

Fusion Systems

A system to accelerate and enhance all work-related functions.



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1. Introducing to Fusion System

1.1. Who Should Use This Application

Burdick gym is a gym established to meet the fitness and health of over twenty-thousand students, faculty and their guests. It provides a multitude of departments for members to participate in and also allows use of a variety of equipment to be rented and used.

In order to meet the demands of the students and faculty of Towson University staff needs to be able to quickly determine between members of the gym and non members. Staff also needs to be able to check available equipment and rent it out to users of the gym.

Fusion Systems provides an interface that allows gyms to fully accomplish those goals and much more. While keeping a maintained history of interactions of gym users and the gym.

1.2. Who Should Use This Guide

This guide is designed for staff users who are not familiar with fusion systems software. This software will teach the basics of the systems such as logging in and adding equipment. The function will also show the difference views and features for different roles.

2. Key Features

2.1. Key Features for Staff Users

- Login to the system / Log out of the system
- Add Users to the System
- Insert/Delete Users in System
- Update Users status (Date of Birth, Phone#,...) to the System
- Keep track of Users Table
- Keep track of Equipment Rental/Checked-in Date
- Keep track of Guests

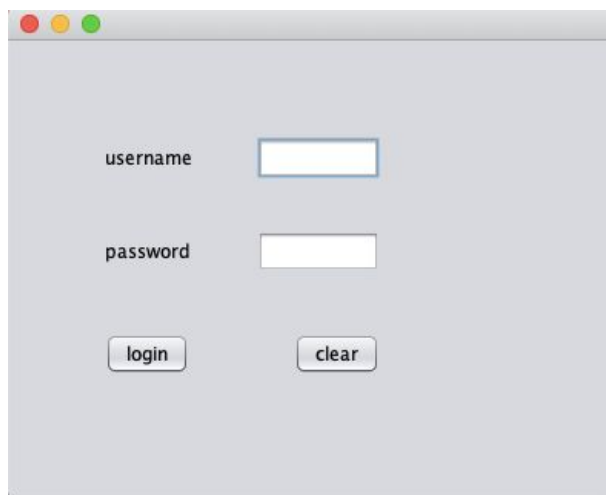
2.2. Key Features for Supervisor Users

- Login to the system / Log out of the system
- Provide information for Departments
- Keep track of Department Table
- Insert/Delete Staff in System
- Choose a Users to be a Staff
- Observe Work Hours, CPR certification, and Salary of Staffs who work in Supervisor's Department
- Keep track of Staffs' activities on the system

3. Staff Users - A Guided Tour

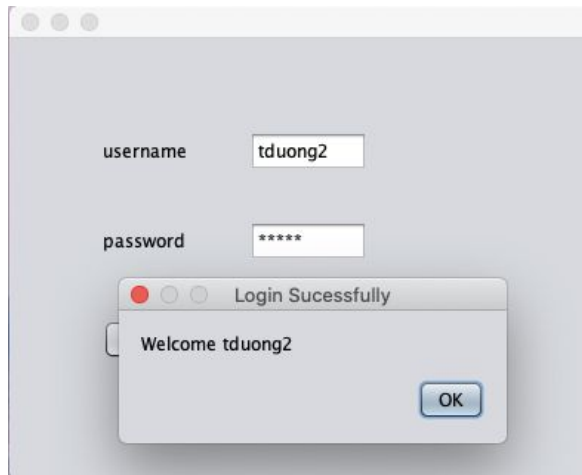
3.1. Log In

When The app is running, users will see a Login window (Figure 1), which requires users to enter a valid username and password to access the system. The username and password were stored in the database already and then given to each staff.



(Figure 1)

When users enter the correct username and password, the system will send a welcome message after the **“login”** button was clicked (Figure 2). In case users want to re-enter the login requirements, the “clear” button would help them.



(Figure 2)

When the users login successfully, the Staff Users Interface will appear on the screen (Figure 3)

A screenshot of a window titled 'Users Information'. The window has a title bar with three buttons (red, yellow, green). The main area contains a form with several input fields: 'First Name', 'Last Name', 'ID', 'DOB', 'Address', 'Phone#', and 'Status'. Each field has a corresponding label to its left. To the right of the 'Phone#' field is a button labeled 'View Table'. At the bottom of the window, there are five buttons: 'save', 'clear', 'back', 'next', and 'logout'.

