INNOVENTURE
H A C K A T H O N

- **Problem Statement Title-** CyberSakshar – AI-Powered Cyber Hub (Citizen Perspective)

- **Education Theme-**Student Innovation

- **Team Name - Team Elite**

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  member 1 : Anshu Raut
  member 2 : Vivek Jangam
  member 3 : Swaraj Mohite

CyberSakshar

Problem Statement

In the current digital era, the rapid expansionofinternetusage hasledtoaparallelrisein cyber threats and crimes. While digital
literacy is growing, **cybersecurity awareness remains significantly underdeveloped**, particularly among students, rural populations, and general citizens.
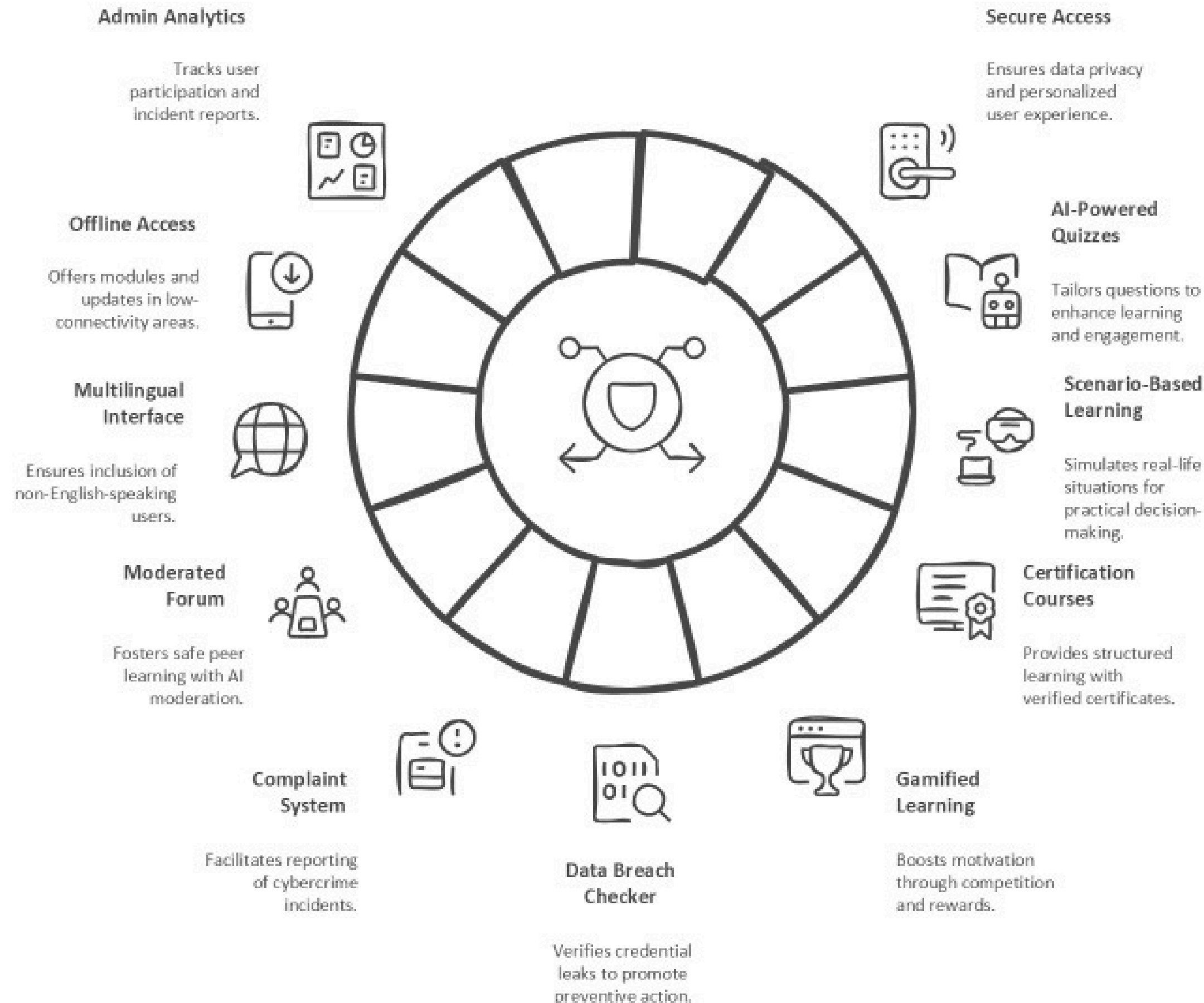
Key Issues Identified -

- **Lack of Structured Cyber Awareness Education**: Most educational institutions do not provide formal cyber safety training to students.

