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WEB BASED APPLICATION FOR LAPSED PRODUCT MANAGEMENT

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Abstract - *In day to day life we are surrounded with many and most vital thing like food, medicine etc. all are conceding to be items but there's a serious drawback too in some shops there are maintaining old items and lapsed items, if anybody utilized those during a few circumstance are going to be harmed. Some shopkeeper is changing all the dates or the duvet and making it like unique item. This causes more sickness to people especially to the youngsters. To overcome those issues government (admin)order each and every businessperson have register about the item and manufacturing data and expire data all the update is under in government control. A client can login any time and buy what they need if any of the merchandise invalid the client can register a complaint about the shop. This information is notified by government and that they take immediate action. Suppose any of the item is there in the website beyond the expire data the admin will notify the actual shop with a while period to remove the product from the shop. If customer finds the product is expired, then they could send a complaint to the admin and the required.*

Key Words: **Fuzzy c means clustering algorithm, EID, Imbalanced data set.**

1. INTRODUCTION

Data processing is predicated on unsheathing and find some design during a data set including some procedures with combination of machine learning, data base etc. the expansion of online transaction through internet with use of database. The data and irrelevant data are fetched from internet this data need to be extracted to urge relevant knowledge. We are using Indri language for knowledge mining. it's hottest software in analytical tool for analysis data. The Imbalanced learning is the foremost important in examination networks and the knowledge mining and AI procedures are presenting the grouping issues concerning sensibly adjusted class circulation. The main category unbalancing issues use of customary learning procedures disposition the induce classes getting about low characterization execution. the category –irregularity case is the most subjected as an interesting obstruction is to the major achievement of tangible classifier that to beat this dis-advantage we represent an extra metric, named entropy –based lopsidedness degree. the info entropy can mirror the positive data content given informational collection. We will calculate the info content of every class.

1.1 Problem Definition

The shopkeepers are selling the expire product to customer and this causes more harm to the customers and are not aware about the expire product. Some shop the change the cover of the product reselling the same product for profit. most of the children are affect by this and this causes more death and more harmful diseases and some shopkeeper are not aware about the product lapse data. And we are using three sampling techniques to make a quick process of the product. That are EOS, EUS, EHS. these process make the storage more efficient compare to existing system and all the stored data are under in database this database are only accessed by the admin if any product want to remove from the product the admin can do that and admin can block any of the particular shop if any of the send any invalid product and admin can fine them too.

2. SYSTEM ANALYSIS

2.1 Existing System

The analysis of technique has display them in-sufficiency, example the problems of over-age and over-lapping by the oversampling methodologies or invalid information are lost in huge data by under examining system, i.e The Admin send the alert message to the shopkeeper. If that specific shopkeeper may replace or not replace the place. this became an enormous problem that for the customer to spot the merchandise and pip out. The algorithm used here id Apriori Algorithm.The Apriori algorithm is an influential algorithm for mining frequent item-sets for Boolean association rules. The Apriori algorithm is also known as bottom up approach, where frequent subsets are extended one item at a time.

2.2 Limitation of existing system

The drawback of the prevailing system is the wasting of execution time while checking the expire data for the product and it take more time to search a product and computational cost is also high , vendors don't have sufficient information about product lapse and the selling the beyond expire products so customer goes under some medical caution. There is no tracking system of the expiry data of a product

3. PROPOSED SYSTEM

In proposed system we are introducing the three sampling approaches. These approaches efficiently reduce the duplicates with sampling techniques and

increase the general mining cost, eliminating the duplicates better to save lots of the memory so we will update new product. the government monitoring all the method that takes place and straightforward to send the notification to shopkeeper about the expire data and straightforward to seek out the expired product. Algorithm is employed here is EID and Fuzzy c means clustering Algorithm.

