

Brute force attack: These techniques are particularly resistant to brute force due to use of the session passwords. The use of these will take out the traditional brute force attack out of the possibility.

SQL injection Attack: Also in this proposed system the encryption of password stored in the database is done using rijndael's algorithm, so in case if the attacker got access to the database the data is no longer useful unless it is decrypted by the code which present at the application side.

V. RIJN-DAEL'S ALGORITHM

Rijndael (pronounced rain-dhal) is the algorithm that has been selected by the U.S. National Institute of Standards and Technology (NIST) as the candidate for the Advanced Encryption Standard (AES). [11]

The Rijndael algorithm is a new generation symmetric block cipher that supports key sizes of 128, 192 and 256 bits, with data handled in 128-bit blocks - however, in excess of AES design criteria, the block sizes can mirror those of the keys. Rijndael uses a variable number of rounds, depending on key/block sizes, as follows:

9 rounds if the key/block size is 128 bits
11 rounds if the key/block size is 192 bits
13 rounds if the key/block size is 256 bits

Also other asymmetric algorithm can be used for the purpose of encryption such as RSA algorithm but since it includes the concept of public and private key cryptography it makes the system very slow and rijndael algorithm if used the efficiency of the system will much better.

VI. CONCLUSION

These techniques generate session passwords and are resistant to dictionary attack, brute force attack and shoulder-surfing. This technique use grid for session passwords generation. For hybrid textual scheme, ratings should be given to colors, based on these ratings and the grid displayed during login, session passwords are generated. However this scheme is completely new to the users and the proposed authentication techniques should be verified extensive.

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