Tokeneer Requirements Specification

Supplement to Requirements Presentation

What is Tokeneer?

- Software system for controlling access to a high-security area
- Developed so that security and other requirements could be formally verified
- Requirements specification is contained on a large document
  - Approach is mainly through Use Cases

Tokeneer Requirements Specification

- Functional (behavioral) requirements through eleven (11) Use Cases
  - Each use case covers a key scenario
- Some supplementary diagrams as well
  - Some for non-functional requirements

5 Behavioral Requirements

The required behavior of the ID Station is specified here using scenarios, which run through typical cases of the ID Station and define the interaction between the ID Station and the biometric system. In many cases, the same scenario may be validated multiple times, but it is expected that any conditions that may need to be tested will not vary. The full behavior of the system, including all successful and failed outcomes, is defined in the system model.

Environmental and Robustness Requirements

Some of these are environmental requirements

Here is a timing Requirement. Should it be Said better?

Functional Requirements (when combined with assumptions)
Robustness requirements

Anticipating Requirements Validation and Design

There is still a need to coordinate and integrate what these scenarios say
Use of Diagrams to Augment the Use Cases

- Not all of our requirements types were addressed by these use cases
- Some of them are addressed separately from the use cases
- Some diagrams are redundant with use cases (to support cross checking)
- Some diagrams could/should be embedded in some of the use cases

Artifacts are needed in order to specify functional/behavioral requirements
Augments Functional Rqmt.

Security Requirement?

Figure 2.1: Hierarchy of certificate types

Figure 3.1: User authentication and Navy data transition

Figure 7.2: Administrator logon/logoff state transitions

6 Design Constraints

The system will be developed and run on an encryption system of D.E.