(Figure 3)

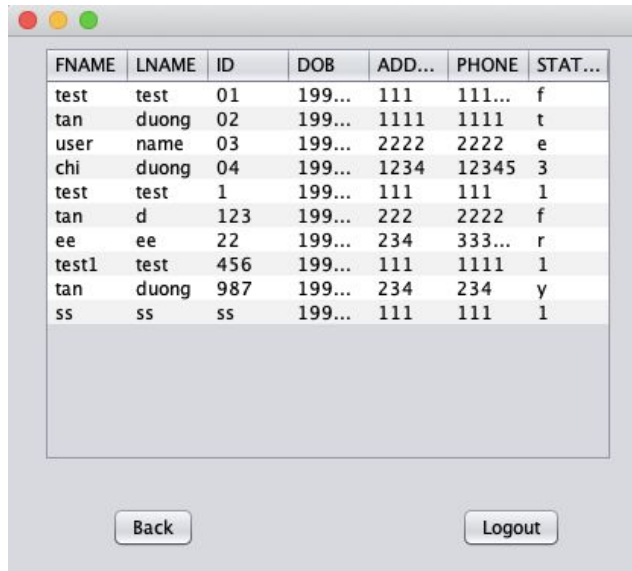
From Figure 3, the Staff Users Interface can be described as a form, which is titled “Users Information”:

- The Field texts, where Staff put the information (name, phone#,...) of new Users in
- **“Save”** button - for save the information after Staff enter all the required field
- **“Clear”** button - in case Staff want to refresh the form and re-enter from the beginning
- **“Back”** button - turn back to the Staff Information form (will be discussed later)
- **“Next”** button - go to “User Display Information” (will be discussed later)
- **“View Table”** - to see a data table of all information of the Users

The form have 7 text fields (first name, last name, ID, Date Of Birth, Address, Phone #, and Status) respectively.

3.2. Manage Users

First, click “**View Table**” to see what were stored in the table of users (Figure 4)



FNAME	LNAME	ID	DOB	ADD...	PHONE	STAT...
test	test	01	199...	111	111...	f
tan	duong	02	199...	1111	1111	t
user	name	03	199...	2222	2222	e
chi	duong	04	199...	1234	12345	3
test	test	1	199...	111	111	1
tan	d	123	199...	222	2222	f
ee	ee	22	199...	234	333...	r
test1	test	456	199...	111	1111	1
tan	duong	987	199...	234	234	y
ss	ss	ss	199...	111	111	1

Back Logout

(Figure 4).

Doing this would help Staff easier to keep track of the data that they want to put in later. After viewing Users Data Table, click “**back**” to turn back to the form and start entering data.

(Figure 5).

The screenshot shows a web application window titled "Users Information". It contains several input fields: "First Name" with the value "Dylan", "Last Name" with "Bassich", "ID" with "246", "DOB" with "1993-11-06", "Address" with "8000 YorkRd", "Phone#" with "098765431", and "Status" with "Y". There is a "View Table" button to the right of the "Status" field. At the bottom, there are five buttons: "save", "clear", "back", "next", and "logout".

(Figure 5)

After filling in all required fields and checking them carefully, click **“Save”** to save data (Figure 6).

Now, click on **“View Table”** again to check if all the correct data are stored (Figure 7).

This screenshot is similar to Figure 5, but it includes a "Message" dialog box in the bottom right corner. The dialog box has a blue information icon and the text "insertion sucessful" (note the misspelling of "successful"). There is an "OK" button in the bottom right of the dialog box. The "Users Information" form is partially visible behind the dialog box.

(Figure 6)

FNAME	LNAME	ID	DOB	ADD...	PHONE	STAT...
test	test	01	199...	111	111...	f
tan	duong	02	199...	1111	1111	t
user	name	03	199...	2222	2222	e
chi	duong	04	199...	1234	12345	3
test	test	1	199...	111	111	1
tan	d	123	199...	222	2222	f
ee	ee	22	199...	234	333...	r
Dylan	Bassich	246	199...	800...	098...	Y

(Figure 7)

We can notice that the user named “Dylan Bassich” was stored successfully on the data table. Now click the “**Back**” button under the table to return to the Users Information Form. The form should be automatically cleared. Click “**Next**” to go to the Users Display information form (Figure 8).

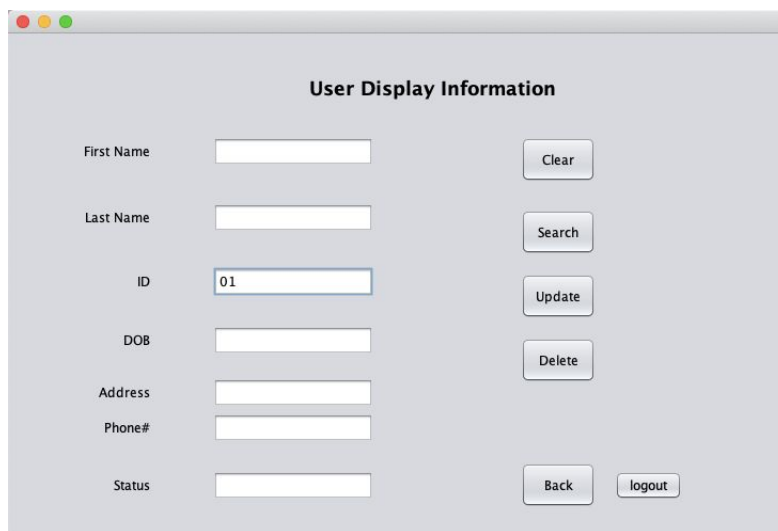


The image shows a web application window titled "User Display Information". It contains a form with the following fields and controls:

