Piracy Shield-Software Piracy Protection System

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Abstract— Software Piracy has become a major threat to software companies on the internet. There are many hackers in who sell expensive software's for less price or free of cost by converting it in pirated format. Hackers can gain access to the system to steal the information with the help of malicious codes and programs. This web application project is developed with the purpose to protect the software's ownership of copyright and make all the transactions secure and threat free. We make a web application which controls additional installation, distribution or reproduction of the software in some way. Piracy Shield will work like protector tool where software companies can protect their software not only for being pirated but also capable of limited period expiration of software. Our technology provides easy and low-cost protection which will protect all kinds of software. This piracy shield will check users MAC address and it collects PC configuration details, then it sends that information to internet server to activate software product on customers PC.

Indexed Terms— Software piracy, Security, Protection, Copyright, Software product.

I. INTRODUCTION

Software piracy refers to illegal copying of software, illegally using, copying or distributing software without ownership or legal rights. The Most software programs purchased are licensed for use by just one user or at just one computer. Copying software to multiple computers or sharing it with friends, colleagues, of clients without multiple licenses is considered software piracy. We have seen over many years that software piracy has been major issue for software industries. Now a day's many people using software without having purchased license key. These kinds software piracy will destroy the revenue stream of small scale and large-scale software companies. The software industry loses billions of dollars each year to piracy. Software piracy has become a crucial issue in the field of technology. Software protection has recently attracted tremendous commercial interest from major software companies. For most of the software pirated version is available in the market. People like to use pirated version because it is free or nearly free. Even many small organizations and small-scale industries prefer to use pirated version of the software. The use of plagiarized software is affecting the revenue of the company.

It has become very important for the software company to protect their product being plagiarized. By keeping these points in mind, we are developing a project to give full protection to any software product and make it sure that the product is accessible only by its authenticated user. This system is used to overcome this problem; it is used to protect the piracy of the software. The MAC address is the unique address of the system, so the MAC address is not used for other user. Our proposed approach using online process and read the MAC address of the system when the user download the software. It generates the product key for correspondent MAC Address. To check the MAC address and Product key when the user install the application.

A. Motivation

Software piracy occurs when people copy, sell, share, or distribute software illegally. It can vary from a limited case of installation of a single-user license on multiple computers to a more. So Piracy Shield implemented solution for Software Piracy.

B. Application of the project

- This web application will help software industries to save their authorized information from piracy.
- Using this system we can determine unethical parties' information who is distributing authorized information.

II. LITERATURE SURVEY

Prof. Harish Barapatre, Prithesh Nimje, Akshay Nimbalkar says that first discuss studies that analyze the economic impacts of software piracy. Behavioral studies that analyze demographic and cultural factors, and their effect on piracy behavior, are presented after the discussion of economic factors.

A. Economic Factors:

Economic models of piracy in general study the impact of piracy on profits and in particular the effect of enforcing copyright.

B. Behavioral and Ethical Factors:

Behavioral studies focusing on the demographics and personality characteristics of software pirates and the social and organizational context of software piracy are also gaining momentum. It is generally found that male pirates are more than females and that heavy users of personal computers pirate more software.

The importance of ethics in modeling software piracy is a recurring theme that is just beginning to be tapped. The decision to copy or not copy intellectual property is influenced by ethical reasons. Ethics is the study of moral systems.

III. EXISTING SYSTEM

Existing system is not at all adequate and beneficial for Software Company. Now a day's all pirated version of any software is easily available and people prefer to use those software for cost cutting. As a result original product can't hold the market and revenue of the company goes down.

IV. PROPOSED SYSTEM

In this proposed system user has to purchase software product through online. This project is intended to maintain software copyright protection and assures that it is being accessed only by the authenticated users. This proposed system developing to protect the software's ownership of copyright and make transactions securely. In this system only our Piracy shield web application generates Unique ID for each and every PC. Piracy Shield will generate license keys, and each license key can be uploaded on one computer. The system generates unique code based on computer configuration. The system takes MAC ID and computer serial number because MAC ID is different for each system. The generated unique code should be copied in to Piracy Shield web application to receive an encrypt ID. The system generates unique encrypted ID based on MAC address. If user enters in their software then they can start using the software.

A. Objectives

The system can be used by any online software dealer. It can also be used by organizations and business owners to promote their product and at the same time protect their copyright. No one can copy the software or share as it requires an activation code that is different for each individual. The system allows user to activate products only through online

B. Architecture Diagram

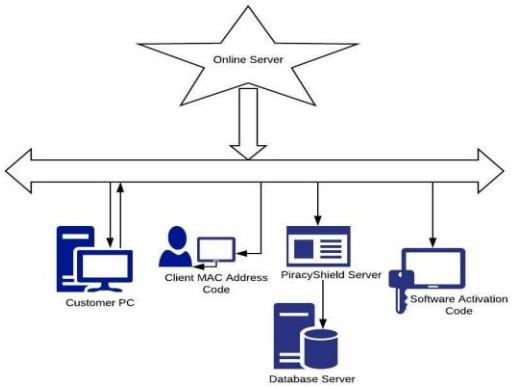

Fig: 1 Architecture of Piracy shield

C. MODULE SPECIFICATION

1. Customer account module:

Customer needs to register to the website to purchase software products. In this module customer can register to the website by entering customer profile details. After the registration customer can login to the system by entering login credentials.

2. Software category module:

This module displays various categories of the software. Customer can search or view category wise products.

3. Software product module:

This module displays various software products with software title, use of the software, product description, product cost, etc. Customer can view the details before purchasing software's.

4. Purchase module:
In this module customer can add purchasing products to the cart. After adding customer can purchase the product in the order section. Customer needs to make payment to purchase the product. After purchasing the system generates download link where customer can download software's.

5. Software activation module:
This module allows customer to activate their purchased software's. In this system only our Piracy Shield web application generates Unique ID for each and every PC. Piracy Shield will generate license keys, and each license key can be uploaded on one computer. The system generates unique code based on computer configuration. The system takes MAC ID and computer serial number because MAC ID is different for each system. The generated unique code should be copied in to Piracy Shield web application to receive an encrypt ID. They system generates unique encrypted ID based on MAC address. If user enters unique activation code in their software then they can start using the software.

6. Dashboard Module:
Administrator and Employees can use this feature. They can add software categories, software products to the system. Customers can view upload software products. Admin can view various types of reports.

7. Report module:
This module displays various kinds of report

- Software product activation report
- Sales report
- Customer report

D. Advantages
The system has following advantages:
- The system can be used by any online software dealer.
- It can also be used by organizations and business owners to promote their product and at the same time protect their copyright.
- No one can copy the software or share as it requires an activation code that is different for each individual.
- The system allows user to activate products only through online.

E. Disadvantages
- Internet connection required to activate product.
- Only English language permitted.
- Since it uses MAC address for validation, single user license type. So current simulation does not provide multi user license.

V. CONCLUSION

Piracy Shield is the web application project works in apache server. PHP used as front end and MySql used as backend in the project. Visual studio and SQL server used to create software applications. This project we presented techniques involved protection of software piracy, Which leads to access software only authorized person and prevent unauthorized access, This system provides more security of the software, It checks software product key is correct for the corresponded MAC address of the system.

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