3.1 Technique Definition

Imbalance data is about the number of information focuses accessible for various class is unique. An ordinary case of imbalanced information is experienced in email arrangement issues where messages are characterized into ham or spam

3.2 Advantages of Proposed System

The advantage of the system is we can use the data efficiently and no data loss and all the information are stored in the database. customer can submit the feedback quick and action will take place as soon as possible, data processing very fast compare to the existing system any of product arrived beyond the expire data customer can rise a complaint about product. We can track the expire data of a product. This function is done by government.

4. EXPERIMENTAL ANALYSIS

For a given multi-class imbalanced dataset, the primary priority is to work out imbalance degree between the multi majorities and therefore the multi-minorities. Sampling approaches use imbalance-ratio (IR) because the metric of sophistication imbalance due to its simplicity. However, not an informative measure for multi-class problems. On one hand, it just describes the imbalance supported most important class and therefore the smallest class without considering other classes. On opposite hand, the multi-class imbalance should exist even with a balance in size. As stated in previous methods, amount of representative (effective) minority instances, instead of that of overall minority instances, decides the classification accuracy for minority classes. Therefore, IR is inappropriate to be considered because the measure sophistication imbalance. This section, we propose a completely the unique metric to live the category imbalance, termed entropy based imbalance degree (EID), rather imbalance-ratio. During this case, we first measure the importance of instances and classes.

EID: In scientific theory, entropy is defined to live the expected average amount of data contained within a knowledge set. It's generally used because the metric of data content.

EOS: Oversampling technique is effective for imbalanced learning, which is dedicated to balance skewed data distribution by generating new minority instances. As for mentioned above, an outsized number of synthetic sample methods are proposed (e.g. SMOTE and AdaSyn). We first compute instance-wise statistics (x) for all instances during a data set and class-wise statistics for overall classes using (x). Then instance-wise difference statistics for all instances employing a and class-wise difference statistics for all classes by. By definitions, it are often known that instances and classes with less information and lower and are easier to find out , instance.

EUS: Unlike oversampling technique, under sampling technique attempts to get rid of a subset of majority instances to make a balanced data set. Since an excellent deal of useful information could also be lost, and therefore the training for classifiers is tough on the subset of knowledge with this under-representative information that is important to imply.
EHS: Hybrid sampling techniques combine the oversampling and under sampling techniques, adding minority instances and removing majority instances simultaneously so as to eliminate overfitting and stop the loss of an excessive amount of information effectively.

5. SYSTEM ARCHITECTURE

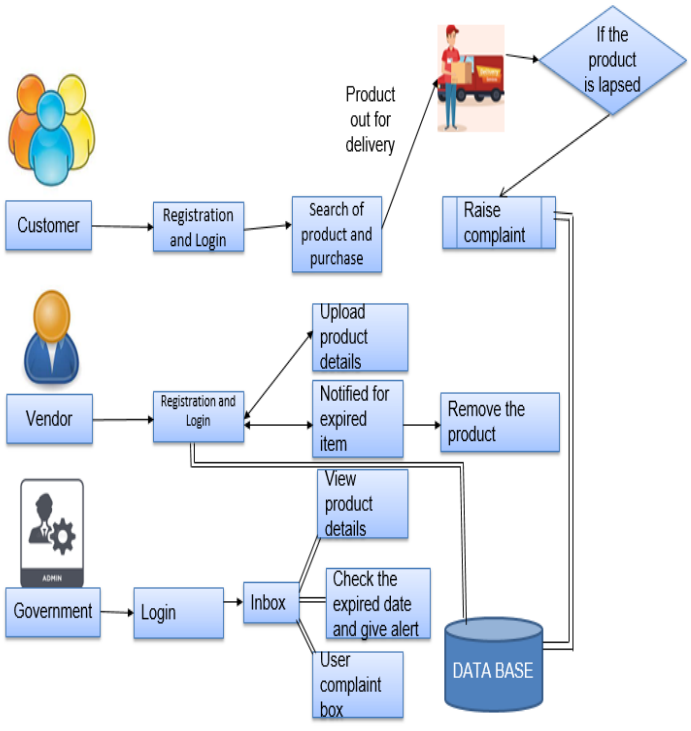

Fig- 1: System Architecture

5.1 Requirement Analysis
Hardware Environment

The hardware requirements may function the idea for a contract for the implementation of the system and will therefore be an entire and consistent specification of the

entire system. They're employed by software engineers because the start line for the system design. These are the ware that are needed externally

.

