# Fraud Apps And Virus Detection System

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Abstract- This paper is concerned with cloud-based fraud apps and virus detection system. Nowadays there are so many applications available on the internet because of that user cannot always get correct or true reviews about the product on the internet. One can't judge how safe or true each application is based on reviews that are mentioned for each application. Hence, it's a need to keep a track and develop a system so as to make sure that the app present are fraud or genuine. So to overcome this issue using cloud computing we proposed the system that is the web application which will help the users to detect fraud apps that are available on the internet using sentiment analysis and also will help the users to detect viruses of any file with the help of the digital signatures. So this system will help the user to be safe from any fraud apps and viruses.

*Keywords*- Cloud Computing, Reviews, Fraud, Genuine, Sentiment Analysis, Digital Signatures.

## I. INTRODUCTION

Cloud computing is the delivery of different services through the Internet. These resources include tools and applications like data storage, servers, databases, networking, and software. Rather than keeping files on a proprietary hard drive or local storage device, cloud-based storage makes it possible to save them to a remote database. As long as an electronic device has access to the web, it has access to the data and the software programs to run it. Cloud computing is a popular option for people and businesses for a number of reasons including cost savings, increased productivity, speed and efficiency, performance, and security. This technological trend has enabled the consummation of a new computing model called cloud computing. cloud offer services that can be grouped into three orders software as a service (SaaS), platform as a service (PaaS), and structure as a service (IaaS). In SaaS technology there is no need of installation of software all this can be done on platform like cloud servers. In PaaS technology in this it basically offers all the tools that are needed to build an application. With the growth in technology there is an increase in the usage of mobiles. There has been the vast growth in the development of various mobile applications on numerous platforms such as Android and iOS. Due to its rapid growth day by day for its everyday usage, sales and developments it has become a significant challenge in the world of business intelligent market that give rise to market

competition. The most important role that plays is the customers ratings and reviews on that specific application they wish to download. This could be the way for the developers to find their weakness and enhance into the development of a new one keeping in mind the peoples need. But certain times just for the upliftment of the developers they tend to hire teams of workers who commits to fraud collectively and provides false comments and ratings over an application. This is known to be termed as crowd turfing. Hence, it is always important to ensure that before installing an app the user must provide with proper and genuine comments in order to avoid certain mishaps. It is essential that suspicious application must be marked as might be safe or fraud in order to be identified by the stored users. It will be difficult for the users to determine the comments that they scroll past or the ratings they see is a scam or genuine for their own benefit. Thereby, using cloud computing we are proposing a system by developing a web application that will help the users to identify such fraud applications that are available on the internet based on the ratings and reviews with the help of sentiment analysis. So, detecting the fraud apps will eventually be useful to determine the fraud application and to ensure the mobile security as well. Also, along with the fraud apps detection the user will also be able to detect the viruses of any file based on the digital signatures. So, the proposed system will help the users not only to detect the fraud or genuine apps but also will help the users to detect the viruses of any file that they want to detect. Thus, main objective of our project is as follows:

- 1. To provide quick and better generation of reports without giving any delay or errors.
- 2. To perform the detection of viruses of any files.
- 3. To make it an open source website.
- 4. Free of cost.

# II. LITERATURESURVEY

It is a literature study of the research papers and research which gives the detailed information about some of the existing systems along with its advantages and disadvantages. Parvathi Modugaand J.V Krishna [1] provides a method for mining leading sessions for each apps from its historical records and then identifies for detecting ranking fraud and expand the ranking misrepresentation identification approach with other versatile app related