- **Absence of Regional and Age-Specific Learning Platforms**: There are limited resources available in local languages or tailored to specific age groups.

- **Low Reporting and Awareness of Cybercrimes**: Victims often do not report incidents due to stigma, lack of understanding, or fear of consequences.

- **Inadequate Tools for Self-Assessment and Learning**: Users lack access to platforms that offer interactive self-tests, gamified learning, or certification opportunities.

- **Unsafe Platforms for Discussion and Peer Support**: Social media is often misused or lacks moderation, leading to misinformation or unsafe interactions.

According to the **National Crime Records Bureau (NCRB)**, India reported over **65,000 cybercrime cases in 2022**, showing a significant increase over previous years.

Teenagers and senior citizens are among the most vulnerable groups targeted by cyber frauds, including phishing, fake applications, and social engineering.

A2023**Kaspersky IndiaSurvey**revealed thatonly**18%of usersregularly update theircredentials or checktheir data breach status**.

Proposed Solution

Admin Analytics

Tracks user participation and incident reports.

Secure Access

Ensures data privacy and personalized user experience.

AI-Powered Quizzes

Tailors questions to enhance learning and engagement.

Offline Access

Offers modules and updates in low-connectivity areas.

Multilingual Interface

Ensures inclusion of non-English-speaking users.

Scenario-Based Learning

Simulates real-life situations for practical decision-making.

Moderated Forum

Fosters safe peer learning with AI moderation.

Certification Courses

Provides structured learning with verified certificates.

Complaint System

Facilitates reporting of cybercrime incidents.

Data Breach Checker

Verifies credential leaks to promote preventive action.

Gamified Learning

Boosts motivation through competition and rewards.

CyberSakshar offers a **comprehensive and accessible platform** to improve cybersecurity awareness across diverse user groups. Through **AI-powered personalized quizzes** and **scenario-based learning**, users gain practical knowledge tailored to their skill level. **Certified micro-courses** provide structured learning with digital credentials, while a **gamified dashboard** encourages continuous engagement. The platform includes a **data breach checker** to alert users about compromised credentials and a **complaint registration system** to streamline cybercrime reporting.

A **moderated discussion forum** enables safe peer interaction, and **multilingual with offline access** ensures inclusion of rural and low-connectivity users. The **admin analytics dashboard** supports continuous monitoring and platform enhancement based on user behavior and trends.

Innovation / Uniqueness

Moderated Community Forum
- Peer Interaction
- Expert Guidance

Personalized Learning
- Knowledge Level
- Progress Tracking

Certified Micro-Courses
- Formal Certification
- Skill Validation

Integrated Complaint Registration
- Cybercrime Reporting
- Platform Integration

CyberSakshar Platform

Admin Analytics Dashboard
- User Data
- Emerging Threats

Scenario-Based Simulations
- Practical Decision-Making
- Theoretical Lessons

Gamification Elements
- Badges
- Leaderboards

Multilingual and Offline Access
- Regional Languages
- Offline Learning

First platform to **integrate personalized AI learning with complaint registration**.

Offers **scenario-based simulations** unlike traditional static content.

Combines **gamified education with certified micro-courses** for formal recognition.

Ensures **inclusive access through multilingual support and offline availability**.

