

# MULTI-LEVEL SPAM BLOCKER

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**Abstract**— Spam emails are invading users without their consent and filling their mail boxes with email trash. Priceless effort and time of the users and organization are wasted in handling them. To circumvent anti-spam solutions, many spammers are sending spam email with image-only content. In this paper we proposed a spam detection approach in emails with text and image contents. In the first part, a novel framework for extracting intelligent information from emails with image content is presented and a prototype implementation is shown. In the second part, a proposal for multi-layered spam detection algorithm is presented, which enhances existing approaches.

**Keywords**—Spam E-Mail, Spam Detection Approach, E-mails, Multi-layered Algorithm.

## I. INTRODUCTION

Email spam, also known as junk email or Unsolicited bulk email (UBE), is a subset of electronic spam involving nearly identical messages sent to numerous recipients by email. Definitions of spam usually include the aspects that email is unsolicited and sent in bulk. Spammers collect email addresses from chatrooms, websites, customer lists, newsgroups, and viruses which harvest users' address books, and are sold to other spammers. They also use a practice known as "email appending" or "epending" in which they use known information about their target (such as a postal address) to search for the target's email address. Much of spam is sent to invalid email addresses. In this project we proposed a spam detection approach in emails with text and image contents. In the first part, a novel framework for extracting intelligent information from emails with image content is presented and a prototype implementation is shown. In the second part, a proposal for multi-layered spam detection algorithm is presented, which enhances existing approaches.

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## II. SYSTEM DEVELOPMENT

### A. Existing System:

There have so far been several ways of filtering spams, One of the methods of filtering out spams is based on pattern matching or machine learning techniques. The most basic method is to use the strings appearing in the header part of them. Once you received a spam, you may register the strings/values as signatures of spams so that you can avoid receiving spams with the same or similar strings/values again. Spam Assassin is one of the most famous examples. Since this method is simple, the cost for this processing is relatively low.

### Disadvantages:

1. Not accurate Spam filter
2. Difficult to Maintenance
3. More Advertisement mails.

We intend to merge our proposal with the existing techniques based on text processing; that is, we intend to apply text processing techniques onto the part on which they are good at processing, and to apply our idea onto the other part on which they are weak. For example, we do not take account of information appearing in the header part of an email message in this paper, because text processing techniques can effectively work on that part and thus it is unnecessary to apply a new technique on such part.

### B. Proposed System:

The proposed anti-spam should be implemented on the email server of a LAN. A training set that contains a set of spam and non-spam emails are used to train the software, to get an initial set of keywords and keyword contexts. The user interface should be designed to give a feedback, say through a "Report Spam & Delete" button, to the server anti-spam software, on the status of the email. This ensures automatic on- going training in real time. Only the reported spam details are used for training

and fed to database. Subject line keywords will have high spam scores, compared to keywords from email content. We define the 'relevance' of a subject line keyword if it is associated with blatant selling of products, porn site links or other clear advertisements. This can be checked with an existing subset of Subject Line Keyword List with most probable ones, which can be taken from past spam history.

#### **Advantages of Proposed System:**

1. Testing is the process of executing a program with the intent of finding an error.
2. A successful test is that one of the covers of undiscovered error.

#### **Testing Issues:**

1. Client GUI considerations.
2. Target environment and platform diversity considerations.
3. Distributed database considerations.
4. Distributed processing considerations.

### **III.SYSTEM IMPLEMENTATION**

System implementation is the stage of the project that the theoretical design is turned into a working system. If the implementation stage is not properly planned and controlled, it can cause error. Thus it can be considered to be the most crucial stage in achieving a successful new system and in giving the user confidence that the new system will work and be effective. Normally this stage involves setting up a coordinating committee, which will act as a sounding board for ideas; complaints and problem. The first task is implementation planning; i.e., deciding on the methods and time scale to be adopted. Apart from planning two major task of preparing for implementation are, education takes place much earlier in the project; at the implementation stage the emphasis must be on training in new skills to give staff confidence they can use the system. Once staff has been trained, the system can be tested. After the implementation phase is completed and the user staff is adjusted to the changes created by the candidate system, evaluation and maintenance is to bring the new

system to standards. The activities of the implementation phase can be summarized as,

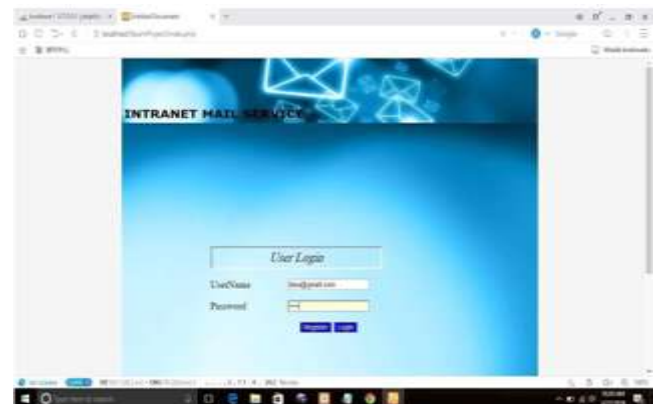
1. Implementation planning
2. Education planning
3. System planning

### **IV. EXPERIMENTAL RESULTS**

#### **Login Form**



#### **User Mail page**



#### **Spam Settings**



### Add Category Name



### Spam Category



## V. CONCLUSION

The Project is an effective spam detection tool which is implemented in mail server successfully. This application is helps to protect spam mail thread in personal mail server. This application is very flexible and also user friendly. This project has great scope for future. This system totally ends on the data that has been entered by the personnel. This package has been designed such that this can be extended to any application that could help it being more efficient system. Hence this package gives good scope for further development. Performance of the system can be monitored; optimization may be done wherever necessary for efficient functioning of the system.

## REFERENCES

- [1] Jesus Castagnetto, Sascha Schumann,” Professional Php Programming”, Addison wosley Publication, Fifth Edition.
- [2] Jay Greenspan, Brad Bulgar,” Mysql/Php Database Applications”, Tata McGraw-Hill Publishing Company, Third Edition.

- [3] William Stallings,” Cryptography and Network Security”, Tata McGraw- Hill Publishing Company, Third Edition.
- [4] Bruce Schneier, “Applied Cryptography”, Pearson Education, Second Edition.
- [5] Rogres Pressman, ”Software Engineering And Applications”, Galgotie Publication, Sixth Edition
- [6] Richard Fairley,” Software Engineering Concepts”, Tata McGraw-Hill Publishing Company, Fourth Edition.
- [7] Ellias M.Award “System Analysis And Design” Tata McGraw-Hill Publishing Company, Second Edition.