

The design in this tokeneer project has two classes and a main method. These two classes are named Users and IdStation.

A user begins with showing the token to a token-reader and then the token-reader request a fingerprint as a password. The token itself contains a clearance-level which the user receives while requesting a token. Obviously, the clearance-level depends on which authority the user has.

In the main method, on the bottom of the code-file, we have our user-cases named UserCase1, UserCase2, UserCase3, UserCase4.

The first user-case, the user tries to open a high-level door with wrong fingerprint. And then with the wrong fingerprint again. At last, the user has the right fingerprint and opens the door. Every test-case has a comment that tells why authentication is approved or denied.

The authentication method works as a method that checks whether right information is received by the user or not. The method checks first the token and clearance-level, if this is not registered in the system, the authentication method jumps at the end of the method and modifies the validation of the user to false. If the token and clearance-level is correct, the method checks whether the fingerprint is right or not. If it appears to be wrong, the wrong variable get incremented and the maximal value of the wrong variable is three, which can be seen on the pre- and postconditions.