GDG MITAOE - NIRMAAN 3.0

Problem Statements

1. End-to-End Insurance Management Platform

Problem: The complexity of insurance products makes it difficult for users to track purchases, assess suitability, and compare new policies.

Solution: Build a unified platform where users can manage, review, and buy insurance policies seamlessly while enabling insurers/intermediaries to sell directly.

Key Features:

- ✓ Policy Aggregation Users can view all active policies in one dashboard.
- ✓ Al-Powered Recommendations Suggests suitable policies based on user history.
- Simplified Comparisons Side-by-side policy comparisons with transparent pricing.
- ✓ Direct Purchase Integration Allows insurers to list and sell products.
- ✓ Renewal & Claim Tracking Automated reminders for renewals and claim status.

Limitations:

- Focus on general insurance (health, auto, home) before expanding.
- Must comply with regional insurance regulations.

2. Sustainable Commuter Rewards Program

Problem: Low adoption of public transport due to lack of incentives.

Solution: A rewards system that offers discounts, points, or perks for frequent public transport use.

Key Features:

- ✓ Digital Pass Integration Taps into metro/bus card APIs to track rides.
- ✓ Gamified Rewards Points redeemable for discounts, vouchers, or free rides.
- Carbon Footprint Tracker Shows environmental impact of commuting choices.
- ✓ Partnerships with Local Businesses Discounts at cafes, retail stores, etc.

Limitations:

Initially works with select transport providers.

Requires opt-in from users for data tracking.

3. Al-Powered Windows Session Monitoring Tool

Problem: Organizations need better tracking of employee login/logout times for security.

Solution: A lightweight UI tool that analyzes Windows event logs and sends automated email reports.

Key Features:

- ✓ Login/Logout Tracking Records session durations and anomalies.
- ✓ Al-Based Anomaly Detection Flags unusual login times or locations.
- ✓ Automated Email Reports Sends daily/weekly summaries to admins.
- ✓ User-Friendly Dashboard Visualizes login trends and security warnings.

Limitations:

- Works only on Windows 10/11.
- No real-time blocking, only reporting.

4. Al-Powered Disaster Relief Coordination System

Problem: Inefficient disaster response leads to delayed aid distribution.

Solution: An Al-driven platform that optimizes relief efforts using real-time data.

Key Features:

- ✓ Real-Time Damage Assessment Analyzes satellite/social media data.
- ✓ Resource Allocation Al Suggests optimal aid distribution routes.
- ✓ Volunteer & NGO Coordination Matches help requests with responders.
- ✓ Predictive Risk Modeling Forecasts high-risk zones for proactive aid.

Limitations:

- Relies on available data sources (may have gaps).
- Requires NGO/government collaboration for full impact.

5. Al-Powered Refugee Integration Assistant

Problem: Refugees struggle with language, jobs, healthcare, and housing in new countries.

Solution: An Al chatbot/mobile app that guides refugees to essential services.

Key Features:

- Multilingual Support Provides info in native languages.
- ✓ Job & Housing Matching Connects refugees with local opportunities.
- ✓ Healthcare Access Locates clinics and explains insurance options.
- ✓ Cultural Orientation Tips on local laws and customs.

Limitations:

- Limited to select regions initially.
- Requires partnerships with NGOs for resource accuracy.

6. Startup-Investor Matchmaking Platform

Problem: Founders struggle to find investors; investors miss promising startups.

Solution: A pitch platform where startups showcase ideas and investors discover opportunities.

Key Features:

- ✓ Startup Profiles Pitch decks, traction metrics, funding needs.
- ✓ Investor Dashboard Filters startups by industry, stage, and risk level.
- ✓ Al-Based Matching Recommends startups aligned with investor interests.
- ✓ Virtual Pitch Events Live Q&A sessions between founders and backers.

Limitations:

- Focus on early-stage start-ups first.
- Requires strict verification to prevent scams.

7. University Club & Event Management Portal

Problem: Student clubs struggle with event promotions, attendance tracking, and member engagement.

Solution: A platform where college clubs can create events, manage members, and promote activities.

Key Features:

- ✓ Club Profiles Each club can manage its own dashboard and events.
- ✓ Event Listings Central feed for all upcoming events with RSVP system.
- ✓ Attendance Tracker QR-based or manual check-ins for events.
- ✓ Announcement System Send updates to members via email or notification.

