A FRAMEWORK FOR RECOGNITION OF DIGITAL HARASSEMENT ON SOCIAL MEDIA

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ABSTRACT

While social media offer great communication opportunities, they also increase the vulnerability of children to threatening situations online. Recent studies report that cyberbullying constitutes a growing problem among children. Successful prevention depends on the adequate detection of potentially harmful messages and the information overload on the Web requires intelligent systems to identify potential risks automatically. Online predators try to gradually seduce their targets through attention, affection, kindness, and even gifts, and often devote considerable time, money and energy to this effort. They are aware of the latest music and hobbies likely to interest kids. They listen to and sympathize with kids' problems. They also try to ease young people's inhibitions by gradually introducing sexual content into their conversations or by showing them sexually explicit material. Here we have proposed solution will detect suspect profiles based on child grooming behavior patterns followers, hate speech provokers, stalking and bullying mentality profiles and explicit content explorers (postings, comments) on social media platforms and other websites

INTRODUCTION

Web 2.0 has had a substantial impact on communication and relationships in today's society. Children and teenagers go online more frequently, at younger ages, and in more diverse ways (e.g. smartphones, laptops and tablets). Although most of teenagers' Internet use is harmless and the benefits of digital communication are evident, the freedom and anonymity experienced online makes young people vulnerable with cyberbullying being one of the major threats [1, 2].

Bullying is not a new phenomenon and cyberbullying has manifested itself as soon as digital technologies have become primary communication tools. On the positive side, social media like blogs, social networking sites (e.g. Facebook), and instant messaging platforms (e.g. WhatsApp) make it possible to communicate with anyone and at any time. Moreover, they are a place where people engage in social interaction, offering the possibility to establish new relationships and maintain existing friendships [3, 4]. On the negative side however, social media increase the risk of children being confronted with threatening situations including grooming or sexually transgressive behaviour, signals of depression and suicidal thoughts, and cyberbullying. Users are reachable 24/7 and are often able to remain anonymous if desired: this makes social media a convenient way for bullies to target their victims outside the school yard

With regard to cyberbullying, a number of national and international initiatives have been launched over the past few years to increase children's online safety. Examples include KiVa (http://www.kivaprogram.net/), a Finnish cyberbullying prevention programme, the'Non au harcèlement' campaign in France, Belgian governmental initiatives and helplines (e.g. clicksafe.be, veiligonline.be, mediawijs.be) that provide information about online safety, andso on.

In spite of these efforts, a lot of undesirable and hurtful content remains online. [2] analysed a body of quantitative research on cyberbullying and observed cybervictimisation rates among teenagers between 20% and 40%. [5] focused on 12 to 17 year olds living in the United States and found that no less than 72% of them had encountered cyberbullying at least once within the year preceding the questionnaire. [6] surveyed 9 to 26 year olds in the United States, Canada, the United Kingdom and Australia, and found that 29% of the respondents had ever been victimised online. A study among 2,000 Flemish secondary school students (age 12 to 18) revealed that 11% of them had been bullied online at least once in the six months preceding the survey [7]. Finally, the 2014 large-scale EU Kids Online Report [8] published that 20% of 11 to 16 year olds had been exposed to hate messages online. In addition, youngsters were 12% more likely to be exposed to cyberbullying as compared to 2010, which clearly demonstrates that cyberbullying is a growing problem.

The prevalence of cybervictimisation depends on the conceptualisation used in describing cyberbullying, but also on research variables such as location and the number and age span of the participants. Nevertheless, the above studies demonstrate that online platforms are increasingly used for bullying, which is a cause for concern given its impact. As shown by [9–11], cyberbullying may negatively impact the victim's self-esteem, academic achievement and emotional well-being. [12] found that self-reported effects of cyberbullying include negative effects on school grades and feelings of sadness, anger, fear, and depression. In extreme cases, cyberbullying could even lead to self-harm and suicidal thoughts.

LITERATURE SURVEY

Professional psychologists need to understand the dangers of online sexual harassment and how to protect young people from internet sex predators. While the internet offers many positive aspects, one of the most pernicious issues is its potential use for online sexual exploitation. The internet provides a medium that allows sex predators to access numerous children in a relatively anonymous environment. The main objective of our project is to detect child predators based on comments and posts on social media accounts and send the predator's record to the cyber cell admin. A recent national survey indicated that about one in five youths are solicited for sex over the internet annually (Finkelhor, Mitchell, & Wolak, 2000; Mitchell, Finkelhor, & Wolak, 2001). This project report presents our current development efforts to create this system. As a result, with the developed system, child predator accounts can be detected and reported to the admin for further action.Big data has become an essential requirement for enterprises looking to harness their business potential. The use cases for big data are endless and range from customer targeting and fraud analytics to anomaly detection and more. This data can be generated quickly from various sources such as users' browser and search history, credit card payments, mobile pinging of the nearest cell phone tower, etc. Given the volume of sensitive information being captured, any or accidental disclosure of or access

to the data can have severe consequences for your enterprise, both in financial terms and in more intangible ways, such as the loss of brand recognition and users' trust.

