

## SECURED ONLINE SHOPPING USING AUTHENTICATION HIDING METHOD

**Dr. A. Sivakumar<sup>#1</sup>, Abdullahi Jele Hassan<sup>\*2</sup>**

*# Assistant Professor, Department of Computer Science,  
Rathinam College of Arts and Science, Coimbatore, Tamil Nadu, India -641021  
sivamgp@gmail.com*

*ORCID iD: <https://orcid.org/0000-0003-3517-816X>*

*\*Student, M.Sc Information Technology, Rathinam College of Arts and Science,  
Coimbatore, Tamil Nadu, India -641021*

**Abstract - Authentication Hiding Method for Web portal, which is implemented in ASP .NET platform. This website is implemented with basic features that are present in every online shopping sites. Main idea of this project is to sell products under different category through online. As the usage of internet is growing day by day users are interested in using internet for buying and selling goods which is a time saving process. In recent years sites like snap dialect had grown rapidly in this field. This application is designed with features like placing orders, add modify delete and cancel orders from the list, subscription option for receiving latest deals to email. This project secured online shopping system that gives the Internet users the confidence to use their online shopping cards or their credit cards without the need to worry about the hackers or the online shopping frauds. This is a web application used by a company to sell products through internet. Customer can select and place order for a product, which are then delivered to the customer. Upon the delivery of the product customer is expected to pay. Extending the original database for sensitive item set hiding is proved to provide optimal solutions to an extended set of hiding problems compared to previous approaches and to provide solutions of higher quality.**

**Moreover, the application of binary integer programming enables the simultaneous hiding of the sensitive item sets and thus allows for the identification of globally optimal solutions.**

**Index Terms – Authentication, Online Shopping, Binary Integer Programming Model.**

### I. INTRODUCTION

Authentication Hiding Method for Web portal, which is implemented in ASP.NET platform. This website is implemented with basic features that are present in every online shopping site. Main idea of this project is to sell products under different category through online. As the usage of internet is growing day by day users are interested in using internet for buying and selling goods which is a time saving process.

In recent years sites like snap dialect had grown rapidly in this field. This application is designed with features like placing orders, add modify delete and cancel orders from the list, subscription option for receiving latest deals to email.

In this project, we propose a secure online shopping system that gives the Internet users the confidence to use their online shopping cards or their credit cards without the need to worry about the hackers or the online shopping frauds.

This is a web application used by a company to sell products through internet. Customer can select and place order for a product, which are then delivered to the customer. Upon the delivery of the product customer is expected to pay.

Extending the original database for sensitive item set hiding is proved to provide optimal solutions to an extended set of hiding problems compared to previous approaches and to provide solutions of higher quality.

Moreover, the application of **binary integer programming** enables the simultaneous hiding of the sensitive item sets and thus allows for the identification of globally optimal solutions.

## II. SYSTEM STUDY

### EXISTING SYSTEM:

The hiding process is guided by the need to maximize the data utility of the sanitized database by introducing the least possible amount of side effects, such as,

The hiding of no sensitive patterns or

The production of frequent patterns that were not existent in the initial data set (ghost item sets). The released database, which consists of the initial part (original database) and the extended part (database extension), can guarantee the protection of the sensitive knowledge, when mined at the same or higher support as the one used in the original database.

### THE PROPOSED SYSTEM:

To properly introduce the hiding methodology, one needs to consider the existence of three databases, all depicted in binary format. They are defined as follows. Database DO is the original transaction database that, when mined at a certain

support threshold  $msup$ , leads to the disclosure of some sensitive knowledge in the form of sensitive frequent patterns. This sensitive knowledge needs to be protected. Database DX is a minimal extension of DO that is created by the hiding algorithm during the sanitization process, in order to facilitate knowledge hiding. Database D is the union of database DO and the applied extension DX and corresponds to the sanitized outcome that can be safely released.

To accomplish the hiding task, the proposed approach administers the sanitization part by formulating a Constraint Satisfaction Problem (CSP) and by solving it through Binary Integer Programming (BIP).

## III. SYSTEM DEVELOPMENT

### DESCRIPTION OF MUDELS:

- ADMIN
  - Add Products
  - Customer Details
  - Purchase Details
  - Exact Knowledge view
  - Delivery Report
- USER
  - Search Item
  - Buy Product
  - Extend Database
  - Knowledge Database
  - Binary Integer Programming

## ADMIN

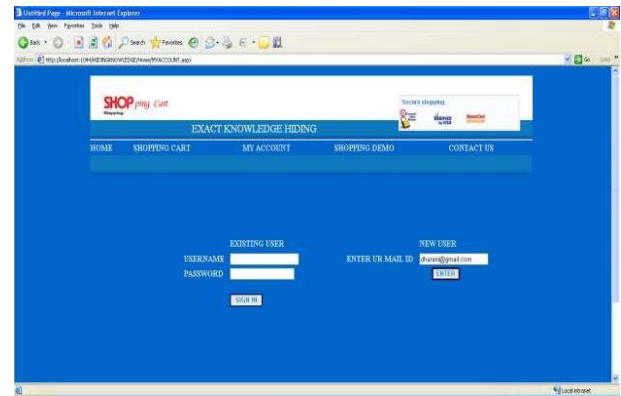
- 1) **Add Product:**
- 2) Admin can add Products for user using Product ID. When Authenticated user can process and create account. After creating an Admin will activate their Account. After Activation only the user can process using that User id.
- 3) **Customer Details:**  
After Activation Admin can view the details of the customer and he can modify User details.
- 4) **Purchase Details:**  
After Activation Admin can view the details of purchased items with user ID and Product ID
- 5) **Exact Knowledge View:**  
Admin can retrieve the data from the duplicate database to get the original data.

