



DEPARTMENT OF  
COMPUTER SCIENCE AND BUSINESS SYSTEMS

INNOVISION 2025

**HACK-SPHERE**



PRIZES WORTH  
₹75,000

+

INTERNSHIP OPPORTUNITIES

## Team Details

**Team name: IgnitedMinds**

**Team leader name: Prasad Kute**

**Domain : Security**

**Problem Statement: Real-Time Cyber Threat Detection and Alert System**

## Proposed Solution :

Developing a cybersecurity solution that helps individuals or small organizations protect against common online threats, such as phishing, malware, or identity theft. The tool will provide real-time analysis or alerts while educating users on staying safe online.

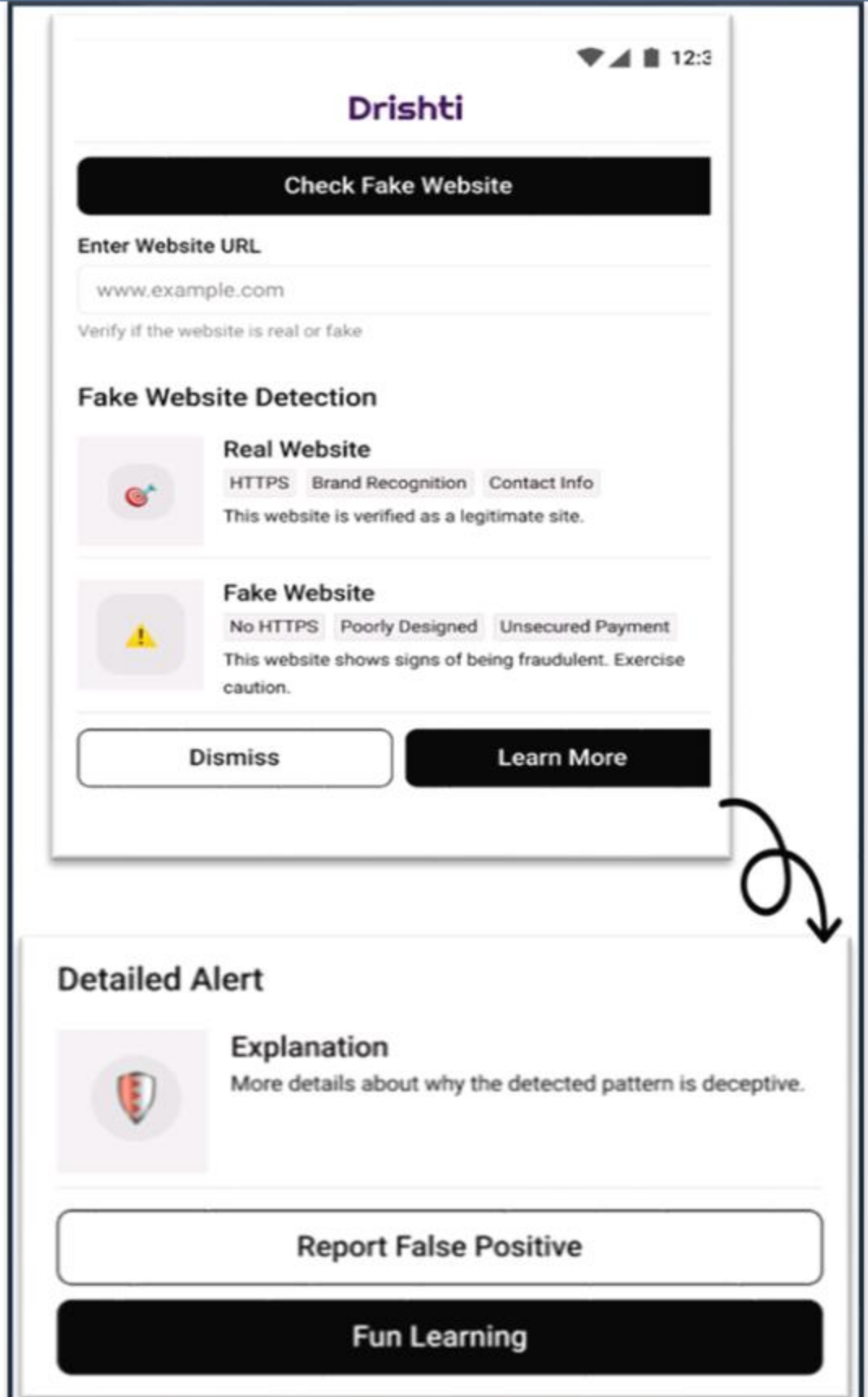
## Key Features:

**Browser Extension:** Analyze websites in real-time to detect phishing, malware, and spam.

**User Education:** Interactive educational games and quizzes to empower users with cybersecurity awareness.

**AI Integration:** Use advanced ML algorithms and APIs like VirusTotal for enhanced threat detection.

**User Feedback:** Enable users to provide feedback to improve threat detection accuracy.







# TECHNICAL APPROACH

## TECHNICAL INFORMATION

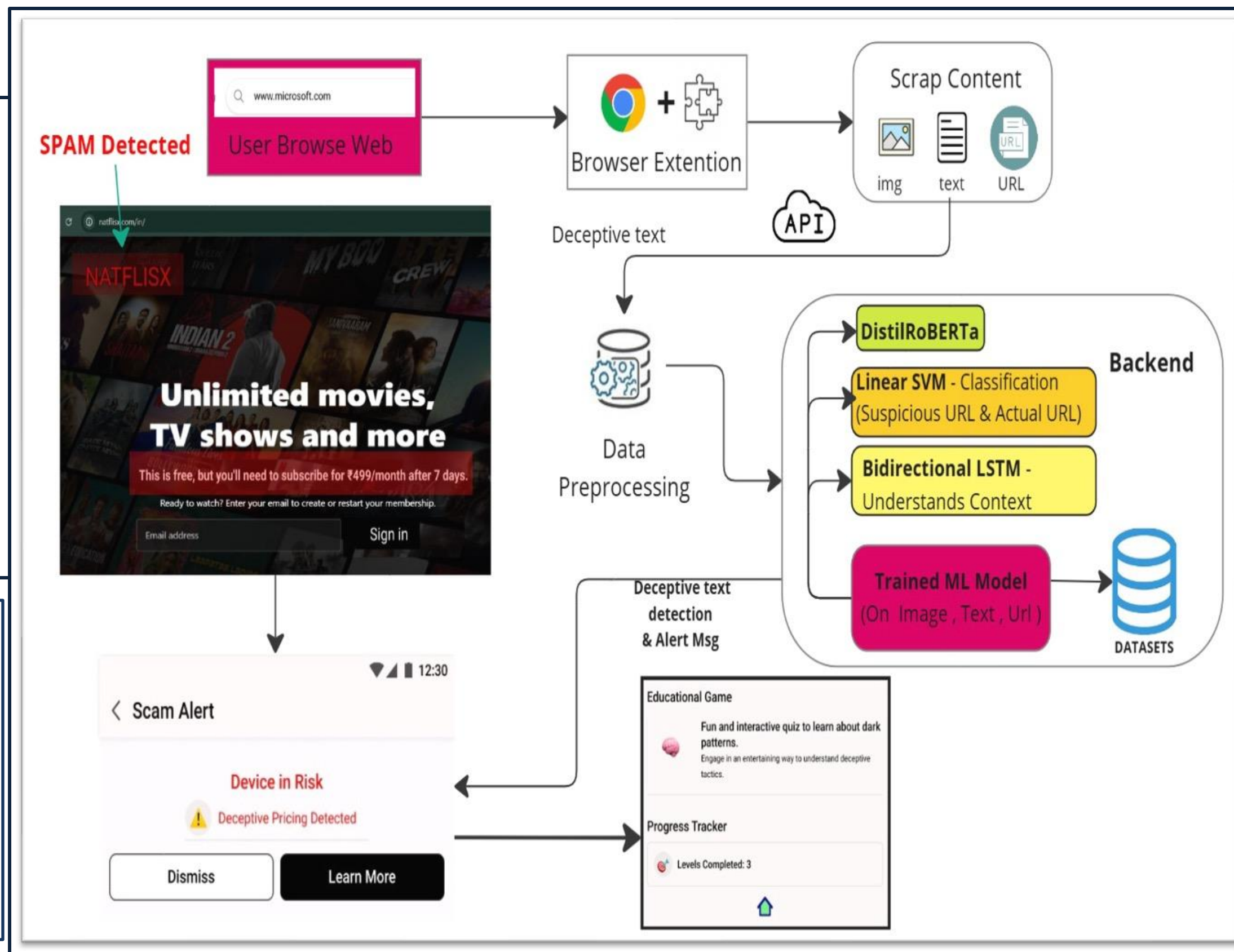
### Technical Approach:

- **Frontend:** A lightweight browser extension for real-time interaction.
- **Backend:** Secure data processing with transformers and ML models.
- **Threat Detection:** Integration with VirusTotal API for malware analysis.
- **Educational Tools:** Quizzes, alerts, and reports to increase user awareness.

### Technology Stack:

- **Frontend:** React for the extension UI.
- **Backend:** Node.js for threat analysis and processing.
- **Database:** MongoDB for storing user data and feedback.
- **APIs:** VirusTotal for malware detection.

## TECHNOLOGY STACK



# FEASIBILITY AND VIABILITY

## Feasibility and Viability:

### Technical Feasibility:

- **Technology Availability:** APIs like VirusTotal, transformers, and cloud platforms support implementation.
- **Security Measures:** AES-256 encryption ensures data security and compliance with privacy standards.
- **Scalability:** Cloud-native architecture allows scaling to accommodate user growth.

### Operational Feasibility:

- **Team Expertise:** Developers, ML engineers, and cybersecurity experts onboard for seamless execution.
- **Reliability:** Cloud infrastructure and redundant systems ensure high availability and minimal downtime.

### Market Feasibility:

- **Demand:** Rising cybercrime awareness creates a significant market for user-friendly cybersecurity tools.
- **Revenue Model:** Freemium model with premium features like advanced analytics, priority support, and custom configurations.
- **User Adoption:** Education-first approach improves user adoption and long-term engagement.

## Unique Value Proposition (UVP) for BioVault

1. **Real-Time Alerts:** Immediate notifications for unsafe websites and potential online threats.
2. **User Empowerment and Trust Building:** Combines education with cybersecurity tools to build awareness and confidence in safe browsing practices.
3. **Seamless Integration:** Compatible with all major browsers, providing a uniform user experience.
4. **Multi-Feature Capability:** Combines phishing detection, educational resources, and deceptive practice identification in one tool.
5. **AI-Driven Accuracy:** Advanced algorithms ensure high precision in threat detection, reducing false positives and negatives.
6. **Customizable Interface:** Users can configure alerts and access levels based on their comfort and technical expertise.
7. **Global Accessibility:** Designed for users worldwide, addressing common cyber threats across regions.

### Challenges:

- Educating non-technical users about using the tool effectively.
- Overcoming resistance to adopt a new browser extension.

### Strategies:

- Conduct webinars and provide tutorials on safe online practices.
- Offer a simplified onboarding process and excellent customer support.



## Team Details

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