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A Survey on Brute Force Attack on Open Functionality Secured

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Abstract: *The project entitled as* ***Brute Force Attack On Open Functionality Secured*** *is to design and develop the application package for well secured dynamic application. A common threat web developer's face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.*

In the world of Cyber crimes, brute force attack is an activity which involves repetitive successive attempts of trying various password combinations to break into any website. This attempt is carried out vigorously by the hackers who also make use of bots they have installed maliciously in other computers to boost the computing power required to run such type of attacks. Usually, every common ID (for e.g. "admin") has a password. All you need to do is try to guess the password. Let's say if it's a 2-digit-pin, you have 10 numeric digits from 0 to 9. This means there are 100 possibilities. You can figure this out with pen and paper like Mr. Bean who tried to find correct last two digits of the phone number of the lost kid's father in the movie, Mr. Bean's Holiday.

But, the truth is that no password in the world consists of only 2 characters. Even, the pin numbers (a sort of password) used on mobile phones or in a bank consist of minimum 4 characters.And, on the internet, 8 is generally the standard number for shortest length of a password. Furthermore, complexity is added as alphabets are added within a password to make it more secure. By the way, alphabets can be used in both UPPER and lower cases, thus making a password case sensitive.

Behind brute force attack, hacker's motive is to gain illegal access to a targeted website and utilize it in either executing another kind of attack or stealing valuable data or simply shut it down. It is also possible that the attacker infect the targeted site with malicious scripts for long term objectives without even touching a single thing and leaving no trace behind.

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I. Introduction

In my survey provides solutions by using some components mainly Administration Management and User Management. Access can be restricted to only those manipulates and perspectives that Administrator.

The main objective of this is to secure enforce by using IP Address tracking ,webcam capturing, password authentication, using bio metric sensors, Mobile phone SMS,ID and password security, Fingerprint based security system.

If any one try to make any trouble the data will be locked and a message will send to administrators and particular computer's users e-mail address and cell phone too. The software is connected with the employs track record and to service history.

PROPOSED SYSTEM

The system, which is proposed, now is an intranet all the details that are maintained in the restricted computer network. Once the details are fed into the intranet there is no need for various persons to deal with separate sections.

Only a single person is enough to maintain all the reports in the intranet. The security can also be given as per the requirement of the users. It also help us to find the hacker in an intrusions with the IP address.

Each computer's are controlled by adminstrator's computer. Password authentication, Bio metric sensors for each user computers and Mobile SMS system.

ADVANCED TECHNIQUES USED

Administration progress
User progress
Locking Accounts

Hacker list
Webcam capture
IP address tracker
Mobile SMS
Bio metric sensor on all computers
ID and Password security
Fingerprint based security system

ADMINISTRATION PROGRESS

Administrator owns the overall determination of controls, setting of major objectives, and the identification of general purposes, guidance, leadership & control of the efforts of the groups towards some common goals. Admin also have the rights to restricts the users and give the access justices to the user to register their details.

In this module, include the user registration details. The username and mail id is already available or not checking this process. The user only accesses the mail within the organization. The hackers hacking company details that time will send the mail to your id and password is hacking.