Provides a **safe, moderated community forum** fostering collaboration.
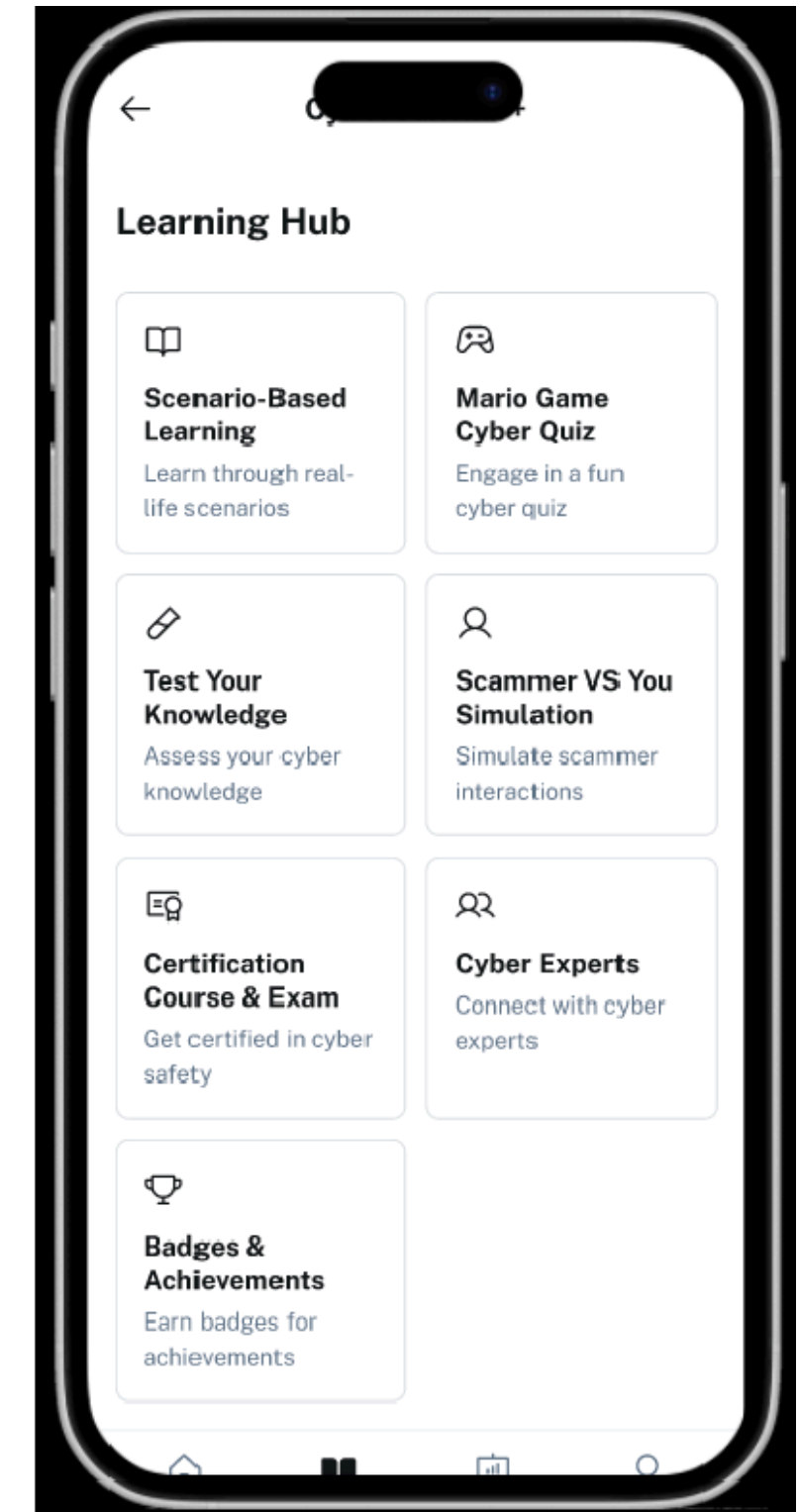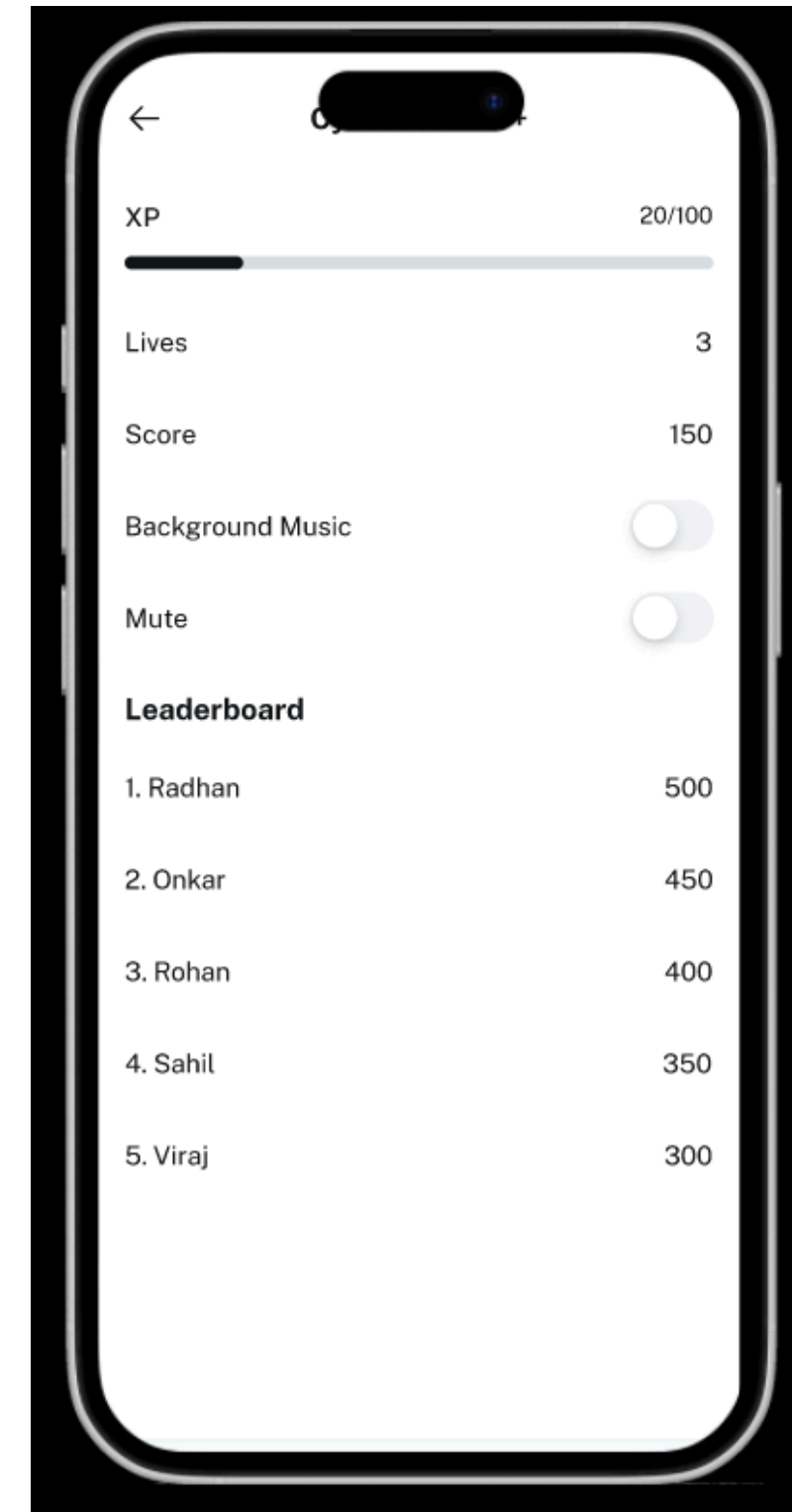