- 6) **Delivery Report:**  
After Purchasing, Admin will give away the delivery status like when the product will reach the user.

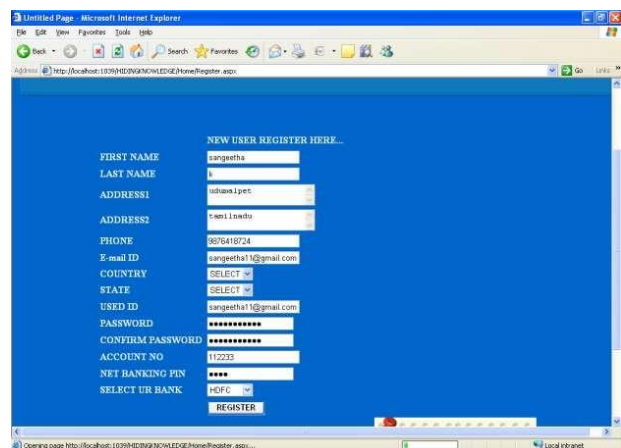
## ➤ USER

- 7) **Search Item:**  
User need to create an account for purchasing products. After creating account user can Search products using user id and with product id.
- 8) **Buy Product:**  
After creation of account, User can purchase products with product ID.
- 9) **Extend Database:**  
Database is extended called duplicate database in which the user information are stored.
- 10) **Binary Integer Programming:**  
The Sensitive or secured data which is send by the user will be converted to binary format using Binary Integer Programming and will be stored in duplicate database.