PROCESSOR: PENTIUM IV 2.6 GHz, Intel Core 2
RAM : 4 GB DD RAM
MONITOR :15"COLOR
HARD DISK : 40 GB

SOFTWARE ENVIRONMENT

The software requirements document is that the specification of the system.. The software requirements provide a basis creating the software requirements specification. It helps in estimating cost, planning team activities, performing tasks and tracking the teams and tracking the team's progress throughout thedevelopment activity.

FRONT END: J2EE (JSP, SERVLETS) JAVASCRIPT
BACK END: MY SQL
OS : Windows7
IDE : Eclipse

6. MODULE DESCRIPTION

During this system, there is a tracking of the expiry date and sending alert message to the vendors. If suppose at the time of delivery the customer received an expired product, then they might complaint directly to the government. First client got to continue all the items with id. At the time after login account they need to transfer every one of the insights regarding items and they need to keep up make item and terminate date all they need to keep up in the wake of transferring all that these all data all they have to stay up within that it will goes to admin, now admin group will deal with that all data and they can investigate and they will give all the data about the item lapsing date if the item will lapse they will send a notice to the vendor 15days of item will terminate. The motivation of the project is to replace the expired products by sending an alert message from government to the shopkeeper. If at all expired product is out for delivery to the customer, they can raise a complaint to the government and legal action will be taken by the government.

6.1 Product Details Upload

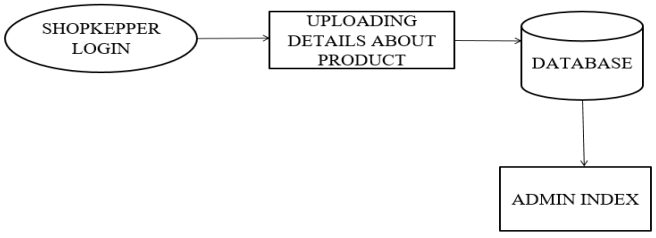

Fig-2: Product details upload

The important role for the user is to move login window to user window. This module has created for the security purpose. In this login page we have to enter login user id and password. If we enter any invalid username or password, we can't enter into login window to user window it will shows error message. So we are preventing from unauthorized user entering into the login window to user window. User have to check tall the products once. whether all products have the expire date and manufacture date is available or not if not available don't use that product to get in to shop. After getting that products shopkeeper have to fill all the product details and it will store in shopkeeper database and government data base.