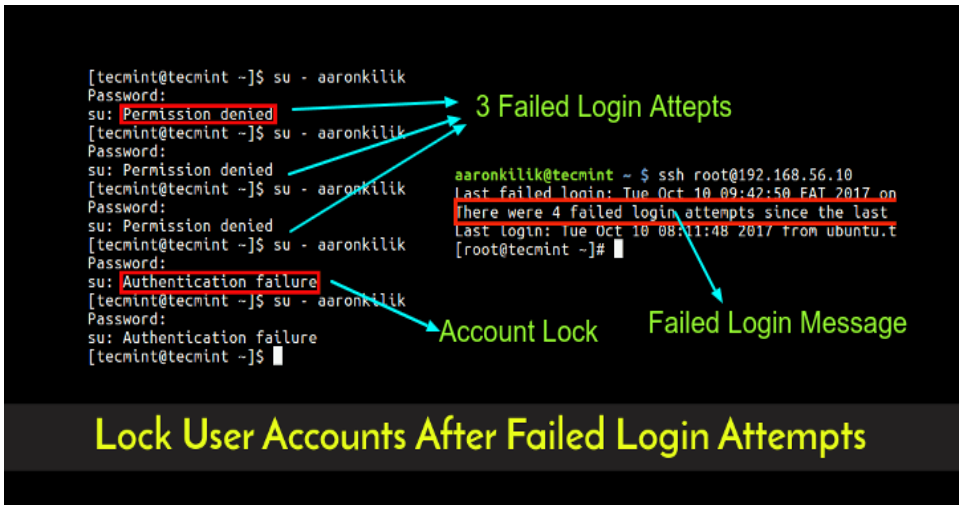
USER PROGRESS

User Module states the person should register their entropy, contact details, and login information. Access can be restricted to only those functions and views that administrator.

User Management is a substantiation feature that provides administrators with the ability to identify and control the state of users logged into the network. This includes, but is not limited to, the ability to query and filter users that are currently logged into the network, manually log out users, and control user login counts and login times.

LOCKING ACCOUNTS

The most obvious way to block brute-force attacks is to simply lock out accounts after a defined number of incorrect password attempts. Account lockouts can last a specific duration, such as one hour, or the accounts could remain locked until manually unlocked by an administrator. However, account lockout is not always the best solution, because someone could easily abuse the security measure and lock out hundreds of user accounts. In fact, some Web sites experience so many attacks that they are unable to enforce a lockout policy because they would constantly be unlocking customer accounts.



HACKER LIST

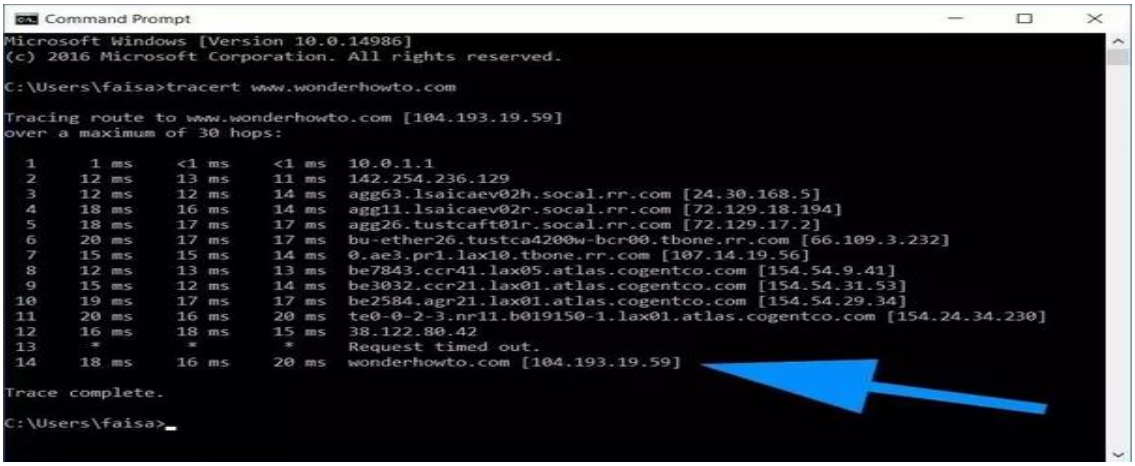
If anecdote of exploiter is being hacked with the purpose of possibilities searching the password by the plodder, when the exploiter login the hacker list displays the detail about the plodder with IP address. The hacker list sends to the exploiter mail. The hacker list visible the IP address with hacking time.

WEBCAM CAPTURE

The hacker photo captures and sends to the exploiter mail. The hacker list visible the hacker photo with hacking password.

