into clean, LaTeX-powered professional layouts using OCR and structural parsing.
- **AI-Driven Content Polishing:** Enhances resume impact with action verb upgrades, quantification tips, and industry-aligned phrasing for maximum clarity.
- **Real-Time ATS Compatibility Scoring:** Instantly scores and heatmaps your resume for recruiter system readiness, offering actionable keyword and formatting fixes.
- **Cover Letters that Think:** Generates job-specific letters using role analysis, profile syncing, and voice preservation to create genuinely personalized narratives.
- **Bonus Features**
 - Dynamic Career Profile Builder: Consolidates resume data into a living profile with skill mapping, timeline visualizations, and smart prompts to fill missing gaps.



RACE

RESUME ACCELERATION AND CAREER ENHANCEMENT

- **Opportunity Sync & Gap Analysis:** Matches you with ideal roles while identifying missing skills and recommending growth paths based on real-time market trends.
- **Document Version Control & Insights:** Tracks improvements across versions with ATS score deltas, edit history, and content density trends.
- **Industry-Specific Resume Templates:** Offers modular LaTeX templates curated for sectors like tech, finance, academia, and design.



F.U.C.K.IT

FICTIONAL UNIVERSE CONSISTENCY KIT

Fictional universes form the backbone of modern entertainment, spanning literature, film, television, and other media. As these narrative worlds grow increasingly complex, maintaining internal consistency becomes both critical and challenging. Creators and franchise managers struggle to track thousands of world-building elements across multiple works, timelines, and media formats. Inconsistencies in established rules, character histories, technologies, or settings can significantly disrupt audience immersion and damage franchise credibility. While dedicated fans often maintain wikis and databases, these approaches lack systematic analysis capabilities and struggle with ambiguity. The Fictional Universe Consistency Kit addresses these challenges by leveraging natural language processing and knowledge graph technologies to help creators maintain coherent narrative worlds that satisfy increasingly sophisticated audiences.

Features

- **Multi-Text Narrative Analysis:** Processes novels, scripts, and comics to extract fictional elements, timelines, and chronologies while managing contradictions through a customizable source hierarchy.
- **Fictional World Modeling:** Builds detailed knowledge graphs covering characters, rules, cultures, and locations-complete with confidence ratings and versioning for multiverses and reboots.
- **Contradiction Detection System:** Identifies inconsistencies in behavior, timelines, and world rules, offering ranked resolution options with minimal impact to established canon.
- **Speculation Boundary Tools:** Separates firm facts from undefined elements, tracks open interpretations, and visualizes how new developments align or clash with existing canon.
- **Bonus Features**
 - Story Possibility Explorer: Maps potential plot developments and checks them against existing rules, motivations, and unexplored areas within the universe.



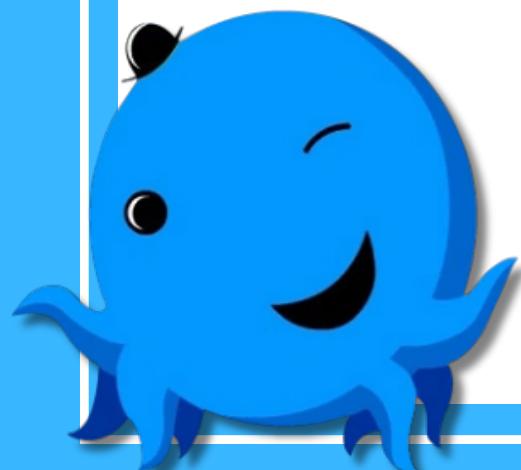
F.U.C.K.I.T

FICTIONAL UNIVERSE CONSISTENCY KIT

- **Audience Awareness Analyzer:** Evaluates fan discussions to distinguish technical flaws from immersion-breaking issues and estimates which canon details require clarification.
- **In-Universe Explanation Engine:** Helps construct narrative-friendly justifications for contradictions, incorporating strong fan theories when applicable.
- **Consistency-Aware Testing Environments:** Isolated spaces to safely model changes, explore new directions, and verify logical continuity before implementation.

References

- [The Project Gutenberg](#)
- [Fictional Worlds Dataset](#)
- [Comic Characters Dataset](#)
- [Comic Characters Dataset 2](#)



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