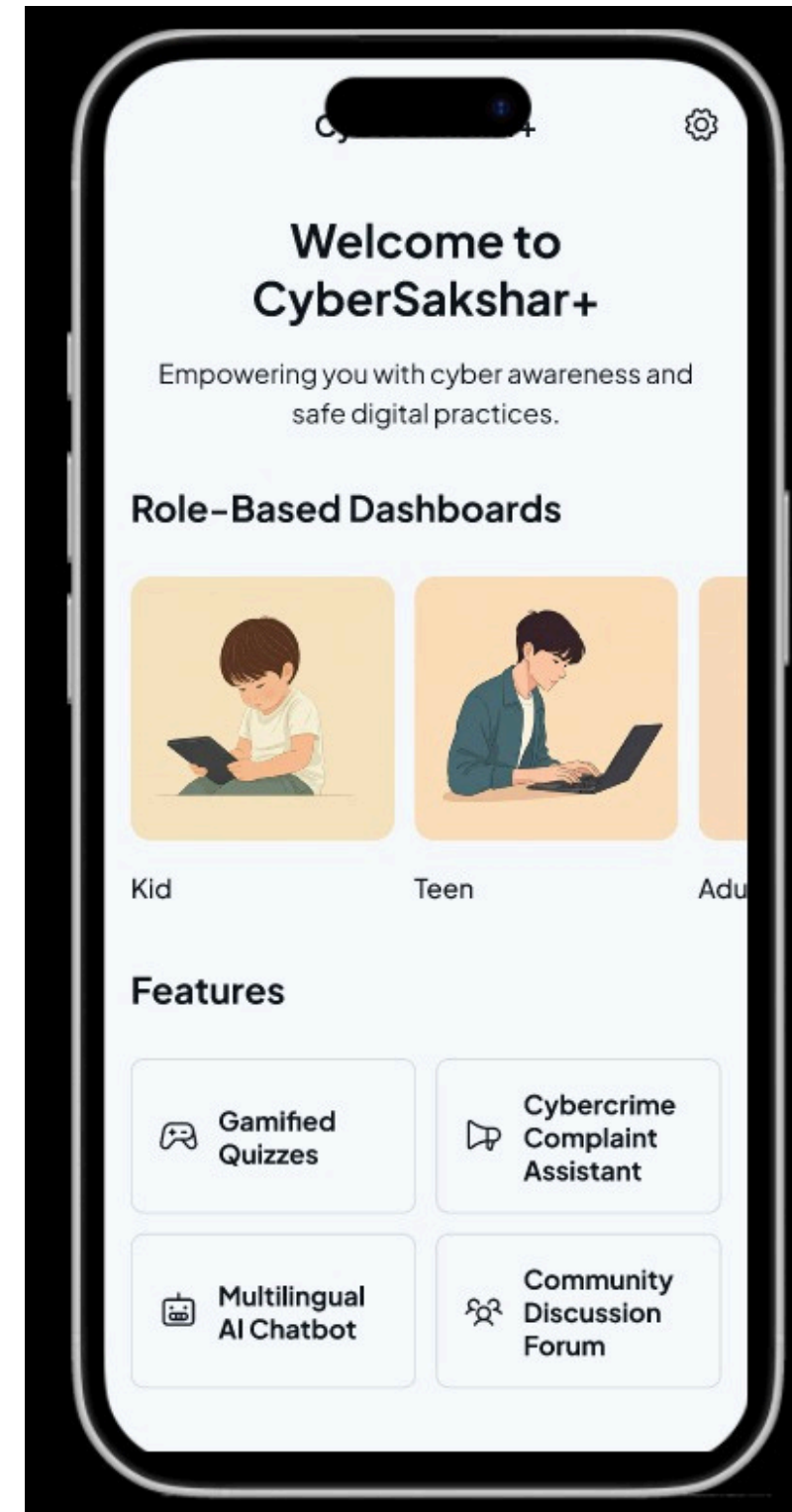
Delivers a **holistic, all-in-one cybersecurity education ecosystem**, unlike fragmented tools.

