SILLIMAN UNIVERSITY MECHANICAL ENGINEERING LABORATORY EQUIPMENT BORROWER

A developed project in compliance to the requirements of

Computer Engineering 50 – Software Engineering

by

MARK VINCENT TY

MARK PHILIP HINAUT

MARC ANGELO CORITICO

ANGELO CARL TOLEDO

User's Manual

Introduction

The Silliman University Mechanical Engineering (SUME) Borrower Application is a software designed to manage the borrowing of laboratory equipment in the university's Mechanical Engineering Laboratory.
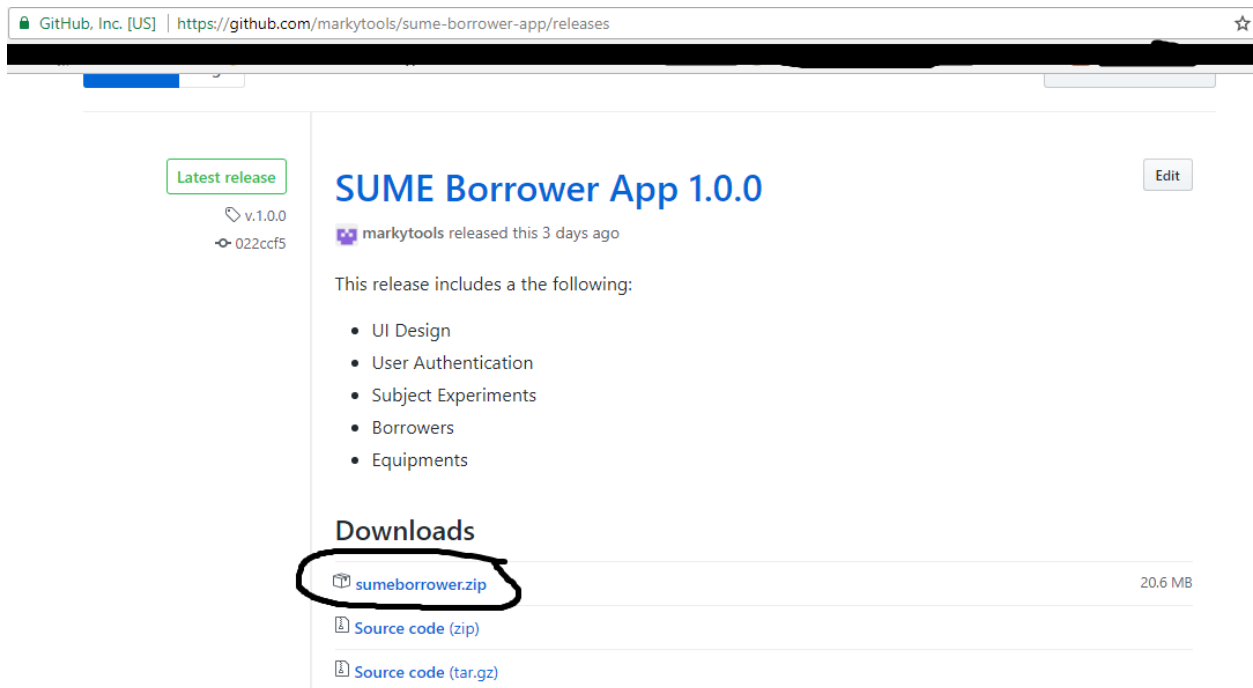
Features:

- Manage Laboratory Equipment
- Manage Equipment Borrowers
- Add Subject Experiment Equipment
- Export Borrower Info to Excel
- User Authentication

Download and Install

The SUME Borrower App is currently being maintained in a GitHub repository called "sume-borrower-app". It can be accessed by downloading the release version of the following GitHub URL:

https://github.com/markytools/sume-borrower-app/releases.

The release is a zip file. By extracting the zip file, the whole program, along with the .exe file, is included along inside it. Just run the .exe file and everything is good to go.