- First Name:** A text input field with a "Clear" button next to it.
- Last Name:** A text input field with a "Search" button next to it.
- ID:** A text input field with an "Update" button next to it.
- DOB:** A text input field with a "Delete" button next to it.
- Address:** A text input field.
- Phone#:** A text input field.
- Status:** A text input field.
- Navigation:** At the bottom right, there are two buttons: "Back" and "logout".

(Figure 8)

If the last form is to put information on the table, this form helps Staff to work with the table. On the right side, next to text fields are buttons for the users to interact with. For example, if the Staffs want to search a user with his/her id = 01, then just type “01” to the text field which represents the ID attribute (Figure 9).



The image shows a web application window titled "User Display Information". It features a form with the following fields and buttons:

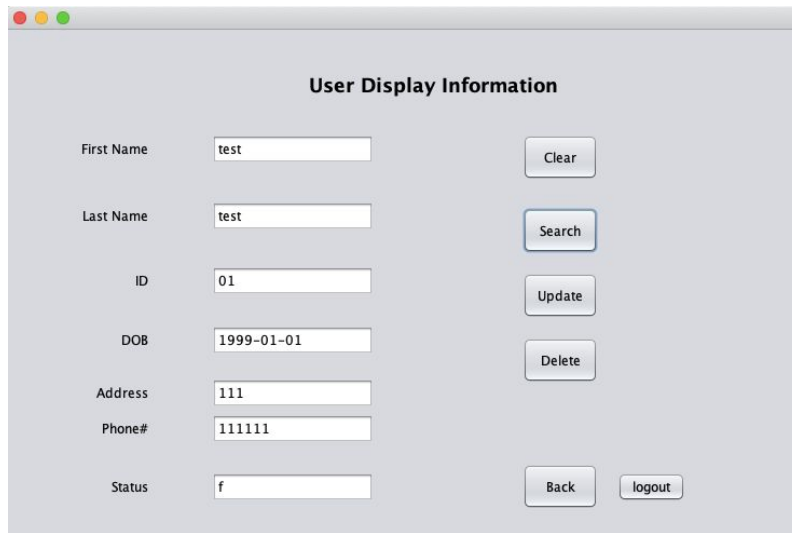
- First Name:
- Last Name:
- ID:
- DOB:
- Address:
- Phone#:
- Status:

Buttons on the right side of the form:

- Clear (next to First Name)
- Search (next to Last Name)
- Update (next to ID)
- Delete (next to DOB)
- Back (next to Status)
- logout (bottom right)

(Figure 9)

Then, click “**Search**”, and every corresponding information would be filled (Figure 10).

A screenshot of a web application window titled "User Display Information". The window has a light gray background and a standard macOS-style title bar with red, yellow, and green buttons. The form contains several input fields and buttons. On the left, there are labels for "First Name", "Last Name", "ID", "DOB", "Address", "Phone#", and "Status". To the right of each label is an input field. The "First Name" field contains "test", "Last Name" contains "test", "ID" contains "01", "DOB" contains "1999-01-01", "Address" contains "111", "Phone#" contains "111111", and "Status" contains "f". To the right of the input fields are several buttons: "Clear" (next to First Name), "Search" (next to Last Name), "Update" (next to ID), "Delete" (next to DOB), "Back" (next to Status), and "logout" (at the bottom right).

User Display Information		
First Name	test	Clear
Last Name	test	Search
ID	01	Update
DOB	1999-01-01	Delete
Address	111	
Phone#	111111	
Status	f	Back
		logout

(Figure 10)

If there is a mistake in the information that is already stored, Users can fix it by: 1. Search this information by using ID; 2. Fix the information; 3. Click **“Update”**. For example, changing the name “Dylan Bassich” to “Ryan Bassich”

1. Search for “Dylan Bassich ” by using ID 246 (Figure 11-12)

A screenshot of a web application window titled "User Display Information". The window has a light gray background and a standard macOS-style title bar with red, yellow, and green buttons. The form contains several input fields and buttons. The fields are labeled "First Name", "Last Name", "ID", "DOB", "Address", "Phone#", and "Status". The "ID" field contains the value "246". To the right of the fields are buttons labeled "Clear", "Search", "Update", "Delete", "Back", and "logout".

