```
1  class_chart CIPHERTEXT
2    indexing
3      author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
4    explanation "CipherText is encrypted data."
5  query
6    "What does this CipherText look like?"
7  constraint
8    "The value of the ciphertext must always be non-void."
9  end
10
11 class_chart ASYMMETRICKEY
12   indexing
13     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
14   explanation "An asymmetric key can be used for either encryption or
   decryption of data."
15 query
16   "What does this asymmetric key look like?"
17 constraint
18   "The value of an asymmetric key must always be non-void."
19 end
20
21 class_chart SYMMETRICKEY
22   indexing
23     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
24   explanation "A symmetric key can be used for either encryption or
   decryption of data."
25 query
26   "What does this symmetric key look like?"
27 constraint
28   "The value of a symmetric key must always be non-void."
29 end
30
31 class_chart MESSAGE
32   indexing
33     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
34   explanation "A message contains the ciphertexts of a symmetric key, a
   command encrypted with the symmetric key and a hash encrypted with the
   senders public key. Used for secure communication."
35 query
36   "What is the initialization vector used to encrypt the command?",
37   "What is the CipherText of the symmetric key used to encrypt the
   command?",
38   "What is the CipherText of the encrypted command?",
39   "What is the CipherText of the senderhash of the command?"
40 end
41
42 class_chart CPR
43   indexing
44     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
45   explanation "A CPR-number is a number identifying a danish citizen,
   consisting of the birthdate and a number."
46 query
47   "What does this CPR-number look like?"
48 constraint
49   "The numeric value of a CPR-number is always greater than zero."
50 end
51
52 class_chart VOTERNUMBER
53   indexing
54     author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
55   explanation "A voternumber is a unique number used in conjunction
   with the CPR-number to request a ballot."
```

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56  query
57    "What does this voter-number look like?"
58  end
59
60  class_chart BALLOTSTATUS
61    indexing
62      author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
63    explanation "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."
64  query
65    "What is the status of this ballot?"
66  constraint
67    "A ballot status is always either 'handed out', 'not handed out' or
    'not available'."
68  end
69
70  class_chart ENCRYPTEDVOTERDATA
71    indexing
72      author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
73    explanation "Encrypted voterdata is the encrypted combination of CPR,
    VOTERNUMBER and BALLOTSTATUS."
74  query
75    "What is the encrypted CPR-number of this encrypted voterdata?",
76    "What is the encrypted voter-number of this encrypted voterdata?",
77    "What is the encrypted ballot status of this encrypted voterdata?"
78  constraint
79    "All the data must have a value, that is, be non-void."
80  end
81
82  class_chart LOGENTRY
83    indexing
84      author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nsbk@itu.dk)"
85    explanation "A log entry is an entry in a log. It contains a message,
    a time and a level indicating its type."
86  query
87    "What is the message of the log entry?",
88    "What type of log entry is this?",
89    "At what time was the log entry added?"
90  constraint
91    "None of the values must be void."
92  end
```