

Specifications for Invoice Upload System - Phase 1

This project consists of two parts which are InvoiceClient and Invoice Server. This document contains requirements of the InvoiceClient.

InvoiceClient application should be developed using c programming language. It is a console application (Windows or Linux). It has at least following user operations:

1. "Login" operation : ask the user for the user id and password.
 - ☐ Step 1.1: "Enter User Id":
 - ☐ Step 1.2: "Enter Password"
 - ☐ Step 1.3: You are **required to use** sqlite to reach the "users" table in the database. The filename of the database is "upload_system.db". The "users" table must have at least "Id", "NameSurname", "Password" columns.
 - ☐ In this step, the user is searched in the database where the search criteria for "id" column is equal to "id" entered.in Step 1.1.
 - ☐ Step 1.4: If user is found and user id and password matches, jump 1.4.a, otherwise jump 1.4.b
 - ☐ Step 1.4.a : Show "Login Succeeded" message for 2 seconds and jump step 5
 - ☐ Step 1.4.b : Show "Login failed" message for 2 seconds and jump step 1.1
 - ☐ Step 5: If Login is successful, you should insert a record in the "Audit" table by setting the "LoginTime" column.
- And, the application displays "Select Operation" menu as follows

```
User : [User Name Surname]
Select Operation
1 - Invoice List
2 - Logout
```

2. "Invoice List" operation : find the file names with extension of ".inv" in the directory.
 - ☐ The application displays the name of the files. Assume file names are {Hakan Uslu.inv, Ayse Yavuz.inv, Hızlı Ticaret.inv},then list would be shown as follows

```
Invoices
1 - Hakan USLU
2 - Ayse YAVUZ
3 - Hızlı Ticaret
...
...
n - Press ESC to return main menu
```

- ☐ If the user presses the ESC key, application returns to “Select Operation” menu
 - ☐ If the user presses a number, the number entered is searched in the list whose content is displayed on the screen..
 - ☐ If the number is found, the content of the corresponding file is printed on the screen for 10 seconds. Then, “Invoices” menu is shown again.
 - ☐ If the number is invalid, an error message like “record not found” is displayed for 2 seconds. Then, “Invoices” menu is shown again..
3. “Logout” : When the user selects “Logout”,
- ☐ The application returns to the initial step where “Enter User Id” is shown.
 - ☐ The “LogoutTime” column in the “Audit” table is updated.

Requirements for the project architecture:

- ☐ Project should have at least three source files and 2 header files : appMain.c, appUser.c, appUser.h, appInvoice.c and appInvoice.h.
- ☐ Source codes which manages Login and Logout operations should be in “appUser.c”
- ☐ Invoice related operations like listing invoices should be managed by “appInvoice.c”
- ☐ Select Operation menu which have sub-items of InvoiceList, and Logout should be displayed in main.c

When you finish all the implementation, you should check this file to match specifications with your client application. An example which shows items in the list are checked:

1. “Login” operation : ask the user for the user id and password.

 - ☒ Step 1.1: “Enter User Id”:
 - ☒ Step 1.2: “Enter Password”
 - ☒ Step 1.3: You are **required to use** sqlite to reach the “Users” table in the database. The filename of the database is “upload_system.db”. Users table must have at least “Id”, “NameSurname”, “Password” columns.

After each code change, clear the list, and check one by one again.