Field	Value
First Name	
Last Name	
ID	246
DOB	
Address	
Phone#	
Status	

(Figure 11)

A screenshot of the same "User Display Information" web application window, but now with the fields populated with data. The "First Name" field contains "Dylan", "Last Name" contains "Bassich", "ID" contains "246", "DOB" contains "1993-11-06", "Address" contains "8000 YorkRd", "Phone#" contains "098765431", and "Status" contains "Y". The buttons "Clear", "Search", "Update", "Delete", "Back", and "logout" are still present.

Field	Value
First Name	Dylan
Last Name	Bassich
ID	246
DOB	1993-11-06
Address	8000 YorkRd
Phone#	098765431
Status	Y

(Figure 12)

2. Change "Dylan" to "Ryan" (Figure 13)
3. Click **"Update"**. If the message said "Updated", the information was changed on the table (Figure 14-15)

User Display Information

First Name	<input type="text" value="Rylan"/>	<input type="button" value="Clear"/>
Last Name	<input type="text" value="Bassich"/>	<input type="button" value="Search"/>
ID	<input type="text" value="246"/>	<input type="button" value="Update"/>
DOB	<input type="text" value="1993-11-06"/>	<input type="button" value="Delete"/>
Address	<input type="text" value="8000 YorkRd"/>	
Phone#	<input type="text" value="098765431"/>	
Status	<input type="text" value="Y"/>	<input type="button" value="Back"/> <input type="button" value="logout"/>

(Figure 13)

User Display Information

First Name	<input type="text" value="Rylan"/>	<input type="button" value="Clear"/>
Last Name	<input type="text" value="Bassich"/>	<input type="button" value="Search"/>
ID	<input type="text" value="246"/>	<input type="button" value="Update"/>
DOB	<input type="text" value="1993-11-06"/>	
Address	<input type="text" value="8000 YorkRd"/>	
Phone#	<input type="text" value="098765431"/>	
Status	<input type="text" value="Y"/>	<input type="button" value="Back"/> <input type="button" value="logout"/>

Message

 Updated

(Figure 14)

FNAME	LNAME	ID	DOB	ADD...	PHONE	STAT...
test	test	01	199...	111	111...	f
tan	duong	02	199...	1111	1111	t
user	name	03	199...	2222	2222	e
chi	duong	04	199...	1234	12345	3
test	test	1	199...	111	111	1
tan	d	123	199...	222	2222	f
ee	ee	22	199...	234	333...	r
Rylan	Bassich	246	199...	800...	098...	Y

(Figure 15)

If the information is not necessary for the system, Staff can delete it by using the “**Delete** button”. Just search for the data by ID first, then click “**Delete**”. The message “Deleted” tells that the data is no longer on the table.

User Display Information

First Name:

Last Name:

ID:


DOB:

Address:

Phone#:

Status:

Message

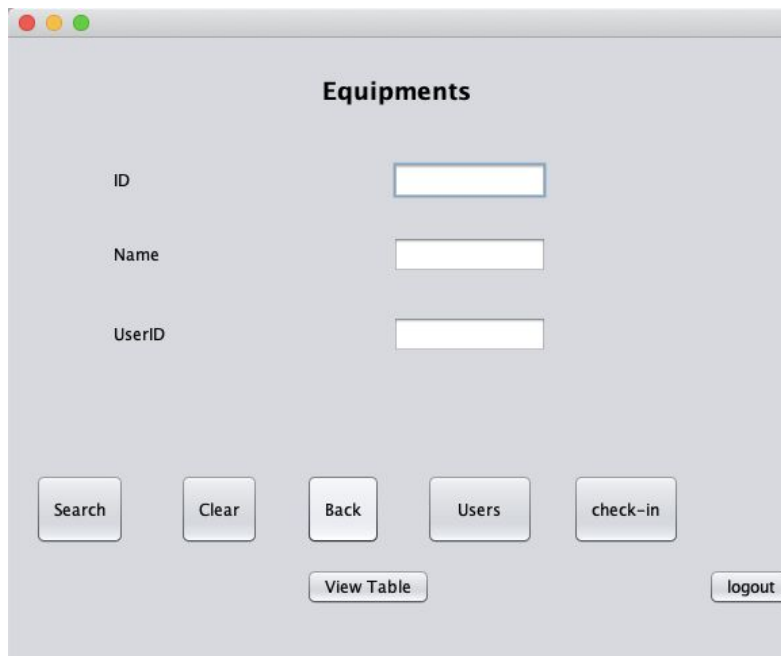
 deleted

FNAME	LNAME	ID	DOB	ADD...	PHONE	STAT...
test	test	01	199...	111	111...	f
tan	duong	02	199...	1111	1111	t
user	name	03	199...	2222	2222	e
chi	duong	04	199...	1234	12345	3
test	test	1	199...	111	111	1
tan	d	123	199...	222	2222	f
ee	ee	22	199...	234	333...	r
test1	test	456	199...	111	1111	1
tan	duong	987	199...	234	234	y
ss	ss	ss	199...	111	111	1

