MJRET
Open Access
Multidisciplinary Journal of Research in Engineering and Technology
Journal homepage: www.mjret.in
ISSN:2348 – 6953

SECURED ONLINE MATRIMONIAL SYSTEM

Akshay Baheti, Abhilash Gonpalliwar , Ajay Date, Yuvraj Deokar
Department of Computer Engineering
Marathwada Mitra Mandals College of Engineering
Pune, India
akshaybaheti.comp@mmcoe.edu.in, abhilashgonpalliwar.comp@mmcoe.edu.in,
ajaydate.comp@mmcoe.edu.in.

Abstract: *The **main objective** of Secured Online Matrimonial System is to provide Grooms and Brides with excellent matchmaking experience by exploring the opportunities and resources to meet true to potential partner. The drawback of existing system is that searching a good life partner in this world is the times Consuming and cost effective. Online matrimonial system is used to overcome these drawbacks. This Secured Online Matrimonial System is a useful for a person of any religion who wishes to find a suitable life partner for himself or herself. This website is very useful as it provides a fast searching of numerous suitable profiles. It also Provide Recommendation with the help of Apriori algorithm to find the Perfect match. This site mainly focus on the Security aspects by using AES security Encryption algorithm [1]. Therefore, He or she can create his or her profile and can communicate with the existing members.*

Keywords*: Advanced Encryption Standard, Apriori, Data mining.*

1. INTRODUCTION

Online Matrimonial System provide platform to a lot of Bride/Groom for finding perfect match. The drawback of existing system is that searching a good life partner in this world is the times Consuming and cost effective. Online matrimonial system is used to overcome these drawbacks. This Secured Online Matrimonial System is a useful for a person of any religion who wishes to find a suitable life partner for himself or her

Matrimonial Web Application will allow a new user to register and after successfully registration user can get email confirmation, after completing registration users profile will be visible to other users. Bride/Groom can directly search Partner according to their required criteria.

2. EXISTING SYSTEM

The existing system was an automated system but It was found to be inefficient in meeting the growing demands of population and different online matrimonial take a lot of time and money for searching a suitable match. But still they are not able to provide a good life partner

2.1. Drawbacks in the existing system

- The existing system is not user-friendly system.
- Time Consuming to search a Perfect Match.
- Lack of security.
- The existing system does not implement restriction for users to access the data.

Secured online matrimonial system is designed to overcome the drawbacks of existing system. It also provides fast searching for a life partner and sending his/her contact or communicates with the existing members. As both the members will agree they meet together for the marriage. A person can search for a bride or a groom of any religion of any caste.

3. PROPOSED SCHEME

Secured online matrimonial system is designed to overcome the drawbacks of existing system. It also provides fast searching for a life partner and sending his/her contact or communicates with the existing members. As both the members will agree they meet together for the marriage. A person can search for a bride or a groom of any religion of any caste.

3.1. Methodology (Design and implementation)

3.1.1. Overall Description

The **ONLINE MATRIMONIAL SYSTEM** is growing as the internet emerges as the best Technology which provides a fast and efficient access to any information about anything. Difficulty in Keeping the details of each user and their partners, delay in sending messages to them and spending so much money for finding a good life partner causes the appearance of this website. The Project concentrates on to surmount these difficulties.

3.1.2. Main Aspects:

- **Security:** For Security purpose we are going to use AES algorithm. AES is based on a design principle known as a substitution-permutation network, combination of both substitution and permutation, and is fast in both software and hardware. Unlike its predecessor DES, AES does not use a Feistel network. AES is a variant of Rijndael which has a fixed block size of 128 bits, and a key size of 128, 192, or 256 bits. By contrast, the Rijndael specification per se is specified with block and key sizes that may be any multiple of 32 bits, both with a minimum of 128 and a maximum of 256 bits.

- **Comparison of AES with other Algorithms [5]:**

Factor	AES	3DES	DES	Reference
Key length	128,192,or 256 bits	168 or112 bits	56 bits	Comparative Study of AES with DES or 3 DES
Block size	128,192,or 256 bits	64 bits	64 bits	
Cryptanalysis resistance	Strong	Vulnerable to differential and brute force attack	Vulnerable	
Security	Considered secure	Secure than DES	Proven inadequate	
Implantation	Faster	Better than DES	Medium	

Table 3.1.2 (a) Comparison of AES with other Algorithms

- **Recommendation [2]:** This system will provide fast searching as we implement Apriori algorithm. Apriori is an algorithm for frequent item set mining and association rule learning over transactional databases. It proceeds by identifying the frequent individual items in the database and extending them to larger and larger item sets as long as those item sets appear sufficiently often in the database**.**

- **Comparison with other Algorithms :**

Factors	Apriori	K-means	O-cluster	Reference
Item set	Frequent Item set	Countable	Countable	Association rules mining using heavy itemsets. Data & Knowledge Engineering, 61, 93–113.
Clustering	Distance-based	Grid-based	Grid-based	Recommendation by two-step modified Apriori data mining algorithm
No of Cluster	User-specified	User-specified	Automatic	
Database	One or more	Only one	Only one	

Table 3.1.2 (b) Comparison with other Algorithms

- Overall flow of our project is shown in Fig.1

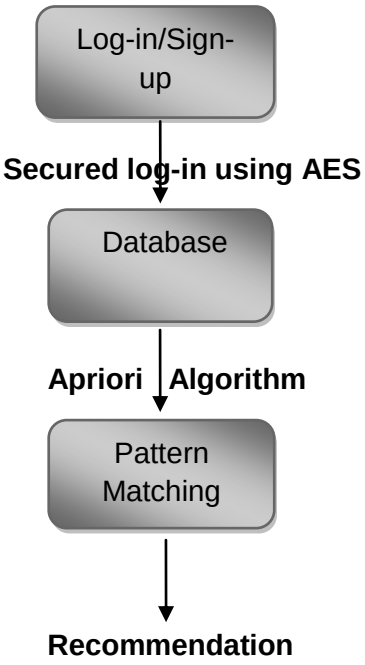

Fig.1: System Architecture

Keeping in mind with the Users perspective and usability, we are providing various unique features such as Recommendation through Mail Alerts. This application also provides a search utility which helps those users who have a certain criteria of qualities in mind to make online matrimonial easier.

