WRITEUP

Project objective:

Set up a standalone project to do unit testing of the user authentication class which is used in the main web application.

The objective is to create a JUnit class that will test all aspects of the authentication class.

Background of the problem statement:

As a part of developing an ecommerce web application, a test-suite is being created to do unit testing of all backend components

in the web application. This project will test the user authentication class. This project will be a standalone Java application,

since Junit does not directly test servlets or web pages. We are only testing the classes that have the business logic.

Description

1. A client application sends a user ID and password to Sterling External Authentication Server, from a user logging in to an application or accessing a destination service.

The client authenticates itself to Sterling External Authentication Server and specifies the definitions. If the connection is made, mutual authentication and encryption secure

messages through the connection.

2. Sterling External Authentication Server references the authentication definition specified by the client application. It includes the LDAP connection definitions, attribute

query definitions, attribute assertion definitions, and/or application output definitions required to authenticate and/or authorize the connection.

3. Sterling External Authentication Server connects to the LDAP server specified in the authentication definition. The user ID and password from the request is validated and

tasks, such as LDAP attribute queries and assertions, are performed to respond to the request. For example, attribute query definitions can include information to locate a user

ID entry, validate group membership, and look up login credentials.

4. Sterling External Authentication Server uses results to determine if the user should be authenticated to an application or authorized for access to a destination service.

When Sterling External Authentication Server authenticates a user as a continuation of certificate validation, information established during certificate validation are available

for authentication.

5. An authentication definition can include application output definitions to specify how return attributes from a query map to outputs that are passed to the client application.

When an application output definition is included, the mapping of return attributes is performed.

6. Sterling External Authentication Server sends a response with the results of user authentication. If authentication is successful, the response can include credentials.

For example, Sterling External Authentication Server can provide the user ID and password returned from a query in an application output definition as part of the response

message.

7. If the client application is a proxy for the destination service, it logs in to the destination service with the credentials retrieved by Sterling External Authentication Server.