(Figure 16-17: Delete a user)

3.3 Manage Equipment

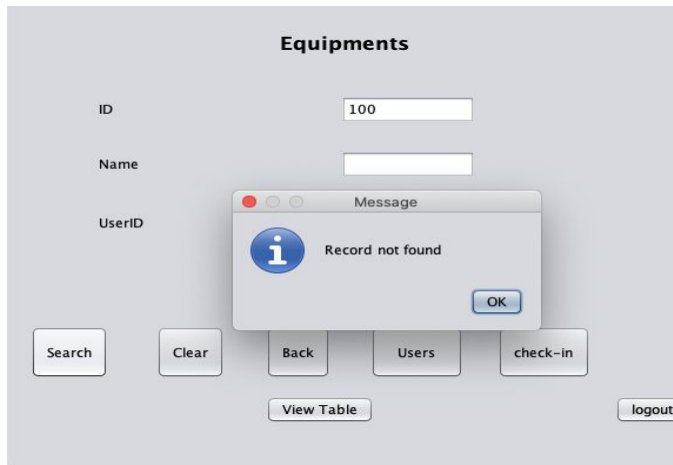
From the User Information Form, Click **“Back”** → **“Equipments”**. The window of equipments would appear on the screen (Figure 18)



The screenshot shows a window titled "Equipments" with a light gray background. At the top, there are three colored window control buttons (red, yellow, green). Below the title, there are three input fields labeled "ID", "Name", and "UserID" on the left, each with a corresponding empty text box on the right. At the bottom of the window, there are seven buttons: "Search", "Clear", "Back", "Users", "check-in", "View Table", and "logout". The "View Table" button is centered below the other buttons, and the "logout" button is at the bottom right.

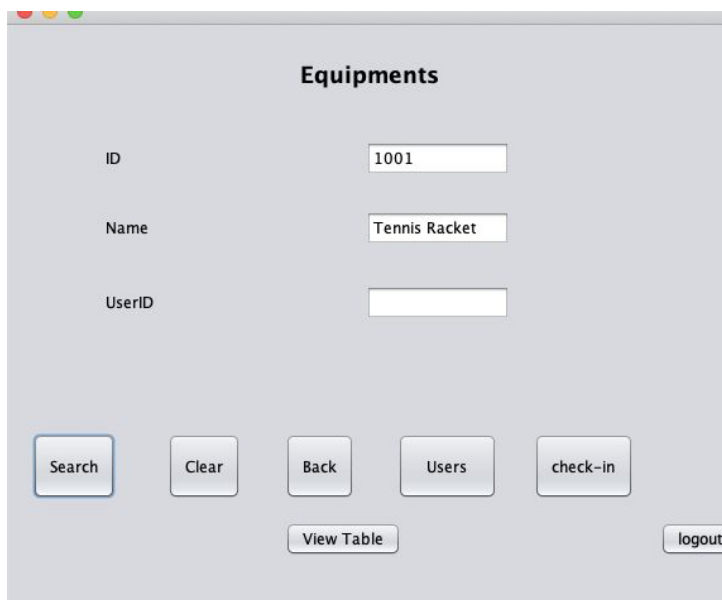
(Figure 18)

For Searching the equipment, enter ID, then click **“Search”**. Remember the wrong ID will return the “No record found” message (Figure 19).

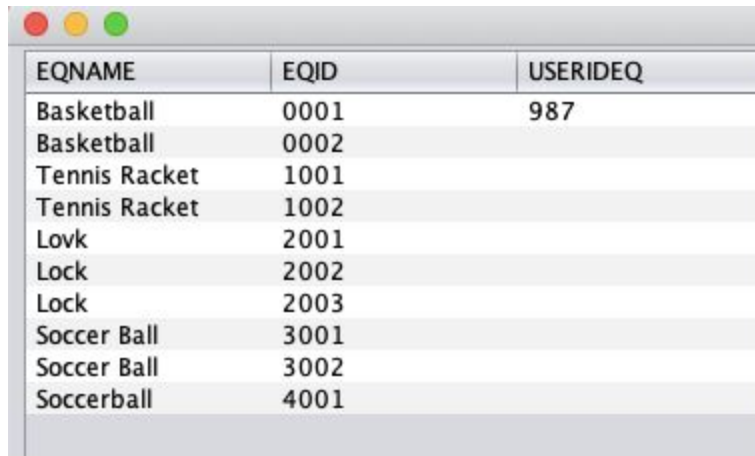


(Figure 19)

Example of successful searching of equipment (Figure 20) (The equipment name and optionally, the user ID will show up). Click on **“View Table”** to see the table of equipment also (Figure 21).



