WOOQER HACKATHON

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File Access Security

Two factor authentication approach with dynamic passwords

- Share File
    - File can be shared only with trusted users
    - URL sent by mail

One time password generation (<small>Soft Token application</small>)
    - User is prompted with an 'id' or key which is dynamic
    - URL used to get access key to file resource
    - AES used as algorithm to generate key
    - This ensures secure download any number of times

Password per download
    - File is encrypted with a new password for each download
    - This ensures control is with the user who downloads the file, restricted even to others with whom the file has been shared

Benefits of Two Factor authentication :

- Reduced probability of an Internet attacker gaining access to an account
- An additional protection option that can be advertised to account holders

Benefits of AES :

- Less susceptible to cryptanalysis (No one has achieved success in plain text attack so far)
- AES is faster in both hardware and software
- Used by the US Government.

Tools/Libraries used : Apache PdfBox

Framework of implementation : JEE

Data Visualisation

Fields in JSON :

- FirstName
- LastName
- SolvedCasesCount
- AverageTimePerCase
- Gender

Graphs Displayed :

- Direct : Case Count, Average investigation time
- Indirect : Performance, Experience

Performance : #SolvedCased + 1/AverageTimePerCase

Experience : #SolvedCased * AverageTimePerCase

Other Features :

- Employee comparision
- Analysis by Attributes

Libraries used : Charts.js (Open source) (IE 9+ but can support other browsers)