

Homework #5

LabVIEW

Dr. Pogo

Assignment is due on Thursday, February 23, 2012

Assigned February 16, 2012

Assignment #5: File Read/Write & Dialogs

Inputs: A “Log in” button, a “Log out” button, a “Quit” button, a cluster of 7 radio buttons, an “Add User” button, and a “Delete User” button

Outputs: A “user ID” text indicator
“Logged In” and “Admin” indicator lights
A picture indicator

A current date and time indicator (including seconds)

Dialogs: Login & Password, ‘Really Quit?’, ‘Login Incorrect!’, ‘Really Logoff?’, ‘Nobody is logged in!’, ‘you are not an administrator!’, ‘__is already logged in!’, ‘__is already a user!’, ‘no such user!’, ‘Can’t delete yourself!’, ‘Password may not be blank!’, ‘User ID may not be blank’, ‘Delete successful!’.

Operation: SubVI filenames should indicate assignment number, author, and purpose (e.g., 05-PogoESubLogin.vi, 05-PogoESubAdd.vi, etc.).

Potential users login by pressing a “login” button, which opens a user ID/password dialog box. The login dialog should initialize blank every time it is used. Typed password characters should appear as asterisks ‘*’ (see text control properties...). The dialog box should have an option to cancel. The user may not attempt to enter multi-line ID’s or passwords. Only validated users can log out or set a radio button. The program should not allow a new user to log in until the prior user logs out (a dialog box should appear indicated that *username* is already logged in). The “log out” button should activate a dialog which also allows the user to cancel. The “Quit” button should activate an “Are you sure?” dialog. When the program starts, or when a user logs off, all buttons should initialize off, all text displays should be blank, and the picture should be blank.

When a user is logged in, their user ID should appear in the text box, and the “logged in” light should be on. A recognized user should be able to change the camera choice (and corresponding picture) using the radio buttons. A set of seven .jpg images are provided. The default camera selection should be “front door”. The picture title should change appropriately. Perhaps you can use the photos to help the police identify some miscreant who broke into Greene.

The program must use the provided CSV file (passlist.txt) to check whether a user ID/password pair is correct. This CSV file must be opened and then closed each time it is needed... you may not load all of the information into memory once at the beginning of the program. So, if I make changes to the CSV file while your program is running, these changes should be immediately available to your program.

Additionally, a user may be flagged as an administrator (and the corresponding light will come on when they are logged in). Administrators may choose to add or delete users from the list. New users must be given a password and are also permitted to be administrators. Administrators may not remove themselves from the list. You may freely use my “delete user” subVI. Make sure that the user may not ever accidentally attempt to enter a two-line ID or password.

Please note that there is an extra section on the grading sheet for this assignment