CyberSakshar uses **AI-adaptive learning** to personalize cybersecurity education and offers **real-world scenario simulations** for practical skill development. It integrates **gamification** to enhance user engagement and includes a **complaintregistration system** for active cybercrime reporting. The platform supports **multilingual and offline access** to maximize reach and features a **moderated forum** for peer learning. Additionally, it leverages **admin dashboard analytics** to continuously improve the system.
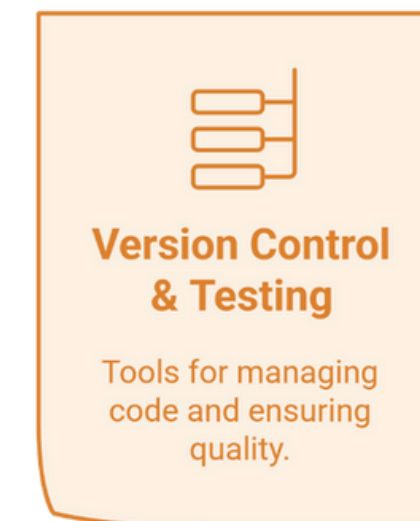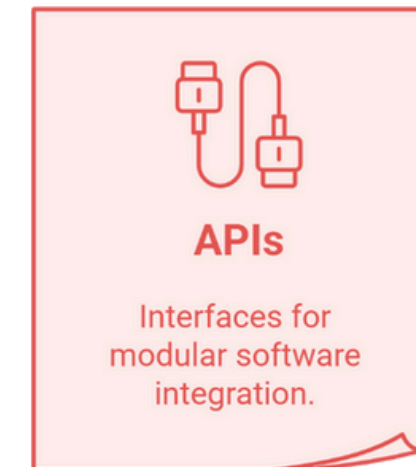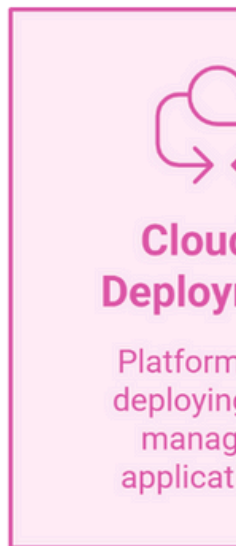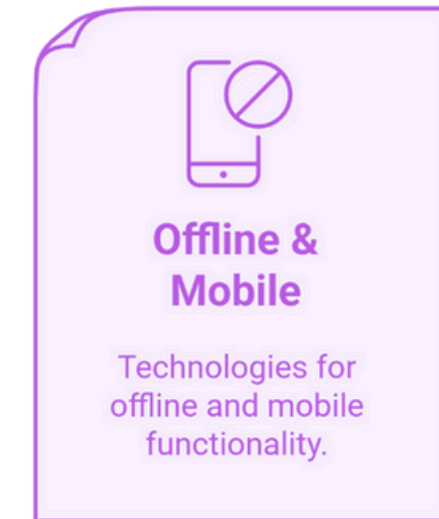
Current Progress