Login

This is the first interface that appears after executing the program. To log in, the user must input the correct username with a corresponding password. By default, the username is "silliman" and the password is "password". Upon successful login after clicking the "Login" button, the user is sent to the main menu. The user may also change password by clicking on the "Change Password" button, sending the user to the interface where the password may be changed.

Change Password

Here, the user is able to change the password of the account. Upon clicking submit – if the username and the old password matches – the user's password is changed into the password written in the "New Password" field. Clicking "Back" returns to the login page.
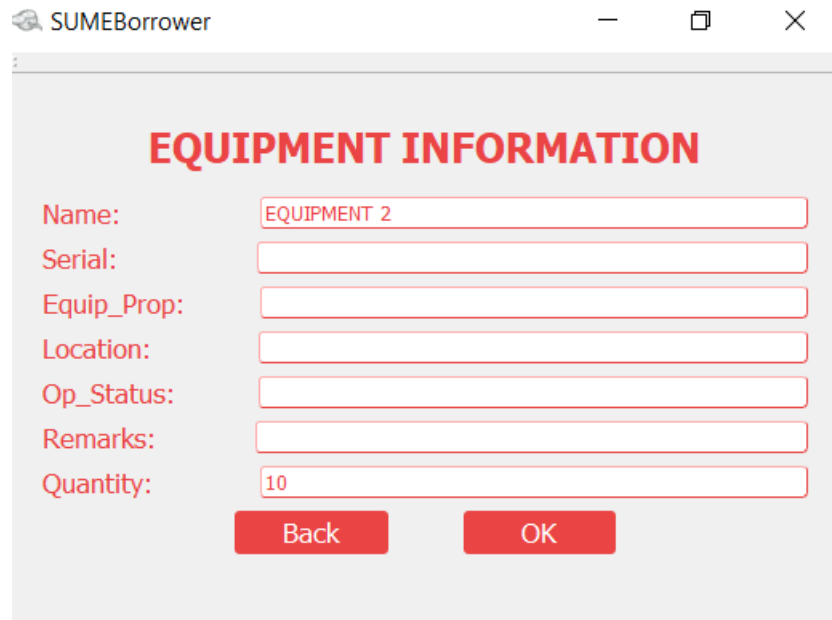
Main Menu

This is the main menu interface that displays after the user has successfully logged in.

Equipment

	QUANTITY	EQUIPMENT NAME	TIMES BORROWED	SERIAL TAG	EQUIPMENT PROPERTY	OPERATIONAL STATUS	LOCATION
1	10	EQUIPMENT 3	0				
2	10	EQUIPMENT 2	0				
3	10	EQUIPMENT 1	0				