Increase in Internet use and facilitating access to social media platform has help the predatory to establish online relationships with children which has boost to increase in online solicitation. We are proposing system that enables us to detect a predator in online chats using Text classification method. In this paper, the use of machine learning algorithm named as support vector machine has been used to determine cyber predators. The main objective of our system is to detect child predator base on chat, comments and post of social media account and send predator record to cyber cell admin & the use of PAN12 dataset is done for text classification Purpose. This paper presents our current development to enable the creation of thechild predator system using SVM text classification.

SYSTEM ANALYSIS

EXISTING SYSTEM

There exists various child predator detection system which are used in gaming, audio chat and in various online entertainment platform. While playing games or for using online audio chat there exists a child predator system which detects an online sexual harassment and prevent child from getting abused or getting harassed by sexual predator as this existing system is only used when the children are playing games on internet or doing any audio chats. As now we are in internet era various children are now days using social media platform for various social activities. They are mostly active on social media so to prevent child harassment we need a child predator detection system for social media

DISADVANTAGES

•Limited Scope of Operation: Existing systems are mostly limited to gaming environments and audio chats, ignoring other critical platforms like social media, messaging apps, or video-sharing platforms where children spend a large portion of their time.

•Lack of Text-Based Monitoring: Most systems focus on voice interactions, neglecting textual conversations, which are often used by predators for grooming and manipulation.

•No Multimedia Analysis: These systems usually do not analyze images, videos, or shared media, making them ineffective in detecting visual harassment or explicit content.

•Platform Dependency: The detection tools are often platform-specific and do not offer cross-platform protection. Children might be safe in one app but vulnerable in others.

PROPOSED SYSTEM

We propose a child predator detection system that aims to enhance the safety of children in online environments, especially on social media platforms. The system is designed with three core modules: the User Module, the Training Module, and the Cyber System. In the User Module, users are categorized into two types—normal users and those exhibiting potential

predator behavior. The Training Module employs a machine learning approach using the Support Vector Machine (SVM) algorithm for effective text classification and image analysis. This allows the system to intelligently detect suspicious conversations or content shared by users. Once a user is flagged for predator-like behavior, the information is passed on to the Cyber System, where all predator reports are reviewed. The cyber administrators can then take appropriate actions such as warnings, account restrictions, or reporting to legal authorities, depending on the severity of the threat.

ADVANTAGES

•Early Intervention – By detecting harmful behavior at an early stage, the system helps prevent potential online abuse before it escalates, protecting children from exploitation.

•Safer Online Spaces – By continuously monitoring online interactions, the system ensures a more secure and regulated digital environment, minimizing exposure to threats like cyberbullying, grooming, and inappropriate content.

•Protection of Privacy – Unlike traditional monitoring tools that may infringe on user privacy, this system focuses specifically on detecting harmful content while maintaining ethical and legal data privacy standards.

IMPLEMENTATION

MODULE DESCRIPTION

MODULES

•Admin

•User

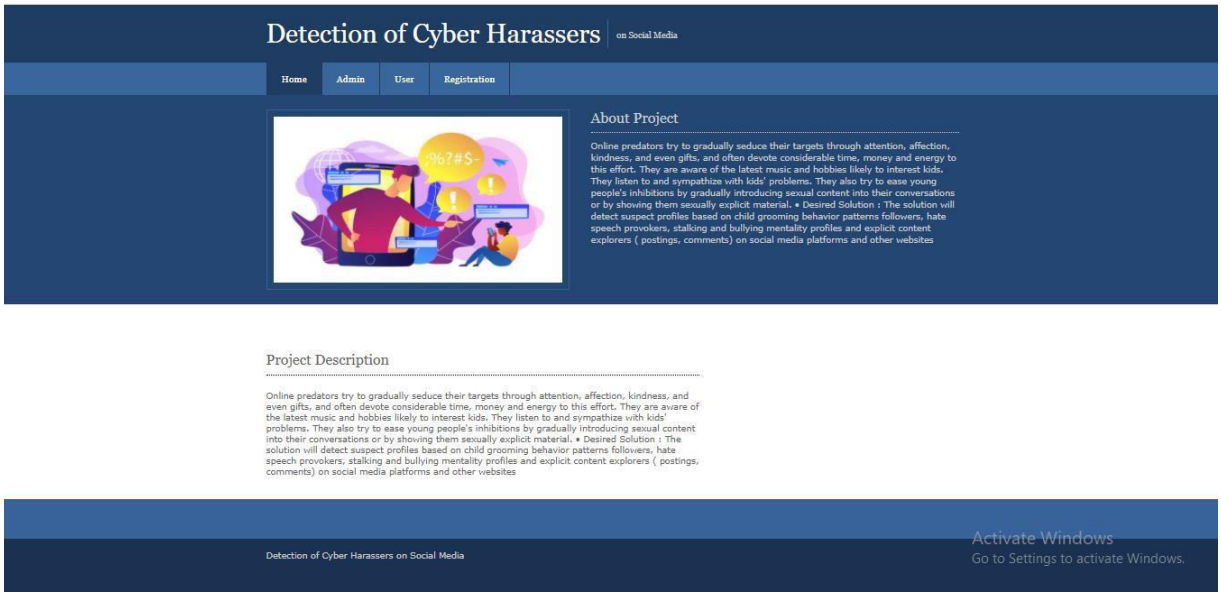
Admin

In this application the admin is the main module, here admin can directly login with the application no need to register with our application after admin successful login admin can perform some operations such as addcategory, addwords, yberharasser and logout