6.2 Fetching of Details

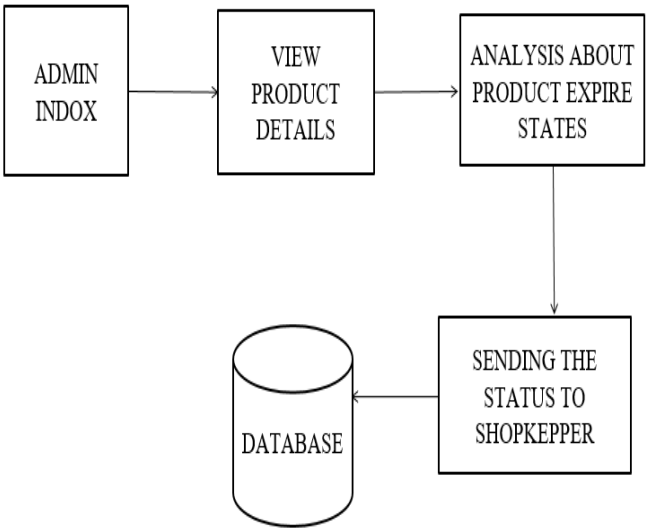

Fig-3: Fetching Details

Once the shopkeeper uploads the product details it gets stored in the shopkeeper database as well as the government login database. The could fetch the data by clustering algorithm. Tons of products are in database these days. Most of the people in the world is connected to digital platform. In the current scenario, the expanding digital platform provides people a convenient way to share views about anything in this world. Since people in higher level administration of government also owns an account it's easy for people to make complaints about the current situation of the country so that the higher officials could take the necessary action. So, this was the right place to collect lots of data about any topic that exist around the world. Fuzzy c-means clustering algorithm is used to avoid overlap, this algorithm works by assigning membership to each data point corresponding to each cluster centre on the basis of distance between the cluster centre and the data point. More the data is near to the cluster centre more is its membership towards the particular cluster centre. Clearly, summation of membership of each data point should be equal to one.

6.3 Track and Alert to Vendor

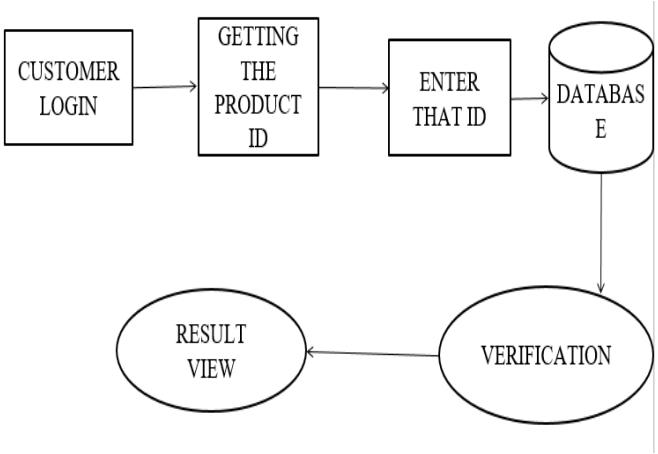

Fig- 4: Tracking and alert

The real-time sending of a batch of notification is a typical application in value added service of mobile. In order to improve the sending efficiency and real-time performance of notification, a short message real-time parallel sending algorithm based on thread is proposed. The algorithm builds on the data structure of data buffer and circular pointer technology, there are two methods is designed: getString and setString, they prevent the sharing data conflict, this algorithm is used in " family- school e-connection system " which is a value added service of mobile application. It ensures the short messages will be sent real-time and improves the efficiency of sending short messages. When products are going to get expired shortly there will be a notification sent by the admin to the user. It intimates that they have to remove it soon. This notification creates awareness to the user that they are in need to remove soon. They won't be having to track their expiry in their mind instead there is automatic track of date by the admin.While tracking, in order to avoid the over lapping of the data EID algorithm is used.

6.4 Complaint and inbox of admin

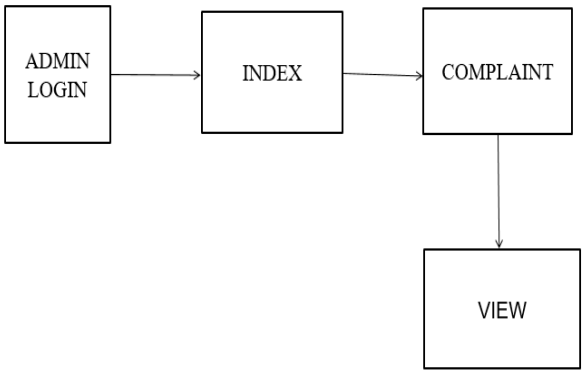

Fig -5 Complaint and inbox

Here customer first they have to be register after login if they want to check that particular product is in good condition or not if he have any doubt they can enter that id if that id show any result then that product is original if not shown it will be fake. Even if it original if the product was expired they can rise a complaint and it will send to government. That compliant will stores in government inbox. If any user sends that complaint to government they will send a warning notification to shop owner. Then shopkeeper can see that warning notification in inbox page and another use is shopkeeper upload all the product details that will stores in government database. If the product is going to expire they will send that alert notification to shopkeeper inbox.