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administrations.Ms. Shraddha Jhundhareand Ms. Padmaja Gajare[2] provides the application for filtering the application and recognize the malware is built. Proposed structure incorporates both the irregularity based risk signals and probabilistic models. So, the system is significant for ID of supportive applications and give the improved danger correspondence and likewise gives more valuable application as indicated by client reviews and recognize fraud application as per evaluation. Monika Pandey, Prof. Tripti Sharma [3] states that the principle reason for this paper is to introduce the functioning model of fuzzy sentiment based fraud application detection. The proposed framework acquires normal precisions of 83% with 5 unique sort of datasets. We can effectively ready to characterized the applications from various datasets. Tejaswini Shingare, Madhuri Sancheti, Swaleha Shaikh [4] states that in today's era, due to rapid development in the mobile technology and mobile devices, the applications are being very interesting and popular concepts but due to this ranking fraud is also increasing. Thus, they provide a system that finds ranking, ratings and review behaviors for investigating review based evidences, ranking based evidences and rating based evidences and then aggregation based on optimization to combine all the evidences for the detection of frauds.M.Shammunga Saundari, M. Akhila [5] states that Versatile Apps has made a monstrous rate inside the course of continuous years. Indeed, the App pioneer board is one in everything about boss basic habits by which for processing adaptable apps. So they provide the positioning trick introduction framework for versatile app is proposed with genuine world app information created from iOS App store for long-term.Mandava Rama Rao, Nandhini Kannan, CH V S Nihanth [6] This paper had presented about determining fraud applications by using the concept of data mining and sentiment analysis. It was supported by the architecture diagram which briefed about the algorithm and processes which are implemented in the project. Data gets collected and stored in the database which is then evaluated with the supporting algorithms defined. This is a unique approach in which the evidences are aggregated and confined into a single result. The proposed framework is scalable and can be extended to other domain generated evidences for the ranking fraud detection.Mr. A. Syed Mustafa, M. Aishwarya, D. Anusha Ganapathy, T. Gowri [7] states that the proposed approach of combining the neural network with PCA shows its superiority not only in quality measures, but also in training time. Also shows that a hybrid combination of PNN and PCA could be a better solution for reducing the training time and increasing the classification performance. Our analysis also shows that the compound combination of unigram, bigram and trigram performs better for almost all the prediction models. Tho Manh Nguen, A Min Tjoa [8] states that advances in current advances have permitted us to consequently record

transactions of regular daily existence at a fast rate that eventually leads to a lot of information which develop at a limitless rate to be specific nonstop information streams. Thus, this paper proposes the Grid-Based mobile phone fraud detection system that enables online analysis, ruled based decision support and automatic reaction for fraud detection. Bonam Manjusha, Dr. B. Sujatha [9] states that Online Social Networks (Osn's) engage and move applications to redesign the customer experience on these stages like Facebook, Twitter. Captivating or drawing in strategies for talking with online mates and contrasting activities, for instance, playing redirections or paying attention to tunes are instance of such updates. Peng He and Gang Gan [10] proposes a detection scheme based on CNN deep learning algorithms which uses static analysis and detection methods. Therefore, this article uses a conversion algorithm to convert Android APK binary files to RGB PNG images and then use the algorithm to extract permissions in the APK and converts the permission matrix to a transparency matrix, combines the previous RGB images and finally generates RGBA images. Shashank Singh, Meenu Garg [11] state that misinterpretation in visa exchange is unapproved and undesirable utilization of record by somebody other than the proprietor of that record. In other words, Credit Card Fraud can be characterized as a situation where an individual use somebody else's charge card for individual reasons while the proprietor and card giving specialists and card ignorant of the way that the card is being utilized. Thus, this paper has clarified exhaustively that how AI can be applied to improve brings about extortion discovery alongside the calculation, pseudocode, clarification, its execution and experimentation results. Mahantesh Borgi, Virai Malik, Breznew Colaco, Pratik Dessai [12] describes that the advertisement network is liable for contracts and lawful issues with a distributer that shows the promotion and get a section of installment as a commission contingent upon the impressions made on the commercial showed. Thus, the results generated through this paper shows that time prints are useful tool for the improvement of the quality of click fraud analysis and increases the overall accuracy of the observations.

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## III. METHODOLOGY

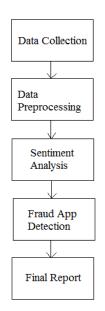


Fig 1: Block Diagram of Fraud App Detection



Fig 2: Block Diagram of Virus Detection

So, in the proposed system we have proposed a solution where a user will be able to detect any fraud apps that are available on the internet and can also be able to detect the viruses that are available in specific application that the user wishes to download. In the proposed system, the user can detect fraud apps by pasting that specific application link that the user wishes to download from the internet. After the link gets pasted than user can click on the launch analysis button after which with the help of Sentiment Analysis the system will scan that specific link for all the reviews that are given by the other users for that application and this is done using google play scrapper which is used to copy the whole website for the ratings and review purpose of all the other users and after that the system will detect weather that application is fraud or genuine on the basis of positive and negative reviews. If the positive reviews are much more than the negative reviews than the sus score will be displayed as zero and the system will display the final report as Safe to use. If there is not much of the difference between the positive and the negative reviews than the sus score will get increased a bit, then the system will display the final report as Might not be very safe or has poor quality features. And finally if the negative reviews are much more than the positive reviews than the sus score gets increased with a greater number and the system will then display the final report as Fraud.