LIST OF EQUIPMENTS

Back	Remove Equipment	Remove All	Edit	Add

This is the interface that appears if the equipment option is clicked in the main menu. The user is able to remove an equipment, remove all equipment, add an equipment, or edit an equipment's details.
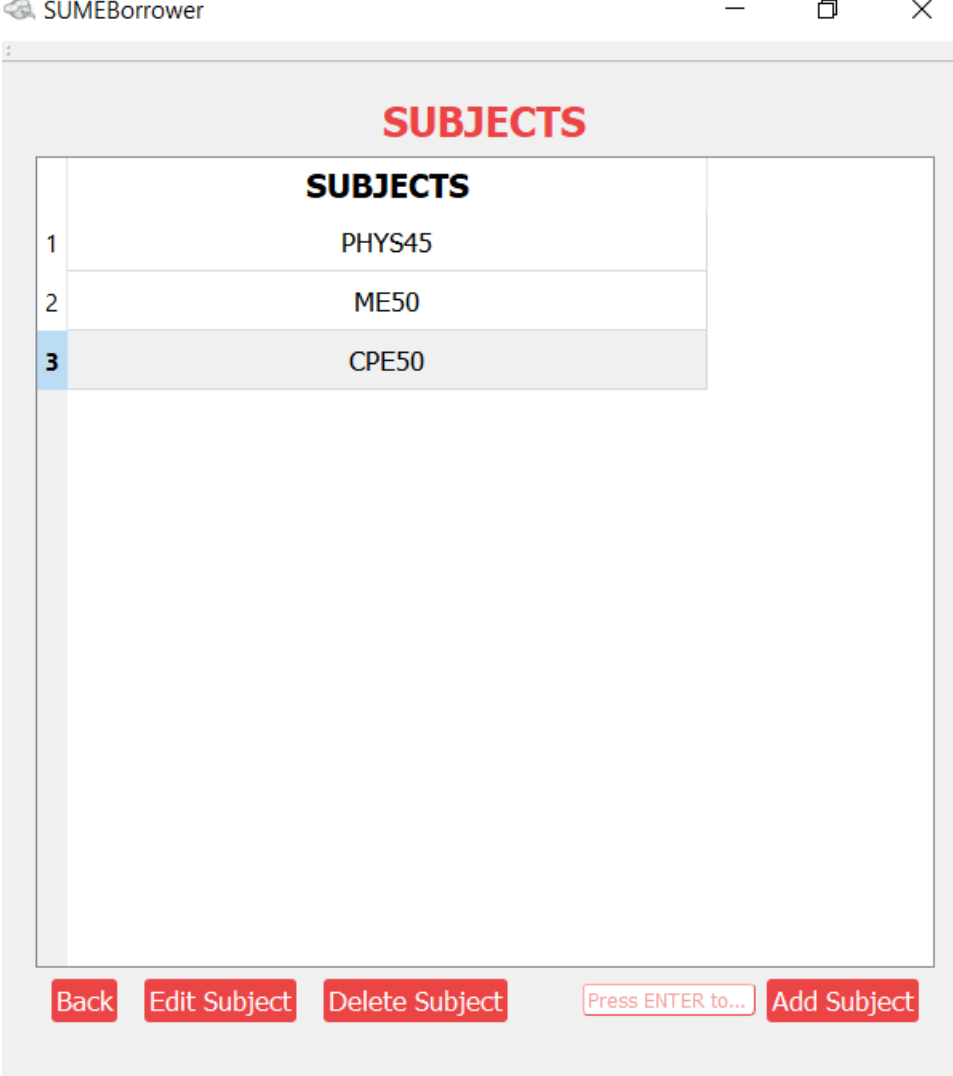
Add/Edit Equipment

The user is able to view and edit an equipment's details here. Clicking "Add Equipment" in the Equipment interface also brings to this same interface. If "Edit Equipment" was clicked, the "Name" field is automatically set to read-only and only the other fields may be edited.

Subjects

This is the interface that appears if the subjects option was clicked in the main menu. A list of subjects will appear. The user may add, delete, or edit a subject. To add, the user must input the name of the subject in the field provided then press the Enter button or click "Add Subject".

Edit Subject

This is the interface that appears when "Edit Subjects" is clicked from the subjects interface. The experiments of the subject are shown here. The user may add or delete an experiment, similar to how a subject can be added or deleted. Furthermore, the user may also determine the equipment that the specific experiment will need. This is done by selecting certain equipment from the "List of Equipment" table and then transferring them to the "Experiment Equipment" table. Doing this will serve the filtering of the list of equipment in the Borrow Equipment section.

Borrowers

This is the interface that appears when "Borrow" is selected from the main menu. A list of borrower groups is displayed. Clicking "Info" will view the information of a specific borrower group. Clicking "Add" will send the user to a set of interfaces which serves as the process of adding a borrower group.

Borrowing Details

This is the interface that appears when "Add" is clicked from the Borrower interface. This is the first step of the borrowing process. Here, the user can add a list of students by typing their names and clicking "Add" and can delete them by highlighting their names in the list and clicking "Delete". Afterwards, the user will have to fill in the other details before being able to proceed to the next process. The "End" field is automatically disabled. If the user determines that there should be an end time of the borrowing of equipment by clicking on the checkbox provided, the "End" field is enabled and the user can set the date and time that the equipment are to be returned.