User

In this application user is another module here user should register with the application then only user can login with the application. After user successful login he/her can perform some operations such as postContent, viewAllPostContent comment on content and then logout

RESULTS


Detection of Cyber Harassers
on Social Media
Home
Admin
User
Registration
About Project
Online predators try to gradually seduce their targets through attention, affection, kindness, and even gifts, and often devote considerable time, money and energy to this effort. They are aware of the latest music and hobbies likely to interest kids. They listen to and sympathize with kids' problems. They also try to ease young people's inhibitions by gradually introducing sexual content into their conversations or by showing them sexually explicit material. • Desired Solution : The solution will detect suspect profiles based on child grooming behavior patterns followers, hate speech provokers, stalking and bullying mentality profiles and explicit content explorers (postings, comments) on social media platforms and other websites
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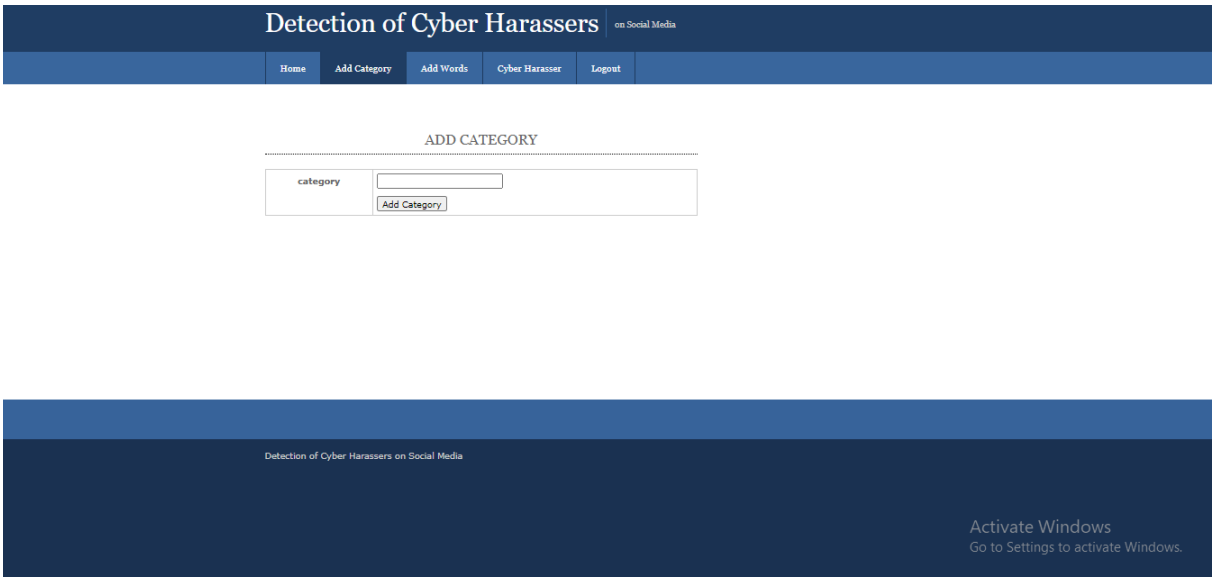
Detection of Cyber Harassers on Social Media
Activate Windows
Go to Settings to activate Windows.


Detection of Cyber Harassers
on Social Media
Home
Add Category
Add Words
Cyber Harasser
Logout
ADD CATEGORY
category
Add Category
Detection of Cyber Harassers on Social Media
Activate Windows
Go to Settings to activate Windows.

CONCLUSION

As each and every one even child is using internet nowadays and getting harassed by predators so in order to stop these predators it is very important to detect and punish them. The main aim of the groomer is to build a relationship with a child in order to gain access to that child. When grooming takes place, it is common that an adult groomer is pretending to be a childwith common hobbies or interests to build a relationship with child. In this project we detect child predator for child safety. And send predator report to cyber admin for action.

FUTURE SCOPE

The future scope of detecting and reporting online child predators is vast and critical for ensuring the safety of children in the digital age. With advancements in artificial intelligence and machine learning, the development of sophisticated algorithms can significantly enhance the accuracy and speed of identifying potential predators. These technologies can be integrated into social media platforms, messaging apps, and online gaming environments to monitor and analyze interactions in real-time, ensuring swift intervention when suspicious activities are detected. Additionally, the implementation of blockchain technology can secure and anonymize reports, protecting the privacy of both victims and whistleblowers while ensuring that data remains tamper-proof. As more devices become interconnected through the Internet of Things (IoT), these detection systems can expand to various digital touchpoints, providing a comprehensive safety net for children across different online platforms..

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