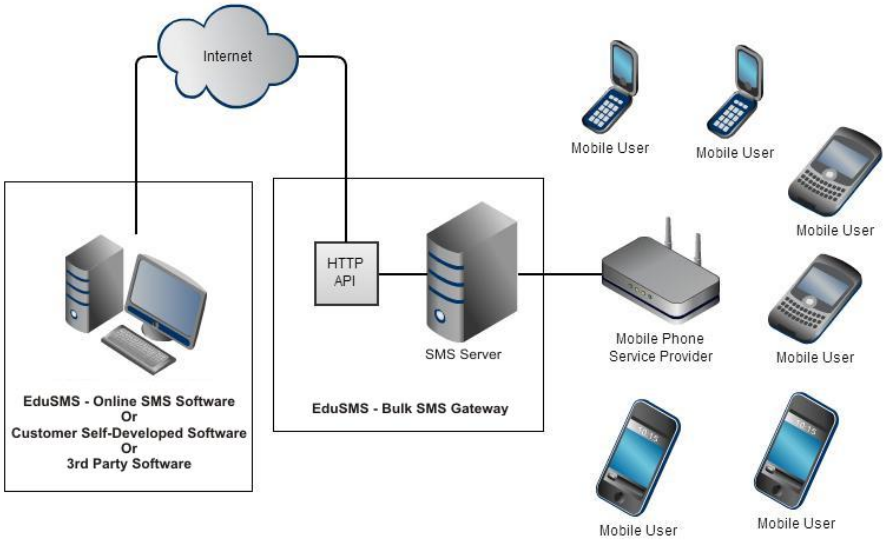
IP ADDRESS TRACKER

Internet Protocol address; a sequence of numbers used to identify a particular computer or domain name on the Internet or Intranet. IP Tracker dll subscribers can install our optional Active Tracker which adds the tracking automatically as password hacker.



MOBILE SMS SYSTEM

A text message **"your system is opened by others"** will send to administrators or users registered mobile number with IP address and time.



BIO METRIC SENSOR ON ALL COMPUTERS

Installation of biometric sensors on each computer helps: authentication is a security process that relies on the unique biological characteristics of an individual to verify that he is who is says he is.Biometric authentication systems compare abiometric data capture to stored, confirmed authentic data in a database.This system will be install on each computer. Using the age old technique of encryption and decryption has been easy to track for people around. Providing security to data using new technique is the need of the hour. This project uses the technique of Visual cryptography and providingbiometric authentication. ... Biometrics is the detailed measurement of human body.

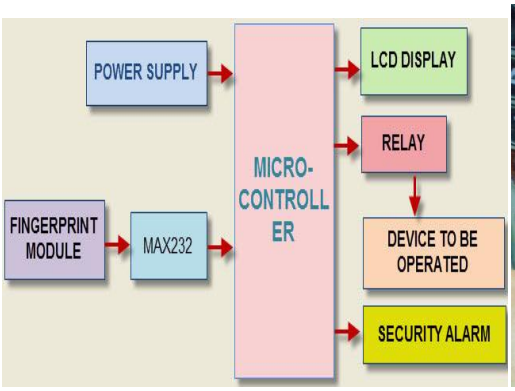
s.

ID AND PASSWORD SECURITY

Organizations should also set policies for users on how to choose a **secure password**. A user **password** should be completely unrelated to one's user **ID**. The**password** should also be a minimum of eight characters in length and contain both letters and numbers, and both uppercase and lowercase characters.

FINGERPRINT BASED SECURITY SYSTEM

Installation of finger print based security system on the entrance of office. It helps to record the time of Inn and out details of each employ. It send a details to all employs service history. If anybody late or any malpractices found, then it will report on the employ service record and it will made several problems to the particular employ. All the employees should use this while entering and getting out of the office, otherwise they may be caught.



SYSTEM ANALYSIS

FEASIBILITY SYSTEM

Advanced DNS Server is a system-tray local DNS server program for Windows that lets you send email messages directly from your computer to recipient mailboxes. Along with a mass mailer the program can be used as a relay server for sending newsletters, distributing messages to different mailing lists, sending notifications to your customers, as well as for sending personalized messages. You can use it instead of your ISP's DNS server to increase your security an privacy. Advanced DNS Server supports all email programs like Outlook Express, Outlook, Eudora, etc. The email program you already use for sending and receiving messages can be connected to the server in a very easy way - just by using the word "local host" instead of your current DNS host. Having done so, you can send messages in a usual manner. Advanced DNS Server is very fast, while sending; it establishes dozens of DNS connections, and gets the most out of your Internet connection. Advanced DNS Server is able to send thousands of emails per minute with a regular DSL Internet connection. The user interface of the program is very easy to learn, excellent documentation is included.

