Cyber Security

SL.NO	Problem Statement	Description
Software		
01	**Data Breach Simulation Training Platform**	Develop a gamified simulation tool for students and employees to learn about phishing and ransomware attacks.
02	**Secure Document Sharing with Blockchain**	A platform to share academic or official documents with time-limited, tamper-proof blockchain links.
03	**Privacy Advisor App for social media**	Build an app that scans users' social media accounts and gives privacy recommendations in real time.
04	**Threat Intelligence Aggregator**	A real-time tool for security analysts to get alerts from dark web, CERTs, and malware feeds.
05	**College Campus Cybercrime Reporting Tool**	A secure and anonymous platform for reporting digital abuse or cyberbullying within college communities.
06	**AI for Malware Behavior Classification**	Build a sandboxed system to analyze and classify malware behavior using machine learning.
07	**Fake News and Deepfake Detection Engine**	Create a browser extension that verifies content authenticity using image and video analysis APIs.
08	**Online Harassment Tracking and Reporting Dashboard**	Create a secure platform for victims of cyberstalking, non-consensual image sharing, or trolling to document, anonymize, and report incidents to cyber cells.
09	**Safer Internet Plugin for Young Girls**	Design a browser extension that blocks harmful DMs, warns about deepfake content, filters explicit imagery, and gives self-protection tips.
10	**Cybersecurity for Space Tech & Satellite Infrastructure**	Satellite systems are vulnerable to spoofing, jamming, and cyberattacks. Protecting space assets is vital for communication, defense, and navigation.
Hardware		
01	**Offline USB Antivirus Shield**	Build a hardware USB that scans other USBs for malware without needing to connect to a PC.
02	**Encrypted Voice Communication Headset**.	A Bluetooth-enabled device for private, end-to-end encrypted communication
03	**Smart Lock with OTP & Facial Recognition**	Design a secure access system for offices and labs with OTP fallback and facial verification.

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04	**Secure Wearable Authentication Badge**	A badge that uses biometrics and proximity sensors to unlock labs or devices without passwords.
05	**RFID-Jamming Wallet for Personal Safety**	Design a wallet that disables RFID access from unauthorized readers to prevent data skimming.
06	**Secure USB Firewall Device**	A microcontroller-based device that acts as a firewall between the USB and host computer.
07	**Biometric Key Generator**	Hardware device that creates secure cryptographic keys using biometric inputs like fingerprints.
08	**USB-Based Privacy Shield for Public Use Devices**	Build a physical device that provides secure access to personal data only after biometric verification — ideal for kiosks, hostels, or women's shelters.
09	**Offline Data Vault Keychain**.	Create a hardware keychain that stores sensitive legal, health, or identity documents for women in abusive environments with stealth lock access
10	**Hardware-Based Intrusion Detection System (H-IDS) for IoT Networks**	With the rapid increase in connected IoT devices (smart homes, agriculture, health, industry), they are becoming major targets for cyberattacks. Traditional software-based intrusion detection systems are often too slow or resource-heavy for edge environments.