Limitations:

- Initial deployment limited to a single campus/university.
- Requires authentication integration with college credentials.

8. Peer-to-Peer Learning & Doubt-Solving Platform

Problem: Students often have doubts outside class hours but lack immediate peer help.

Solution: A collaborative platform where students ask questions and peers/tutors respond.

Key Features:

- ✓ Doubt Boards Post questions with tags, images, or code snippets.
- ✓ Real-Time Chat Chat with volunteers or assigned mentors.
- ✓ Reputation System Upvote answers and reward helpful users.
- Group Study Rooms Create temporary rooms for live discussions.

Limitations:

- Moderation tools needed to prevent spam/inappropriate content.
- Initially focused on specific subjects or grades.

9. Interview Preparation Tracker & Practice Portal

Problem: Students preparing for interviews lack structure and real-time feedback.

Solution: A platform to plan prep, practice questions, and track readiness.

Key Features:

- ✓ Prep Planner Schedule DSA, HR, and system design timelines.
- ✓ **Practice Questions** With hints, tags, and solution tracking.
- ✓ **Mock Interviews** Schedule peer interviews with timers and scoring.
- ✓ Progress Dashboard Visualize strengths and weak areas.

Limitations:

- Initial focus on CS/tech interviews.
- Question bank must grow over time.

10. Live Interactive Resume Portfolio

Problem: Static resumes don't showcase a developer or creative's real work or personality.

Solution: A web app that turns your resume into an interactive timeline/portfolio.

Key Features:

- ✓ Live Projects Embed GitHub repos, deployed sites, and APIs.
- ✓ **Skill Graph** Interactive visuals of proficiencies and experience.
- √ Timeline Mode Shows your career/progress like a story.
- √ Visitor Log See who viewed or bookmarked your portfolio.

Limitations:

- May not be ATS-compatible; best for sharing with recruiters directly.
- Needs performance optimization for smooth interaction.

11. Smart Urban Farming Network

Problem: Urban residents lack space/knowledge to grow fresh produce sustainably.

Solution: A community-driven platform connecting balcony/rooftop gardeners with experts and local buyers.

Key Features:

- √ Crop Planner Tool Al suggests plants based on space/light/climate
- ✓ Knowledge Base Crowdsourced troubleshooting for urban farming
- √ Harvest Marketplace Sell/barter excess produce locally
- √ IoT Integration Compatibility with soil sensors/cameras

Limitations:

- Geofenced to metro areas initially
- Requires user-owned gardening equipment

12. Eco-Friendly Travel Planner

Problem: Travelers lack tools to plan sustainable trips with low carbon footprints.

Solution: A MERN-based platform recommending eco-friendly routes, accommodations, and activities.

Key Features:

- ✓ Carbon Calculator Estimates emissions for flights, hotels, and transportation 4.
- ✓ **Green Certification Database** Rates hotels/transport providers using sustainability metrics.
- ✓ Rewards System Offers discounts for eco-conscious choices (gamification inspired by commuter rewards) 2.
- ✓ Community Reviews User-generated tips for sustainable travel.

Limitations:

- Geofenced to Europe/North America initially.
- Relies on third-party APIs for transportation data.

13. Decentralized Content Licensing Platform

Problem: Creators struggle to monetize digital content (art, music) while retaining ownership.

Solution: A blockchain-integrated MERN platform for transparent content licensing and royalties.

Key Features:

- ✓ **NFT Minting Tool** Converts digital assets into tradable NFTs (similar to blockchain insurance integrations) 36.
- ✓ Smart Contract Templates Automated royalty splits for collaborations.
- ✓ Marketplace Dashboard React-based UI for browsing/purchasing licenses.
- ✓ Copyright Verification Al checks for plagiarism using image/text recognition.

Limitations:

- High gas fees for blockchain transactions.
- Requires Ethereum/Polygon integration.

14. Smart Inventory Management for SMEs

Problem: Small businesses lack affordable tools to track inventory and predict demand.

Solution: A low-cost app with Al-driven stock predictions and supplier coordination.

Key Features:

- ✓ Barcode Scanning Mobile-first UI for real-time inventory updates.
- ✓ Demand Forecasting Analyzes sales trends
- ✓ **Supplier Portal** Automated restocking requests
- ✓ Multi-Location Sync Centralized dashboard for branch management.

Limitations:

- Optimized for retail/restaurants initially.
- Requires IoT integration for advanced warehousing.