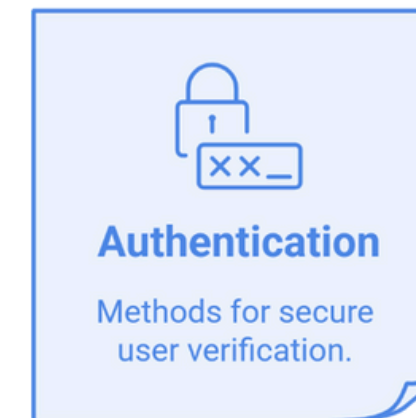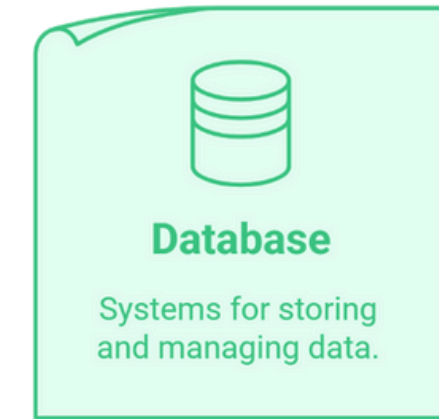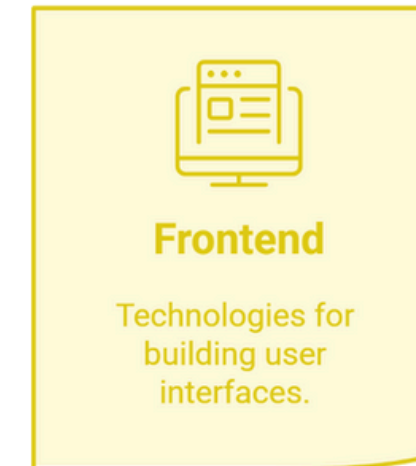
We have designed UI Prototype of our webApp - **CyberSakshar** .
Go through it !
Alsowehave made Our Solution Explanation Video : CyberSakshar

