

```

// drops to here if not valid password/userid or too many attempts
if (!$passed) {
    $I--;
    echo "Invalid Userid/Password";
    $valid_useridpasswords['user'][$I]['attempts'] = $user['attempts'] + 1;
    // add 1 to attempts
    // if not successful must save the values
    saveupfile($dog_data_xml,$valid_useridpasswords);
} } }
catch(Exception $e)
{   echo $e->getMessage(); }
?>
form method="post" action="">
Userid must contain eight or more characters.<br/>
Password must contain at least one number, one uppercase and lowercase letter, and at least
8 total characters.<br />
Username: <input type="text" pattern=".{8,}" title="Userid must contain eight or more
characters." name="username" id="username" required/><br />
Password: <input type="password" pattern="(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,}"
title="Password must contain at least one number, one uppercase and lowercase letter, and at
least 8 total characters."
name="password" id="password" required /><br />
<input type="submit" value="Login">
</form>

```

In Example 7-4, an if statement checks the current date/time with the date/time saved in `datestamp`. If the current date/time is more than 30 days beyond the value in `datestamp`, the password change (`changepassword`) program is called. The next if statement determines if the user has had fewer than three invalid attempts to log in, and it has been more than five minutes since the last attempt. If this is the case, the PHP method `password_verify` will compare the password entered by the user with the password contained in the XML file. If the passwords match, the `validattempts` value will be updated with the date/time, the attempts will be reset to 0, and the user ID and password will be saved in session variables. The changes to the XML file are then saved. In addition, the user login is recorded in the log file. If the passwords do not match, the `lastattempt` value is updated with the current date/time.

Since a valid login or an expired password will cause the application to redirect to a different program with the PHP header method, the program will only drop to the last if statement if the user ID and password combo is not valid, or if there have been too many attempts in five minutes. When this occurs, the "invalid /password" message is displayed, and the number of attempts is increased by 1. The changes to the XML file are then saved. The program will then continue to display the user ID and password boxes with the "invalid userid/password" message. As noted, even a valid user ID/password combo that's been entered in five minutes or three or more invalid entries (sequentially) is rejected.