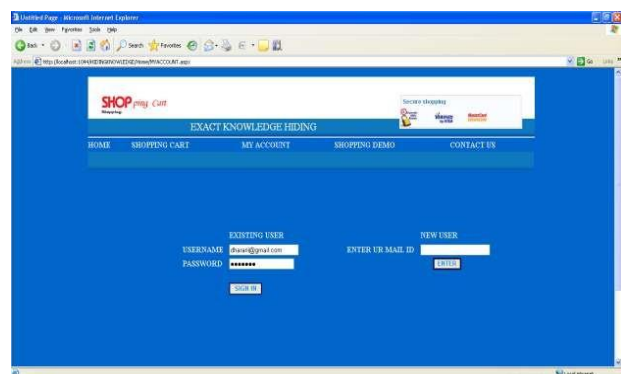
## IV. OUTPUT SCREENS



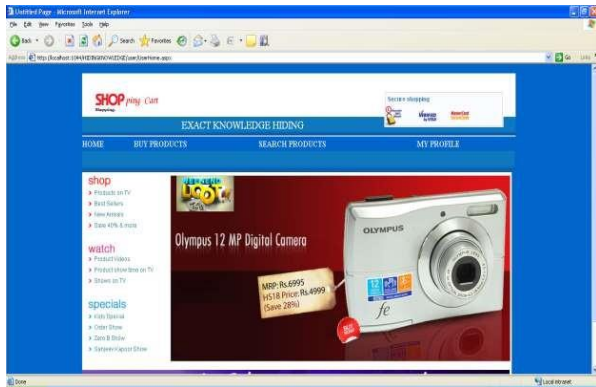
Login Form new user



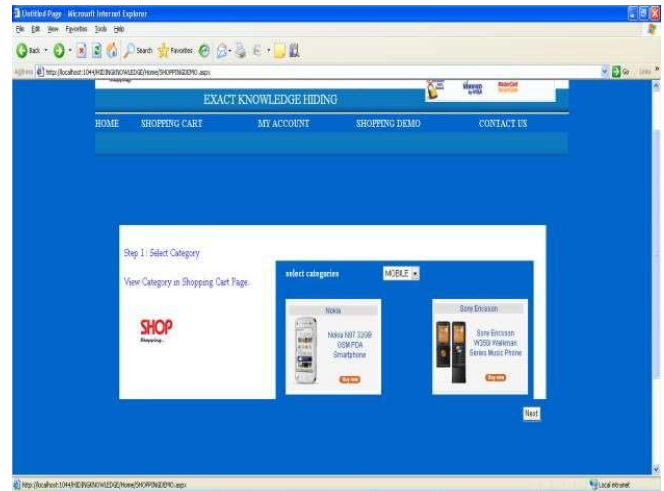
Registration form



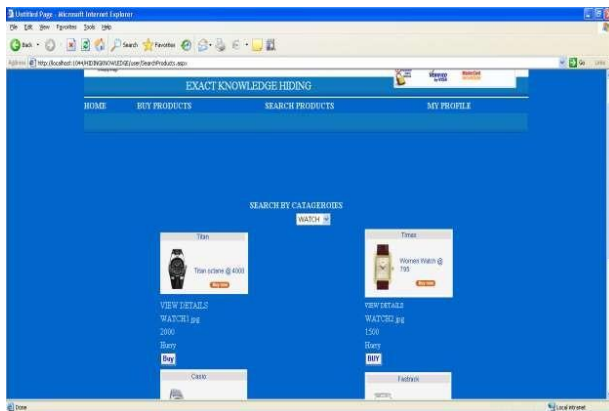
Login form existing



User home page



Shopping Demo

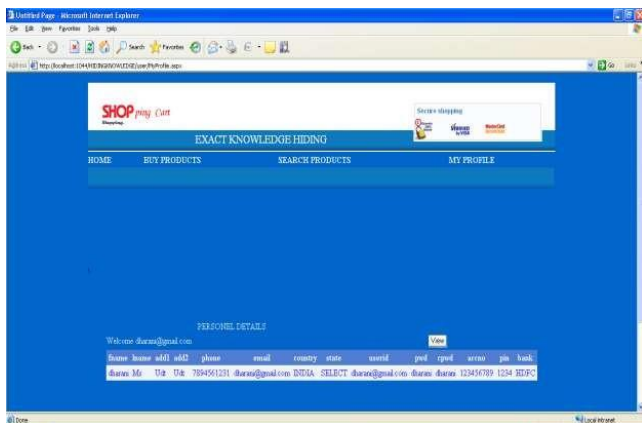


Search product



## V. CONCLUSION

In this project, we have presented a novel, exact border-based approach to sensitive knowledge hiding, through the introduction of a minimal extension to the original database. By exploiting the revised borders as well as the cover relationships among the item sets, we were able to minimize the set of item sets participating in the CSP, which provides a solution to the sensitive knowledge hiding.



My Profile

The attained solution is identical to the one of solving the CSP involving the whole set of item sets. The proposed methodology is capable of identifying an ideal solution whenever one exists, or approximate the exact solution, otherwise. In this work, we provided insight on various topics, such as the minimum expansion of the original database, the validation of the constructed transactions, and the treatment of sub optimality in solutions.

A partitioning approach was introduced to improve the scalability of the algorithm. Finally, through experiments we demonstrated that the solutions of this algorithm are typically of higher quality than those produced by other state-of-the-art approaches.

## REFERENCES

- [1] Agift, A., Rekha, V. and Nisha, C. (2014), "Consumers attitude towards online shopping", Research Journal of Family, Community and Consumer Sciences, Vol. 2 No. 8, pp. 4-7.
- [2] Akroush, M.N. and Al-Debei, M.M. (2015), "An integrated model of factors affecting consumer attitudes towards online shopping", Business Process Management Journal, Vol. 21 No. 6, pp. 1353-1376.
- [3] Alam, M.Z. and Elaasi, S. (2016), "A study on consumer perception towards e-shopping in KSA", International Journal of Business and Management, Vol. 11 No. 7, p. 202.
- [4] Alam, S. and Yasin, N.M. (2010), "What factors influence online brand trust: evidence from online tickets buyers in Malaysia", Journal of Theoretical and Applied Electronic Commerce Research, Vol. 5 No. 3, pp. 78-89.
- [5] Al-Debei, M.M., Akroush, M.N. and Ashouri, M.I. (2015), "Consumer attitudes towards online shopping: the effects of trust, perceived benefits, and perceived web quality", Internet Research, Vol. 25 No. 5, pp. 707-733.
- [6] Aziz, N.N.A. and Wahid, N.A. (2018), "Factors influencing online purchase intention among university students", International Journal of Academic Research in Business and Social Sciences, Vol. 8 No. 7, pp. 702-717, doi: 10.6007/IJARBS/v8-i7/4413.
- [7] Banerjee, N., Dutta, A. and Dasgupta, T. (2010), "A study on customers' attitude towards online shopping-An Indian perspective", Indian Journal of Marketing, Vol. 40 No. 11, pp. 36-42.
- [8] Bianchi, C. and Andrews, L. (2012), "Risk, trust, and consumer online purchasing behaviour: a Chilean perspective", International Marketing Review, Vol. 29 No. 3, pp. 253-275, doi: 10.1108/02651331211229750.
- [9] Bilgihan, A. (2016), "Gen Y customer loyalty in online shopping: an integrated model of trust, user experience and branding", Computers in Human Behavior, Vol. 61, pp. 103-113, doi: 10.1016/j.chb.2016.03.014.
- [10] Casalo, L., Flavián, C. and Guinalíu, M. (2008), "The role of perceived usability, reputation, satisfaction and consumer familiarity on the website loyalty formation process", Computers in Human Behavior, Vol. 24 No. 2, pp. 325-345, doi: 10.1016/j.chb.2007.01.017.