

CS 375 - UNIX System Programming

Fall 2015 - Project 4

30 points

Out: October 15, 2015

Due: October 22, 2015 (Thursday)

Problem Statement

Many websites and mobile applications require the registration of a userid and a password. Keeping track of all these userids and passwords has become difficult. We would like a program that keeps track of a user's Internet accounts and passwords.

Assignment

Write a password keeper program in PHP. The source file should be named **pwkeep.php**. (That is, the command "**php pwkeep.php**" should run your program. Additional files are allowed.) There are four pieces of information stored for each account: url, userid, passwd, and a one-line comment (that may be blank). All data is to be stored in one or more files. The file (or files) should be stored in a directory named **.pwkeep** (notice the leading period in the directory name) under the user's **home** directory. You may use any file name(s) you choose.

Your program should do the following:

- the first time the program is used, prompt the user to set a password
- thereafter, prompt the user for a password before displaying any information
- allow the user to enter a url and then display all information corresponding to that url
- allow the user to add, replace and delete entries based on url
- allow the user to list all entries
- allow the user to search all entries for a provided string in any of the fields and display all matching entries
- allow the user to import and export all password data using the text file format given below

The choice of which action to take may be obtained interactively or via the command line.

You are free to develop your own file format (an encrypted format is preferred) and directory structure for storing the password data. However your program must use the following specified text file format for importing and exporting password data.

PWTEXT 3

```
url=gmail.com
userid=freddy
passwd=pebbles
comment=Gmail Account
```

```
url=slatestone.com
userid=fflintstone
passwd=dino01
comment=Office Domain Account
```

```
url=mlb.com
userid=freddy@gmail.com
passwd=playball
comment=Major League Baseball
```

The first line contains the word **PWTEXT** and the number of entries in the file. Following the first line are all of the account entries with a blank line before each entry. The example above only contains three entries, but an arbitrary number of entries should be supported.

What to submit

- Provide a **README** text file explaining how to use your program.
- Create a tarfile or zipfile containing the program source file(s) and the **README** file.
- Submit your archive using the submission system (<http://submission.evansville.edu>). The grading script will check that the files **pwkeep.php** and **README** are submitted. It will not run the program.