

1. No. The user name on the cookie site cannot be used to check the validity. Instead we determine by checking the session on the server end. Thus, a tempered value in the cookie (which is not on the server) will not be considered valid. Instead, we need a combination of username and encryption for the sake of authentication.
2. No. User session information in the browser cookie is vulnerable. Doing this will not only makes those unexpectedly tampered values insecure for the users, but also potentially results in logical errors due to inconsistency between user side and server side.
3. TicTacToe page as well as Default page. Both involves sensitive values of user name and password or session id which should be encrypted.
4. A cookie expiration is tamper-able on the user side. If the expiration is tampered, we cannot get the desired functionality such as timeout, resulting in dangerous consequences.