(Figure 20)

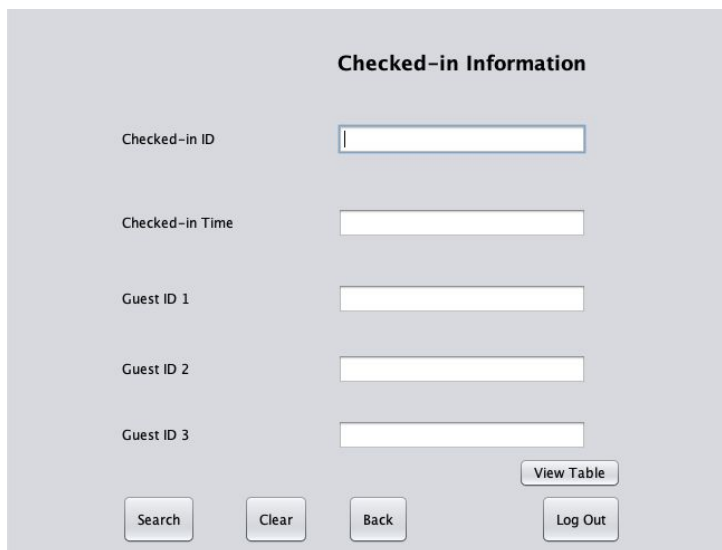


EQNAME	EQID	USERIDEQ
Basketball	0001	987
Basketball	0002	
Tennis Racket	1001	
Tennis Racket	1002	
Lovk	2001	
Lock	2002	
Lock	2003	
Soccer Ball	3001	
Soccer Ball	3002	
Soccerball	4001	

(Figure 21)

3.4 Manage Check-in

Click on the “**Check-in**” button on the right corner of the Equipment window. The Check-in Information form would appear on the screen (Figure 22).



Checked-in Information

Checked-in ID

Checked-in Time

Guest ID 1

Guest ID 2

Guest ID 3

(Figure 22)

Staff can keep track of the Check-in time by entering the Check-in ID and then click “**Search**”, or click on “**View Table**” to view the history of rental. The example of searching is show on Figure 23 (Success) and 24 (Error)

A screenshot of a web application window titled "Checked-in Information". The form contains five input fields: "Checked-in ID" with the value "01", "Checked-in Time" with the value "2020-01-01 15:15:15", "Guest ID 1" with the value "123", "Guest ID 2" with the value "456", and "Guest ID 3" with the value "789". At the bottom of the form, there are four buttons: "Search", "Clear", "Back", and "Log Out". A "View Table" button is located to the right of the "Guest ID 3" field.

(Figure 23)

A screenshot of the same "Checked-in Information" form. The "Checked-in ID" field now contains the value "1", and the "Checked-in Time" field is empty. A modal message box is overlaid on the form, displaying an information icon, the text "no record found", and an "OK" button. The "View Table" button is still visible to the right of the "Guest ID 3" field.

(Figure 24)

3.5. Log Out

Click the “**Logout**” button → The system is automatically turned back to the login form.

4. Supervisor Users - A Guided Tour

4.1 Login

Same as the 3.1

4.2 Manage the Staff Information.

Supervisors work on managing Staffs on the Staff Information window (Figure 25). Here, Supervisors can observe the Departments tables as well as keep track of the Staffs, and work on the Staff table. Supervisors can choose the staff from users by updating the staff.

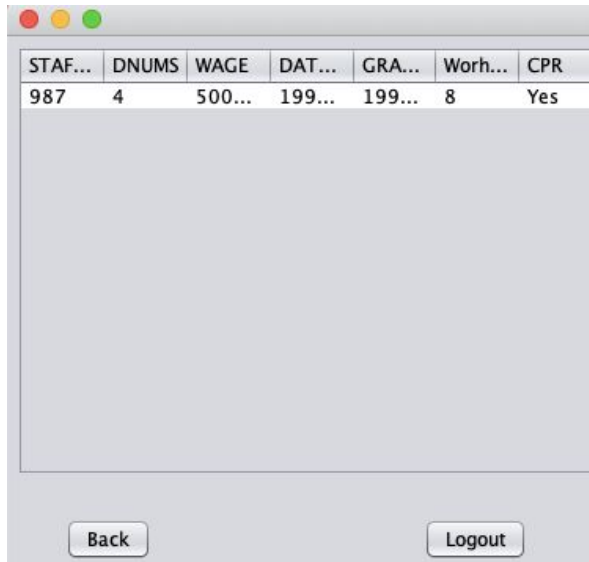


The screenshot shows a web form titled "Staff Information". At the top right is a "View Tables" button. The form contains several input fields: "ID" (text box), "Dept." (radio buttons for 1 through 6), "Wage" (text box), "Start Date" (text box), "Grad. Date" (text box), "Work Hours" (dropdown menu showing "4"), and "CPR Certificate" (radio buttons for "Yes" and "No"). To the right of the "Dept." radio buttons is a box titled "Departments:" containing a list: "1 - Facilities", "2 - Fitness", "3 - Aquatics", "4 - Marketing", "5 - Membership", and "6 - Outdoors". Below this list is a "Learn more about Dept." button. At the bottom of the form are several buttons: "Save", "Clear", "Next", "Equipment", "Users", and "logout".

