

Library Project

Specification Document

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System Introduction

Summary

This program is going to be based and presented as a real-term library system, which allows customers borrow and return books and magazines from the library.

Librarians (who are sysadmins) are also able to add and remove items from the library

Also the librarians will have access to the User Management System – where they could add/remove users and assign/edit roles of current users.

When the system is initialized there are 10 books and 5 journals,

Also there are 3 hardcoded users in the system :

<u>Username</u>	<u>Password</u>	<u>Role</u>
guy	library	Administrator
sela	sela123	Customer
user	Aa123456	Customer

because we are not keeping data in any database or external file, changes made to data (users being removed/added, books being borrowed etc) will be lost when we quit the program.

System Design

The program has six screens in total :

- **Login Page** – this is the Main page reformatted to be the main login page when the program starts.
In this page the user is greeted with a login screen to enter his appropriate credentials to login in to the library system.
If the user has entered admin username and password he will be transported to the **Permissions Page**.
If the user has entered customer username and password he will be transported to the **Customer Page**.
In case the user has entered wrong credentials or left fields empty, the system will notify the user via exceptions.
- **Permissions Page** – this will be the first post-login screen seen by the admin. It will give the librarian a choice to transfer either to the **User Management Page**, or to the **Library Management Page**, as well being able to sign out of the program or quit entirely.
- **Library Management Page** – this is the page Admins are transported to from the **Permissions Page**, here the admin will be able to see the list of books and journals (separated by a radio button indicating book or journal).
the administrator will be able to remove/add items in the library, as well search and filter out a specific item from the library.
In the list appearing on this page there are only 3 panes of indication of information about the list – the title, is it a book or journal, and is it borrowed. To be able to see more details about each individual item there is a button that navigates to an **All Details Page**.

- **User Management Page** – this page is only accessible to admin via the **Permissions Page**. here the admins have access to add, edit or remove users from the library system, they can choose the user name and password for each user, his password and role (admin or customer). There is also a back button to return to the **Permissions Page**.
- **Customer Page** – this is the page the customer is transported to from the **Login Page**, here they can get a detailed view of the list of items that are present in the library, return or borrow items, search for a specific title in the library, clear the list parameters entered, and go back to the **Login Page**.
Pressing on the button to show all details will transport the user to the **All Details Page**. he can return back to this page by pressing back there.
- **All Details Page** – this page has only one purpose – to display the full details of every item - name, author, ISBN, publishing year, copy number, category (of either book or journal), the type of journal (daily, weekly or monthly).