Basic Details of the Team and Problem Statement

PSI : AI108

Problem Statement Title: Obscene content blocker

Problem Statement: Design and develop a technological solution for identifying and blocking any obscene media (text/ image/ video/ audio) at the user's end. The solution should be able to send alerts to the concerned nodal agency in case of the spread of such content. The solution may be in the form of a desktop/mobile application or a web browser plugin.

Team Name: Teamsolo

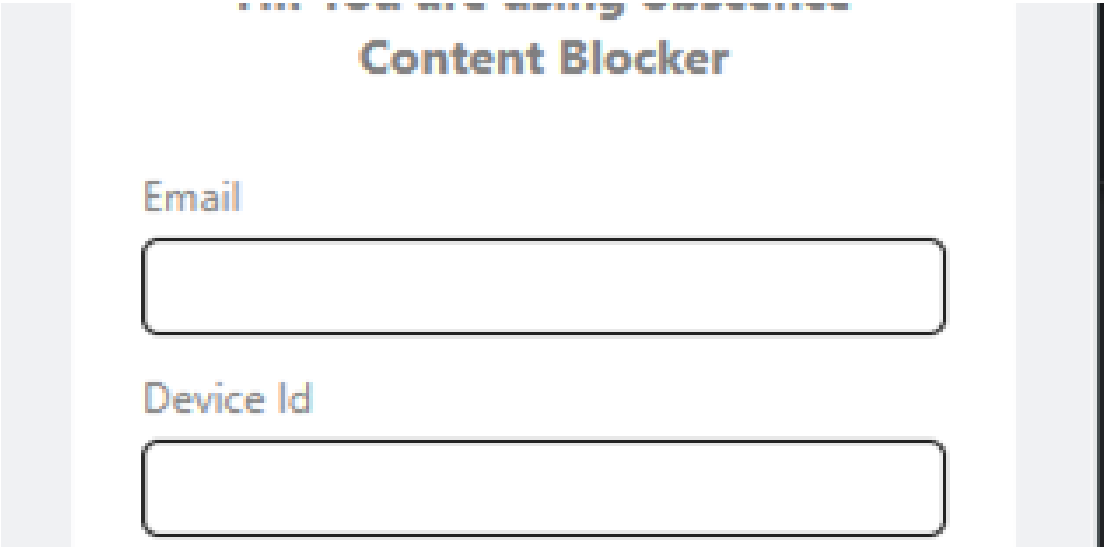
Team Leader Name: Kishan

Institute Name: MAIT

Theme Name: AIML

Idea/Approach Details

- Made an extension that identifies and blocks obscene content on any website and URL.
- Detection of content done by two things i.e. static check and transformer's model prediction.
- Alerts nodal agency for potentially unsafe content when the user accesses such content which can further be used as a feedback mechanism for model improvement.
- Sends uninstallation notifications to the nodal agency on browser uninstallation.



- HTML, CSS, JavaScript.
- Flask.
- Transformer models.
- Beautiful soup.
- NLTK.

Social impact and innovation

Social Impact

- Reducing Exposure to Harmful Content
- Promoting Digital Well-being
- Empowering Users
- Enhancing Online Safety Awareness
- Facilitating Law Enforcement

Innovation and USP

- 2 Round verification, one static and one deep learning based.
- Feedback system for fine-tuning the model.
- Alerting nodal agencies/Notification system.
- Customizability.
- We also avoid the uninstall/Disable of the app.
- Customization both on the level of engineering and business

Business Model

Key partners

Educational institutions and organizations for collaborative implementations

Online platforms for potential integration partnerships

Cybersecurity firms for consultation and best practices

Key Activities

Software development and continuous updates

Machine learning model training and improvement

Marketing and promotional activities

User feedback analysis and model fine-tuning

Key Resources

Data scientists for machine learning model enhancement

Marketing and sales team for promotion

Customer support team for user assistance

Value propositions

Enhanced online safety through content filtering

Personalized content control and preferences

Compliance with regulatory standards

Early detection and reporting of inappropriate content

Continuous learning and improvement through user feedback

Customer Relationships

User onboarding tutorials and guides

Customer support for technical assistance

Regular updates on new features and improvements

Community forums for user engagement and feedback

Channels

Direct distribution via web browser extension stores (Chrome Web Store etc.)

Collaboration with educational platforms and organizations

Online marketing and awareness campaigns and social media engagement

Customer Segments

Parents and guardians

Educational institutions

Corporations and workplaces

Public spaces with shared computers

Individual users concerned about online safety

Cost Structures

Development and maintenance costs for the software

Machine learning model training and infrastructure costs

Marketing and promotional expenses

Customer support and community engagement costs

Revenue Streams

The freemium model with basic content blocking features available for free

Premium subscription for advanced features and personalization options

Partnerships and collaborations with educational institutions and organizations

Use Case :

- **Parental Control:**
  Parents want to ensure a safe online environment for their children.
  Use Case: The browser extension helps parents filter and block explicit content, ensuring a child-friendly browsing experience.
- **Corporate Security:**
  Organizations aim to maintain a safe and secure working environment.
  Use Case: The extension helps organizations block access to inappropriate content, fostering a professional and secure workplace.
- **Public Spaces:**
  Public places with shared computers (libraries, internet cafes) need to prevent access to explicit content.
  Use Case: The extension helps maintain a safe browsing environment in public spaces, adhering to community standards.
- **Institutional Compliance:**
  Organizations need to comply with regulations regarding inappropriate content.
  Use Case: The extension helps organizations meet compliance standards by actively blocking and reporting explicit content.
- **Individual User Control:**
  Users want to customize their online experience and avoid specific types of content.
  Use Case: The extension allows users to define their content preferences, blocking or allowing websites based on their personal choices.