(Figure 25)

Like a Users Information Form, Supervisors will enter all the information to the form, and click **“Save”** to store them in the table. First, Click on **“View Table”** to see what was stored already (Figure 26), then click **“Back”**, and start prompting the inputs

(Figure 27). After the form was filled, click **“Save”**, and wait for the message to say **“Insertion successfully”** (Figure 28). Then check a table again (Figure 29). To refresh the form, click **“Clear”**.



STAF...	DNUMS	WAGE	DAT...	GRA...	Worh...	CPR
987	4	500...	199...	199...	8	Yes

Back Logout

(Figure 26)



Staff Information

View Tables

ID: 01

Dept.: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

Wage: 30000

Start Date: 2020-12-01

Grad. Date: 2021-06-01

Work Hours: 8

CPR Certificate: ☒ Yes ☐ No

Departments:
1 - Facilities
2 - Fitness
3 - Aquatics
4 - Marketing
5 - Membership
6 - Outdoors

Learn more about Dept.

Save Clear Next Equipment Users logout

(Figure 27)

Staff Information View Tables

ID:

Dept: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

Wage:

Start Date:

Grad. Date:

Work Hours:

CPR Certificate: ☒ Yes ☐ No

Departments:
 1 - Facilities
 2 - Fitness
 3 - Aquatics
 4 - Marketing
 5 - Membership
 6 - Outdoors

[Learn more about Dept.](#)

Save Clear Next Equipment Users logout

Message

Insertion successful

OK

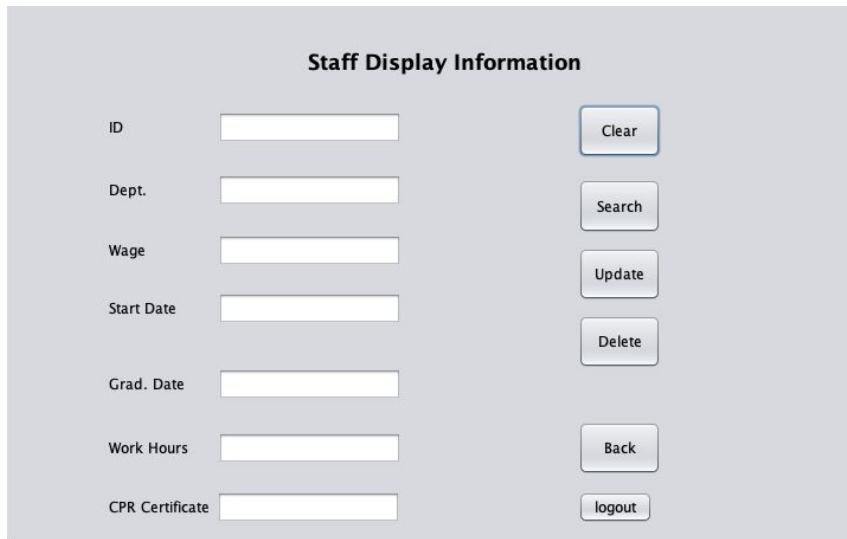
(Figure 28)

S...	...	WAGE	DATESTARTED	GRADDATE	W...	C...
01	2	30000.0	2020-12-01	2021-05-31	8	Yes
9...	4	5000.0	1999-01-01	1999-01-01	8	Yes

(Figure 29)

4.3 Managing Staff Table

Click **“next”** to see a Staff Display Information window (Figure 30).



The image shows a web form titled "Staff Display Information". It contains seven input fields on the left, each with a label: "ID", "Dept.", "Wage", "Start Date", "Grad. Date", "Work Hours", and "CPR Certificate". To the right of these fields are seven buttons: "Clear", "Search", "Update", "Delete", "Back", and "logout". The "Clear" button is positioned to the right of the "ID" field. The "Search" button is to the right of the "Dept." field. The "Update" button is to the right of the "Wage" field. The "Delete" button is to the right of the "Start Date" field. The "Back" button is to the right of the "Work Hours" field. The "logout" button is to the right of the "CPR Certificate" field.

(Figure 30)

Supervisors can manage the Staff table by using this form.

