

CSE 202 LAB 8

File I/O

In this laboratory, we are going to revisit the username-password problem by storing the usernames and passwords in a file. The file will consist of a single username and password per line with a space in between.

1. Create a class *PasswordFile* which has the following interface :

```
class PasswordFile
{
public:
    PasswordFile(string filename); // opens the file and reads the names/passwords in the vector entry
    void addpw(string u, string p); //this adds a new user/password to entry and writes entry to the file filename
    void delpw(string u); //this deletes the user u from the password file
    bool checkpw(string u, string p); // returns true if user exists and password matches
private:
    string filename; // the file that contains password information
    vector<string> user; // the list of usernames/passwords
    vector<string> password; // the list of usernames/passwords
};
```

The constructor accepts a filename, and reads the file one-line at a time and adds values to the vectors. The function addpw adds a user/password, and the function delpw deletes a user.

2. Now create a password.txt file with some entries such as :

```
jsmith turtle
madams apple
```

Also create a main program to test your classes :

```
int main()
{
    PasswordFile passfile("password.txt");
    passfile.addpw("dbotting","123qwe");
    passfile.addpw("egomez","qwerty");
    passfile.addpw("tongyu","liberty");
    // write some lines to see if passwords match users
}
```