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1  system_chart DVL
2    indexing
3      author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
4    explanation "An open source digital voter list that keeps track of
   who has been handed a ballot at an election, with a focus on security."
5    cluster DIGITALVOTERLIST description "The various elements of the
   digital voter list system."
6    cluster COREDATATYPES description "Core datatypes used by the digital
   voter list system."
7  end
8
9  cluster_chart DIGITALVOTERLIST
10   indexing
11     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
12   explanation "The various elements of the digital voter list system."
13   class STATION description "A station is a client-machine that
   communicates with its manager, and provides a graphical user interface
   for voters to use when requesting a ballot. A station can also be the
   manager. A manager manages the various stations, and handles
   synchronization of the data. It also has elevated rights compared to a
   station, and can for example manually mark a voter as having been
   handed a ballot (in case he lost his voter card, or the like)."
14   class SCANNER description "A scanner can read a physical voter card
   and extract required information from it."
15   class COMMUNICATOR description "A communicator is responsible for
   securely passing commands between two parties."
16   class CRYPTO description "Crypto is responsible for cryptographic
   functions such as public-key encryption."
17   class DATABASE description "The database-layer is responsible for
   communicating with the database (create, read, update, write). It can
   also perform batch-operations such as importing and exporting the
   database."
18   class COMMAND description "A command is sent over the network and can
   be executed at the destination."
19   class LOGGER description "A log is used to track events in the system."
20   class UI description "A UI is used to interact with human beings. The
   UI must be able to support requirements to be able to interact with the
   Digital Voter List system."
21 end
22
23 cluster_chart COREDATATYPES
24   indexing
25     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
26   explanation "Core datatypes used by the digital voter list system."
27   class CIPHERTEXT description "CipherText is encrypted data."
28   class ASYMMETRICKEY description "An asymmetric key can be used for
   either encryption or decryption of data."
29   class SYMMETRICKEY description "A symmetric key can be used for
   either encryption or decryption of data."
30   class MESSAGE description "A message contains ciphertext of a
   symmetric key, a message encrypted with the symmetric key and a hash
   encrypted with the senders public key. Used for secure communication."
31   class CPR description "A CPR-number is a number identifying a danish
   citizen, consisting of the birthdate and a unique identifier."
32   class VOTERNUMBER description "A voternumber is a unique number used
   in conjunction with the CPR-number to request a ballot."
33   class BALLOTSTATUS description "A ballot status is used in
   conjunction with a cpr-number and a voternumber, and indicates wheither
   status that indicates whether the ballot has been handed out, not
   handed out, or if it is unavailable at the given election venue."
34   class ENCRYPTEDVOTERDATA description "Encrypted voterdata is the
   encrypted combination of CPR, VOTERNUMBER and BALLOTSTATUS."
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35    class LOGENTRY description "A log entry is an entry in a log. It
      contains a message, a time and a level indicating its type."
36    end
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