Welcome to CyberSakshar+

Empowering you with cyber awareness and safe digital practices.

Role-Based Dashboards

Kid   Teen   Adu

Features

- Gamified Quizzes
- Cybercrime Complaint Assistant
- Multilingual AI Chatbot
- Community Discussion Forum

XP	20/100
Lives	3
Score	150
Background Music	
Mute	

Leaderboard

1. Radhan   500
2. Onkar   450
3. Rohan   400
4. Sahil   350
5. Viraj   300

Learning Hub

Scenario-Based Learning
Learn through real-life scenarios

Mario Game Cyber Quiz
Engage in a fun cyber quiz

Test Your Knowledge
Assess your cyber knowledge

Scammer VS You Simulation
Simulate scammer interactions

Certification Course & Exam
Get certified in cyber safety

Cyber Experts
Connect with cyber experts

Badges & Achievements
Earn badges for achievements

Gppians

Tech Stack

- **Frontend:** HTML5, CSS3, React.js

- **Backend:** Node.js, Express.js

- **Database:** MongoDB,Supabase (PostgreSQL)

- **AI/ML:** Python (TensorFlow, Scikit-learn)

- **Authentication:** FirebaseAuthentication, JWT

- **Multilingual Support:** Google Translator API, i18n libraries

- **Offline & Mobile:** Progressive Web App (PWA) technology

- **Cloud & Deployment:** AWS / Azure Cloud, Docker containers

- **APIs:** RESTfulAPIsformodular integration

- **Version Control & Testing:** Git, Postman

Frontend
Technologies for building user interfaces.

Backend
Server-side technologies for handling logic.

Database
Systems for storing and managing data.

AI/M
Tools for a intellige implemen

Authentication
Methods for secure user verification.

Multilingual Support
Tools for translating content to languages.

Offline & Mobile
Technologies for offline and mobile functionality.

Clou Deploy
Platform deploying manag applicati

APIs
Interfaces for modular software integration.

Version Control & Testing
Tools for managing code and ensuring quality.

CyberSakshar

IMPACT AND BENEFI

CyberSakshar creates a safer digital society by empowering individuals with the knowledge and tools to protect themselves from cyber threats. By focusing on accessibility and community engagement, it reduces digital inequalities and promotes responsible online behavior, contributing to the overall well-being and security of communities, especially in underserved regions.

- **Cybersecurity Awareness:** Raises awareness among diverse users, increasing vigilance and preparedness.

- **Skill Development:** AI-driven adaptive learning and scenario simulations build practical cyber risk response skills.

- **Digital Inclusion:** Multilingual and offline support bridges the digital divide for underserved communities.

- **Community Building:** Moderated forums enable knowledge sharing and expert support.

- **Cybercrime Reporting:** Complaint registration empowers efficient reporting and strengthens safety.

- **ContinuousImprovement:** Real-time analytics drive platform evolution and relevance.

- **Personalized Learning:** Tailored content boosts engagement and retention.

- **Practical Experience:** Hands-on scenario-based training for real-life challenges.

- **Motivation & Recognition:** Gamification with badges and certifications encourages learning.

- **Accessibility:** Multilingual and offline access widen usability.

- **SupportSystem:** Forums and expert guidance enhance user confidence.

- **Data-Driven Management:** Admin dashboard enables targeted improvements and user satisfaction.

RESEARCH AND REFERENCES

Research :

CERT-IN Reports & Guidelines –Insightsinto India's cyber threatlandscape andsecurity frameworks. : https://www.cert-in.org.in
National Cyber Security Policy (GoI) – Guidelines supporting secure digital practices and education. https://www.meity.gov.in
NCRB Cybercrime Statistics – Official crime data indicating a surge in cyber-related incidents. : https://ncrb.gov.in
UNESCO Digital Reports – Research on digital literacy gaps and need for inclusive education. : https://www.unicef.org

Platform Benchmarks :

Cyber Aware (UK Govt) – Public awareness platform lacking gamification or scenario-based learning.
🔗 https://www.cyberaware.gov.uk

- **Cybrary** – Skill-based training for professionals; less suited for general public or rural users.
🔗 https://www.cybrary.it

- **TryHackMe** – Gamified learning, but not multilingual or inclusion-focused.
🔗 https://tryhackme.com

- **InfoSec Institute** – Advanced training modules; lacks regional adaptation and accessibility.
🔗 https://www.infosecinstitute.com

T H A N K U !