3.2. System Features

- **Maintainability:** There will be no maintenance requirement for the Secured Online matrimonial System. The database is provided by the administrator and user and therefore is maintained by this Admin. This website is automated.

- **Portability:** The system is developed to work on any environment so it can be portable.

- **Availability**: This system will available on any system.

3.3. User Interfaces: The software provides good graphical interface for the user any administrator can operate on the system, performing the required task such as create, update, and viewing the details of firms.

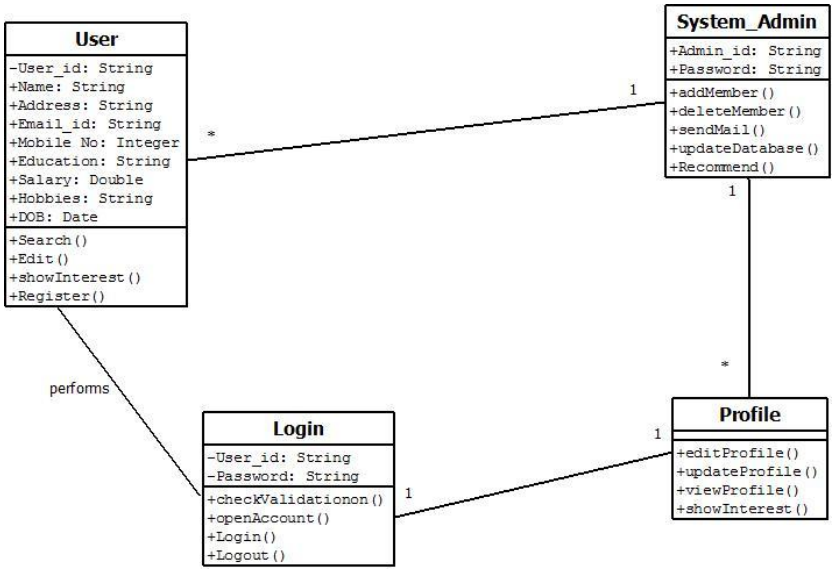

Fig.2: Class Diagram

3.4. Mathematical Model

Sr. No	Symbols	Description
1.	A	Admin
2.	U	User
3.	P	Profile
4.	D+	Delete any profile
5.	D*	Delete own profile
6.	R	Recommend
7.	DV	Data validation
8.	Up	Upload
9.	Ud	Update
10.	V	View
11.	I	Show interest
12.	Db	Database

Fig.3: Abbreviation Table

Set Theory:
Let S be the System Such that S = {U,A,O}

U is the Set of Users such that U = {U1,U2,.....Un}

A = {A}

P is the Set of profiles of users such that P = {P1,P2,....Pn}

O is the Set of Operations such that O = {D*,D+ ,R, DV, Up , Ud, V, I}

Relation between User and Operations

A = {D+, R, DV}
U = {D*,Up, Ud, I, V}

4. CONCLUSION

Secured Online Matrimonial System provides Grooms and Brides with excellent matchmaking experience by exploring the opportunities and resources to meet true to potential partner. It secures information provided by user using standard encryption algorithms such as Advanced Encryption Standard (AES). It provides a Recommendation through Apriori algorithm. In short our system is best as compare to existing system because it provide higher security by using **AES** algorithm and fast searching through **Apriori** algorithm.

5. FUTURE SCOPE

- Matrimonial website provide platform to a lot of Bride/Groom for finding perfect match.
- There are different sectors like Registration, Partner, Search, etc. So the Bride/Groom can get their interest for find their partner. Bride/Groom can directly search Partner according to their required criteria.
- The Bride/Groom can use match By Email functionality so he/she can get directly E-mail alert for the match which fulfill their required criteria.

ACKNOWLEGEMENT

I feel immense pleasure in expressing my deepest sense of gratitude to my guide **Mrs. Pradnya Mehta,** for her encouragement and enlightened comments throughout this project work. Her appreciative suggestion always motivated me for putting most willing efforts on my study during project report. My special thanks to our head of department **Prof. Harmit Khanuja** for providing co-operation. Last but not least, I express my thanks to all staff members of Computer laboratory for their enthusiasm and constant reminders to complete the work as soon as possible. I am also thankful to everyone in this college who directly or indirectly helped me in completing our project.

REFERENCES

[1]. A.A.Zaidan, B.B.Zaidan, Anas Majeed, "High Securing Cover-File of Hidden Data Using Statistical Technique and AES Encryption Algorithm", World Academy of Science Engineering and Technology (WASET), Vol.54,ISSN : 2070-3724, P.P 468-479.

[2]. J. Farrell and H. Lausen. Semantic Annotations for WSDL and W3c recommendation, W3C Recommendation 28 August 2007, June 2007.

[3]. Palshikar, G. K., Kale, M. S., & Apte, M. M. (2007). Association rules mining using heavy itemsets. Data & Knowledge Engineering, 61, 93–113.

[4]. M. Alam,W. Badawy, G. Jullien, A novel pipelined threads architecture for AES encryption algorithm, in: The IEEE International Conference on Application- Specific Systems, Architectures and Processors, 2002, pp. 296–302.

[5]. New Comparative Study Between DES,3DES and AES within Nine Factors,2010.