**Use Case for Login**

**1 Brief Description**

This use case describes how the user logs into our tool in order to use it.

**2 Actors**

**2.1 User**

User is the actor that is going to invoke commands over the tool. The user shall explicitly command and check the responses to the functionality of the tool.

**3 Preconditions**

1. The user can access the login page of the tool over the internet.
2. The user is registered with the tool.

**4 Basic Flows of Events**

1. The use case begins when user browses to the login webpage of the tool
2. The user is prompted with a username & password
3. The user enters the username & password to validate against the tool (webserver)
4. On validating the username-password pair, related information is pulled out from the database
5. The user is authenticated and is directed to the profile page
6. Use case ends

**5 Alternative Flows**

**5.1 Invalid User**

If in step 6 of this Login use case: Validation of user fails

1. This use case ends with a failure condition. The invalid use case shall then be invoked
   1. **Connection Breaks**

As we execute the basic flow at:

1. Step 1: This means the website itself has not been hosted yet, thus the webserver needs to be started
2. Step 4: The connection resets and the prompt is up again
3. Step 5: The validated token is saved and the session state is maintained, thus the application can pick from where it went down and resume normal working

**5.3 Quit**

If at point the user selects Quit, then

1. The application closes the connection with the webserver and deletes all the data stored at the client end (e.g cookies)

**5.4 Remember Password**

If the user wants the browser to remember the password, the specific browser code shall be triggered.

**6 Key Scenarios**

**6.1 No response from webserver**

1. The DNS server does not have the tool name registered
2. The tool webserver is not reachable via the internet

**6.2 Database Server not reachable**

1. The database server is not running
2. The DMZ configuration is flawed, hence the connections to the DB server are dropped
3. The database server does not have the schema in it

**7 Post-conditions**

**7.1 Successful Completion**

The user has been able to successfully login into the account and see’s his profile page

**7.2 Failure Condition**

The user hasn’t been able to log in and the system shifts onto a different use case

**8 Special Requirements**

1. The user cannot give unsuccessful login attempts continuously, this might load the server
2. Some preventive measures to be taken against constant login attempts