Advancements in Information Security:
Humanics security and Entertainment security

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Humanics security and Entertainment security

- What is “humanics security”?
  - Security enhancement that is achieved by combining security technology and human aspects.

- What is “entertainment security”?
  - Subset of Humanics security in which entertainment aspect is focused on.
User Authentication Based On Personal History

User authentication using what users already know
To eliminate the burden of memorizing passwords

Memorizing passwords to use it

It is very difficult for users to memorize long and random strings

change in thinking

Using memory as passwords

Passwords are what users already know
What users already know

Personal information
- Name
- Birth day
- Address
- Hobby

Personal history
- Woke up at 7AM
- Had bread for breakfast
- Played baseball from 10AM
- Made a throwing error in bottom of 2nd inning
CAPTCHA using humor

A combination of security and human psychological aspect
Four-panel cartoon CAPTHCA

1. A four-panel cartoon is selected at random from a database of cartoons.
2. The order of the panels in the selected four-panel cartoon is rearranged randomly (shuffled).
3. The shuffled four-panel cartoon is presented to the webpage visitor.
4. The visitor rearranges the shuffled four-panel cartoon into what appears to be the correct order. (The webpage could be equipped with a form allowing the visitor to input the correct order of panels.)
5. If the order of the panels entered is correct, the visitor is identified as a human, and if the order is incorrect, the visitor is identified as malware.
Movie CAPTCHA

1. The system randomly selects one of the movies from the movie database.
2. The system divides the movie into scenes.
3. The system randomly selects scene(s) from the movie in which the alteration process is applied.
4. The system performs the scene alteration.
5. The system plays the altered movie to the user.
6. The user clicks on the screen as soon as the user feels strangeness in watching the movie.
7. If the user clicked the altered scene correctly, the system certifies the user as human.