

Open/Hobbie Projects

1. Cybersecurity or Digital Forensics Interview Preparation/ Education App

- **Focus:** App Development, Cybersecurity
- **Description:** An interactive app designed to help individuals prepare for cybersecurity-related job interviews. The app will feature practice questions, mock tests, and detailed explanations of common cybersecurity concepts and vulnerabilities.

2. Placement Portal for NFSU Placement

- **Focus:** Web Development, Cybersecurity
- **Description:** A dynamic web portal that connects cybersecurity professionals with companies looking to hire. It will feature job listings, resume uploads, skill assessments, and networking opportunities for both job seekers and recruiters.

3. Smart ID Card System for NFSU

- **Focus:** IoT, Database Management Systems (DBMS)
- **Description:** A smart ID card system integrated with IoT and a database backend for real-time monitoring of access control. The system will track student and staff entry and exit, integrate with campus facilities, and provide secure authentication.

4. NFSU Chatbot for Student Support

- **Focus:** Natural Language Processing (NLP), AI
- **Description:** A chatbot to assist students and staff with frequently asked questions, campus information, event notifications, and administrative tasks. It will use NLP and AI algorithms to provide personalized responses and real-time support.

5. Cybersecurity Analysis Tools

- **Focus:** Data Analysis, AI, Cybersecurity
- **Description:** A suite of tools that can analyze raw data from cybersecurity tools like Wireshark. The system will apply AI to detect anomalies such as data leaks, identify vulnerabilities, and generate actionable insights for security improvement.

6. Capture The Flag (CTF) Competition Platform

- **Focus:** Game Development, Cybersecurity
- **Description:** A platform that hosts online Capture The Flag (CTF) competitions designed to challenge participants on their cybersecurity skills. The platform will include various security challenges, ranging from reverse engineering to web security, and track participants' performance.

7. Security Dashboard for Network and Security Monitoring

- **Focus:** Data Aggregation, Network Security, Real-time Monitoring
- **Description:** A comprehensive security dashboard that aggregates data from various network security tools and provides real-time monitoring of network traffic, security events, and incidents. The dashboard displays key metrics such as traffic volume, failed login attempts, DDoS attacks, malware activity, and more, using graphical representations like charts and heatmaps. It features customizable alerts and flags based on predefined thresholds to help security teams identify and mitigate potential threats quickly. The system aims to enhance visibility and improve incident response times by providing a centralized view of network and security health.

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