In the proposed system, the user can also detect the viruses available in the specific application where user will have to choose the file path of that application and by clicking on the initiate scan button the system will then scan that application and checks for any of the viruses that are available in the application. If after scanning virus gets detected than the system will display the message as Virus Found or else the system will detect the message as No Virus Found. So, with the help of these methodology the system will detect weather the application is fraud or genuine and also weather there is virus in the application.

#### IV. RESULTS

## 1. Home Page:



Fig 3: Home Page

Fig 3 is the home page that includes description of the website and further consists of two buttons namely Fraud App analyzer and Malware App analyzer that redirects to Fraud app detection system and Virus detection system page.

## 2. Safe App:



Fig 4: Safe App 1

Fig 4 that is Safe App 1 is the Fraud app detection system page where user will paste the link of specific app for analysis.

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Fig 5: Safe App 2

Fig 5 that is Safe App 2 is final report after the analysis is done. Further user can click on Other Action button for Malware detection.

## 3. Moderate App:



Fig 6: Moderate App 1

Fig 6 that is Moderate App 1 is the Fraud app detection system page where user will paste the link of specific app for analysis.



Fig 7: Moderate App 2

Fig 7 that is Moderate App 2 is the final report after the analysis is done.

# 4. Fraud App:



Fig 8: Fraud App 1

Fig 8 that is Fraud App 1 is the Fraud app detection system page where user will paste the link of specific app for analysis.



Fig 9: Fraud App 2

Fig 9 that is Fraud App 2 is the final report after the analysis is done.

## 5. Virus Not Found:



Fig 10: Choose File

Fig 10 is the Virus detection system page where user will have to choose a specific file for the virus detection and then further click on initiate scan button for analysis.

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Fig 11: Safe File

Fig 11 is the final report of the analysis done that is a safe file is shown in the final report.

#### 6. Virus Found:



Fig 12: Virus File

Fig 12 is the final report of the analysis done that is a virus contained file is shown in the final report.

## 7. About:

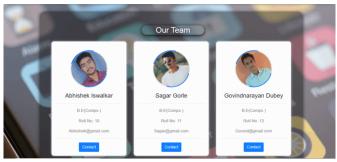


Fig 13: About Page

Fig 13 is the About page that includes some information regarding Our team.

## 8. Help:



Fig 14: Help

Fig 14 is Help section that includes the steps regarding the operating of the website and along with it there is a link for tutorial video for the same.

### 9. Contact:



Fig 15: Contact

Fig 15 is the Contact page where user will have to fill the details for any queries regarding the website.

## V. CONCLUSION

The proposed method is to develop a secure internet fraud apps and virus detection system based on sentiment analysis and digital signatures that eventually overcomes all the drawbacks that occurred in traditional detection systems. The proposed system has many strong features like faster report generation, detection of viruses for any file is easy, secure, free of cost and an open source website. The proposed system is a user friendly website and easy to operate as the user will just have to paste the link of that specific application after that using google\_play\_scrapper the system will scan that whole website for scanning the reviews of that specific application for sentiment analysis and to detect weather that specific app is Safe to Use, might not be very safe or has poor quality features or its fraud. Also, for virus scanning the user will just have to choose that specific file that the user wanted to scan for detection and then based on digital signatures the system will scan weather there is virus found in that specific file or not. So, this website will benefit the user as this site will help to detect weather the application is fraud or not by

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scanning all the reviews and generating a final report through which the user willbe able to decide that he/she can download that application or not. Thus, usage of these website will help the users to be safe from all the fake applications that are available on the internet and also will help them to keep their system safe from the viruses.

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