“Search” is for searching a specific Staff by typing his/her ID. For example, a supervisor knows one of the staff has ID “987”, and he/she wants to know more information about this staff. The **“Search”** would be a big help. (Figure 31-32 show how to use this)

Staff Display Information

ID	<input type="text" value="987"/>	<input type="button" value="Clear"/>
Dept.	<input type="text"/>	<input type="button" value="Search"/>
Wage	<input type="text"/>	<input type="button" value="Update"/>
Start Date	<input type="text"/>	<input type="button" value="Delete"/>
Grad. Date	<input type="text"/>	
Work Hours	<input type="text"/>	<input type="button" value="Back"/>
CPR Certificate	<input type="text"/>	<input type="button" value="logout"/>

(Figure 31)

Staff Display Information

ID	<input type="text" value="987"/>	<input type="button" value="Clear"/>
Dept.	<input type="text" value="4"/>	<input type="button" value="Search"/>
Wage	<input type="text" value="5000.0"/>	<input type="button" value="Update"/>
Start Date	<input type="text" value="1999-01-01"/>	<input type="button" value="Delete"/>
Grad. Date	<input type="text" value="1999-01-01"/>	
Work Hours	<input type="text" value="8"/>	<input type="button" value="Back"/>
CPR Certificate	<input type="text" value="Yes"/>	<input type="button" value="logout"/>

(Figure 32)

An “**Update**” button helps the Supervisors to fix mistakes of the staff’s information. For a example above, update Work Hours to 10 (Figure 34-34)

Staff Display Information

ID	<input type="text" value="987"/>	<input type="button" value="Clear"/>
Dept.	<input type="text" value="4"/>	<input type="button" value="Search"/>
Wage	<input type="text" value="5000.0"/>	<input type="button" value="Update"/>
Start Date	<input type="text" value="1999-01-01"/>	<input type="button" value="Delete"/>
Grad. Date	<input type="text" value="1999-01-01"/>	
Work Hours	<input type="text" value="10"/>	<input type="button" value="Back"/>
CPR Certificate	<input type="text" value="Yes"/>	<input type="button" value="logout"/>

(Figure 33)

Staff Display Information

ID	<input type="text" value="987"/>	<input type="button" value="Clear"/>
Dept.	<input type="text" value="4"/>	<input type="button" value="Search"/>
Wage	<input type="text" value="5000"/>	<input type="button" value="Update"/>
Start Date	<input type="text" value="1999-01-01"/>	
Grad. Date	<input type="text" value="1999-01-01"/>	
Work Hours	<input type="text" value="10"/>	
CPR Certificate	<input type="text" value="Yes"/>	<input type="button" value="logout"/>

i

Updated

(Figure 34)

Recheck the table, Work Hours changed to 10 (Figure 35)

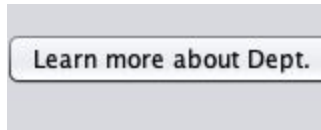
STAF...	DNUMS	WAGE	DAT...	GRA...	Worh...	CPR
01	2	300...	202...	202...	8	Yes
987	4	500...	199...	199...	10	Yes

(Figure 35)

To delete a staff, search this staff by ID (see page 18), and then click “**Delete**”. Then recheck a table to make sure that it was deleted.

4.4. Manage Departments

Click on “Learn more about Dept” to go to the Department's information window (Figure 36-37)



(Figure 36)

A form titled "Departments Information" with a light gray background. It contains three input fields: "Dept. Number", "Dept. Name", and "Supervisor". To the right of the "Supervisor" field is a "View Table" button. At the bottom of the form are four buttons: "Search", "Clear", "Back", and "logout".

Departments Information	
Dept. Number	<input type="text"/>
Dept. Name	<input type="text"/>
Supervisor	<input type="text"/> <input type="button" value="View Table"/>
<input type="button" value="Search"/>	<input type="button" value="Clear"/> <input type="button" value="Back"/> <input type="button" value="logout"/>

(Figure 37)

Supervisors can keep track of departments tables and Supervisors' ID here. To do that, enter the Department Number to the top field (from 1-6), then click “Search”, all the information will be showed up (Figure 38-39)

The screenshot shows a web form titled "Departments Information". It contains three input fields: "Dept. Number" with the value "3", "Dept. Name" which is empty, and "Supervisor" which is empty. To the right of the "Supervisor" field is a "View Table" button. At the bottom of the form are four buttons: "Search", "Clear", "Back", and "logout".

(Figure 38)

This screenshot shows the same "Departments Information" form, but with the input fields filled. The "Dept. Number" field contains "3", the "Dept. Name" field contains "Aquatics", and the "Supervisor" field contains "987". The "View Table" button remains to the right of the supervisor field. The bottom buttons "Search", "Clear", "Back", and "logout" are still present.

(Figure 39)

4.5 Log Out

(See content 3.5).