**Software Puzzle:**

**A Countermeasure toResource-Inflated Denial-of-Service Attacks**

**OBJECTIVE:**

To design and development CaPGP to address a number of security problems altogether, such as online guessing attacks, relay attacks.It offers reasonable security and usability and appears to fit well with some practical applications for improving online security.

**SYNOPSIS:**

Many security primitives are based on hard mathematical problems. Using hard AI problems for security is emerging as an exciting new paradigm, but has been underexplored. In this paper, we present a new security primitive based on hard AI problems, namely, a novel family of graphical password systems built on top of Puzzle technology, which we call Puzzle as graphical passwords (CaPRP). CaPRP is both a Puzzle and a graphical password scheme. CaPRP addresses a number of security problems altogether, such as online guessing attacks, relay attacks, and, if combined with dual-view technologies, shoulder-surfing attacks. Notably, a CaPRP password can be found only probabilistically by automatic online.

guessing attacks even if the password is in the search set. CaPRP also offers a novel approach to address the well-known image hotspot problem in popular graphical password systems, such as PassPoints, that often leads to weak password choices.

CaPRP is not a panacea, but it offers reasonable security and usability and appears to fit well with some practical applications for improving online security.

**EXISTING SYSTEM:**

Security primitives are based on hard mathematical problems. Using hard AI problems for security is emerging as an exciting new paradigm, but has been underexplored. **A** FUNDAMENTAL task in security is to create cryptographic primitives based on hard mathematical problems that are computationally intractable.

**DISADVANTAGES OF EXISTING SYSTEM:**

* This paradigm has achieved just a limited success as compared with the cryptographic primitives based on hard math problems and their wide applications.
* Using hard AI (Artificial Intelligence) problems for security, initially proposed is an exciting new paradigm. Under this paradigm, the most notable primitive invented is Puzzle, which distinguishes human users from computers by presenting a challenge.

**PROPOSED SYSTEM:**

We present a new security primitive based on hard AI problems, namely, a novel family of graphical password systems built on top of Puzzle technology,

which we call Puzzle as graphical passwords (CaPRP). CaPRP is both a Puzzle and a graphical password scheme. CaPRP addresses a number of security problems altogether, such as online guessing attacks, relay attacks, and, if combined with

dual-view technologies, shoulder-surfing attacks. Notably, a CaPRP password can be found only probabilistically by automatic online guessing attacks even if the password is in the search set. CaPRP also offers a novel approach to address the well-known image hotspot problem in popular graphical password systems, such as PassPoints, that often leads to weak password choices. CaPRP is not a panacea, but it offers reasonable security and usability and appears to fit well with some practical applications for improving online security**.**We present exemplary CaPRPs built on both text Puzzle and image-recognition Puzzle. One of them is a text CaPRP wherein a password is a sequence of characters like a text password, but entered by clicking the right character sequence on CaPRP images. CaPRP offers protection against online dictionary attacks on passwords, which have been for long time a major security threat for various online services. This threat is widespread and considered as a top cyber security risk. Defense against online dictionary attacks is a more subtle problem than it might appear.

**ADVANTAGES OF PROPOSED SYSTEM:**

* It offers reasonable security and usability and appears to fit well with some practical applications for improving online security.
* This threat is widespread and considered as a top cyber security risk. Defense against online dictionary attacks is a more subtle problem than it might appear.
* Puzzle Login(top of Puzzle technology Using mathematical problems).
* Image Puzzle Solving Using AES Algorithm.

**SYSTEM ARCHITECTURE:**

Enter Details

New User

Enter Username & Password

Registration Completed

Save

Select Captcha Image from group

Login Successfully

Online Banking

Existing User

Enter Puzzle Uname And Pws

Select Captcha image

Puzzle solving

**No**

**Yes**

**No**

**Yes**

**Hardware and Software Specification:**

**Hardware:**

­

1. 1 GB RAM
2. 80 GB Hard Disk
3. Above 2GHz Processor
4. Windows os

**Software :**

* Windows 7 OS
* JDK 1.7
* MySQL
* NetBeans IDE 7.1.2