Borrow Equipment
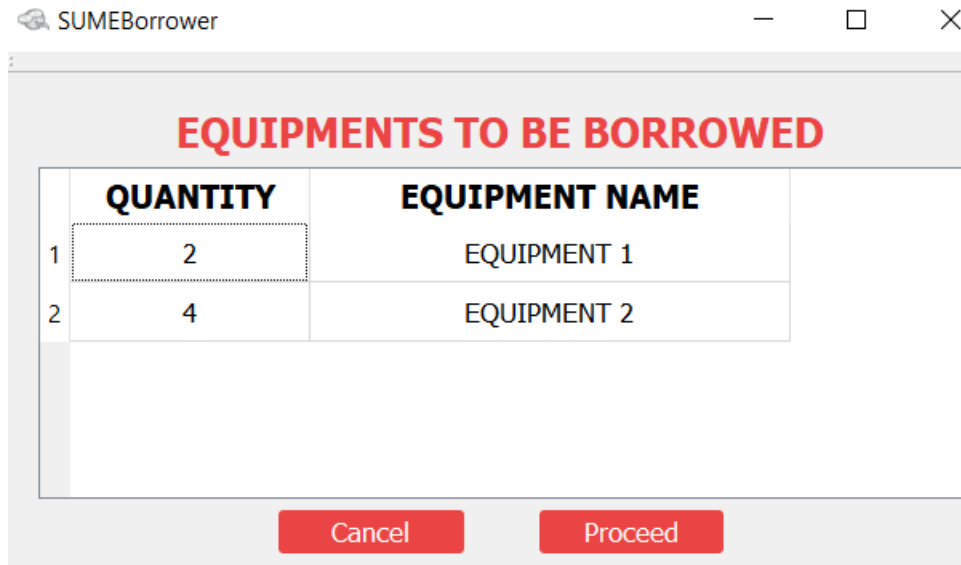

This is the second step of the borrowing process. The "Subjects" and the "Experiments" tables are for filtering purposes of the "List of Equipment" table. Once a subject and an experiment is highlighted, the user can make use of the "Add Filter" button. Upon clicking it, the "List of Equipment" table is automatically filtered by the search field below it through the codeword "subjectname@experimentname". If the search field is left blank, the list will show all the equipment in the inventory. The user is then able to determine the number of equipment and pieces of the equipment the borrower group can borrow.

Borrow Confirmation

This is the third and final step of the borrowing of equipment. A final confirmation is displayed to the user. Upon clicking "Proceed" a new borrower group is created and the user is sent back to the borrower page where a list of borrower groups is shown.

Borrower Information

       This is the interface that appears when "Info" is clicked from the borrower interface. This interface shows the full details of the borrower group: the students, the equipment borrowed, and other necessary details. Clicking "Export To Excel" opens up Microsoft Excel with a pre-made table containing the details of the borrower group. The "Delete Borrower" button is automatically disabled. If the user knows that the equipment is returned, the user may click on the checkbox on the rightmost of the equipment field. If all equipment is returned the "Delete Borrower" button is enabled. Upon clicking the button, the borrower group is deleted and the user is sent back to the borrower page where a list of borrower groups is shown.

MECHANICAL ENGINEERING LABORATORY BORROWER SLIP

Subject: CPE 50   Section: A

Borrower/Group: GROUP 1   Start Date/Time: 2017-10-18 03:09:34 PM

Adviser/Instructor: ENGR. DIPUTADO   End Date/Time:

Students	Equipment	Quantity	Remarks
ANGELO	EQUIPMENT 1	2	✓
MARK	EQUIPMENT 2	1	
PHILIP			
MARC			

Mechanical Engineering Department, Charles Bachelor Building, Silliman University, Dumaguete, Negros Oriental

Instructor's Signature

This is the display of the Microsoft Excel file when "Export to Excel" is clicked from the "Borrower Information" interface. A checkmark determines that the equipment is returned.