7. REPORT

7.1 Output and its screenshots

Below figures are the customer's search engine page and the customer complaint box page.

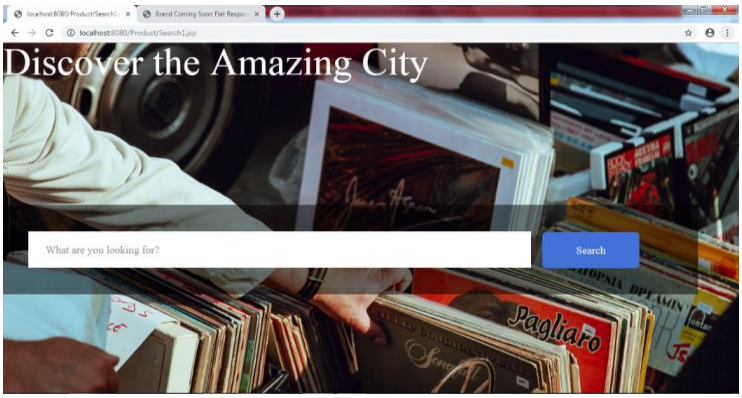

Fig-6: Product search

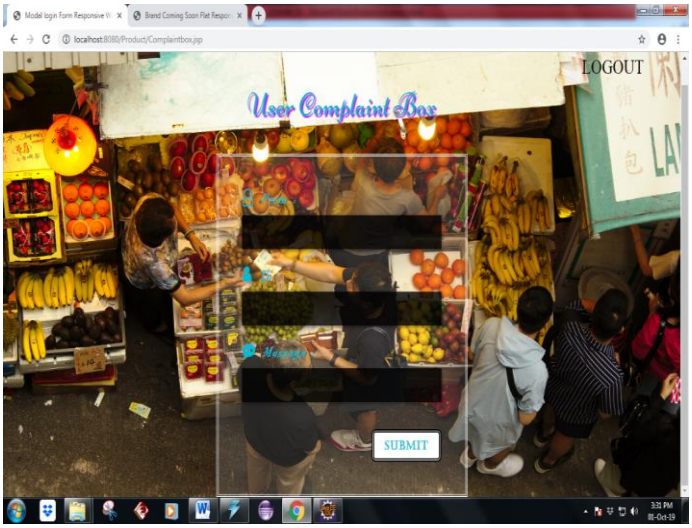

Fig-7: Customer complaint box

8. CONCLUSION

During this system, we present three new entropy-based learning approaches, for multi-class unevenness learning issues. EOS depends on the info substance of the most important dominant part class. EOS oversamples different class until their data substance accomplish the most important one. EHS depends on the traditional data substance of the considerable number of classes, and oversamples the minority classes even as under samples the greater part classes as indicated by EID. The viability of our proposed three techniques is exhibited by the unrivalled learning execution both on manufactured and real-world informational collections.

9. FUTURE ENHANCEMENT

In future, we might want to investigate the hypothetical properties of our proposed system lopsidedness measure and expand it just as our three imbalanced learning strategies for other grouping issues .example picture, arrangement etc. And some automatic tracking system can be included so we can access more number of product compare to propose system. The algorithm used in future enhancement is Heuristics Miner Algorithm.

9.1 Algorithm Definition

We propose a filtering algorithm to retrieve the data from the database based on the message to retrieve the data from the database based on the event, that is more convenient for the user to retrieve the data.

9.2 Advantages of future enhancement

The advantage of the future enhancement can quickly access the data from anywhere and to track the expire data of the product automatically and send the notification to the user as soon as possible .and storage of data will be more efficient compare to proposed system and some of the process are atomized and can check the process very easily.

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