Economic Feasibility:

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

Technical Feasibility:

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system. This is demonstrated if the needed hardware and software are available in the marketplace or can be developed by the time of implementation.

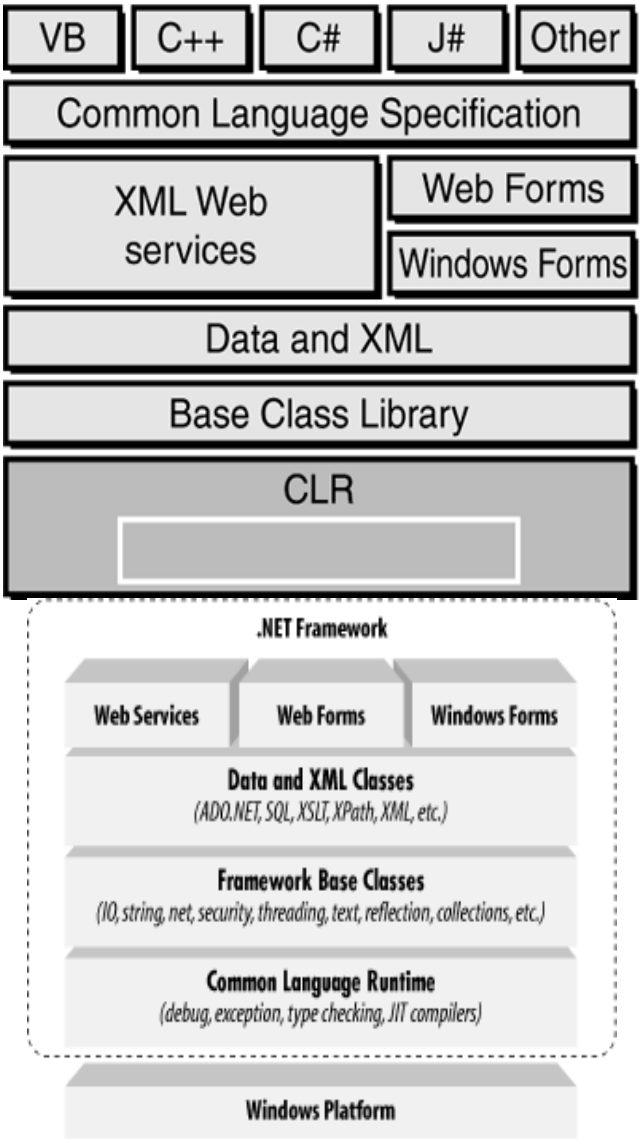
Operational Feasibility:

The ability, desire, and willingness of the stakeholders to use, support, and operate the proposed computer information system. The stakeholders include management, employees, customers, and suppliers. The stakeholders are interested in systems that are easy to operate, make few, if any, errors, produce the desired information, and fall within the objectives of the organization.

LANGUAGE SPECIFICATION

- **.**NET
- ASP**.**NET
- **.**NET Framework
- XML
- Codings-C#

The common language runtime and the .NET Framework.



COMPARISON TABLE

EXISTING SYSTEM	PROPOSED SYSTEM
• Manual exploit • Security is low. • A valuable data is lost or eavesdropped • Needs of lot of manpower. • Frequent occurrence of hacking Accumulations are exfoliated. • Easily hackers can get the password and reuse the Email accounts. • Single server No speed. • Junk mail.	• Fully Hidden from the System. • Security is assured. • Perfect Deadlock. • Maintenance of file is flexible. • Automatic Lock Down if the password is potential searched. • Hacker list displayed with IP address. • Hackers cannot get the password. • Time is consumed • Time Management • User friendly.

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