# careTrack.

Serving nursing homes to facilitate management

USER GUIDE

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# 1 Introducing the careTrack System.

## 1.1 Who Should Use This Application

The Nursing Home Database Management System is a crucial tool for improving efficiency and streamlining operations in nursing homes. Nursing homes give people in need essential care services; thus, it is critical for them to monitor staff and patient activity to ensure the best possible management and care.

Nursing homes must manage their resources properly, including staff time and patient care. Staff members may keep an eye on and examine different facets of the nursing home's operations thanks to the Nursing Home Database Management System, which functions similarly to a care-tracking system for assisted living facilities.

The CareTrack system provides an interface to this system from all users’ perspectives. The nursing home staff, which includes doctors, nurses, and management staff, is one of the main user groups of the Nursing Home Database Management System. Nurses oversee giving patients direct care. Doctors diagnose patients, write prescriptions, and examine medical records using this system, guaranteeing that every patient receives thorough and well-coordinated care. Management personnel oversee monitoring overall facility operations, deploying resources efficiently, and making well-informed decisions about patient care and staffing.

## 1.2 Who Should Use This Guide

This guide is designed for users of the Nursing Home Database Management System, particularly those who are new to the system and require assistance in navigating its functionalities. The primary user groups for this guide include:

- Doctors: This guide provides Doctors with instructions on how they can use the Nursing Home Database Management System from logging in to diagnose patients, prescribe medications, and review medical records, thereby ensuring comprehensive and coordinated care for each patient.
- Nurse: Nurses play a critical role in patient care delivery and rely on the Nursing Home Database Management System to input and update patient data, record medications and treatments administered, and communicate with other members of the healthcare team. This guide provides nursing staff with instructions on how to navigate the system, access patient records, document care activities, and collaborate with colleagues to deliver comprehensive and coordinated care.
- Management: This guide provides management with step-by-step instructions on how to log in to their accounts, access and update patient and staff information, manage room assignments, manage patient allowance and visits, and generate reports. Management Staff can utilize the Nursing Home Database Management System to effectively manage resources, ensure regulatory compliance, and make informed decisions to enhance the quality of care provided to patients.

For more detailed information on executing functions, users should consult the Use Cases booklet provided with the application.

# 2 Key Features

## 2.1 Features for Management

The following are key system functions available to users who are part of management in the Nursing Home:

- Log into the system / log out of the system.
- Add/ Edit patients, guests, and staff information from the database.
- Assign rooms to patients.
- Add/ Edit patient allowance.
- Add/Edit visit for guest.
- Search database

## 2.2 Features for Nurses

The following are key system functions available to users who are nurses in the Nursing Home:

- Log into the system / log out of the system
- Add/ Edit patients, guests, and staff information from the database.
- Edit personal information
- Assign themselves to/ treat certain patients
- Search database

## 2.3 Features for Doctors

The following are key system functions available to users who are doctors in the Nursing Home:

- Log into the system / log out of the system.
- Add/ Edit patients, guests, and staff information from the database.
- Edit personal information.
- Add/Edit Patient’s diagnosis.
- Add, update and manage medical conditions for patients.
- Add/Edit medications
- Search database

# 3 Management: A Guided Tour

This section teaches management users how to use the features of the careTrack System.

## 3.1 Login

Upon launching the application, users will see a login window (Figure 3.1.1) with input fields for username and password. To log in and access the careTrack System, users must enter a username and password and then click the "Log In" button.

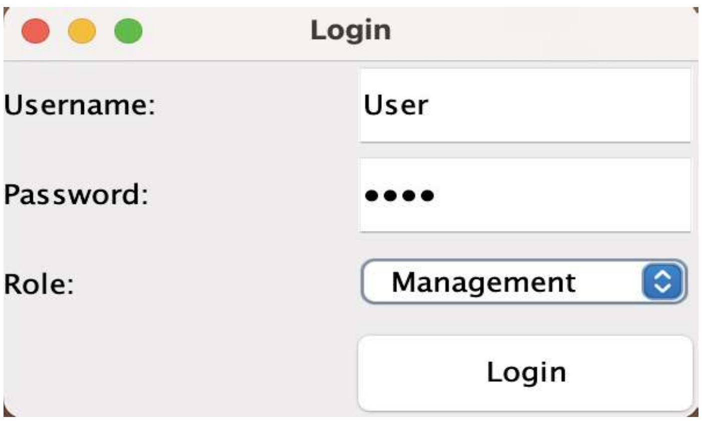



**Figure 3.1.1**

If the correct username and password combination is not entered, the system will notify the user by displaying an error message (Figure 3.1.2). The screenshot below displays the result of an unsuccessful attempt to log into the system.


**Figure 3.1.2**

If the user enters a valid username and password, the management interface appears on the screen (Figure 3.1.3).


**Figure 3.1.3**

## 3.2 Dashboard

These three tasks listed below can be found on the navigation bar on the dashboard for all eligible users.

The administrative interface is divided into four main sections:

1. The top navigational bar allows for management to search, create, delete, or update participants.
2. The right sidebar serves as a navigational bar for specific functions. On this side there are only actions that can be done by a member of management.
3. The main display area shows that user's information. It shows that participants personal information.
4. The footer area is a narrow strip along the bottom of the application window that contains the "Logout" button in the bottom right-hand corner.

Upon launching, the management interface always displays the currently logged in user's information which it pulls from the database.

(Figure 3.1.4) first since accessing patient personal information is one of the most common uses of management.

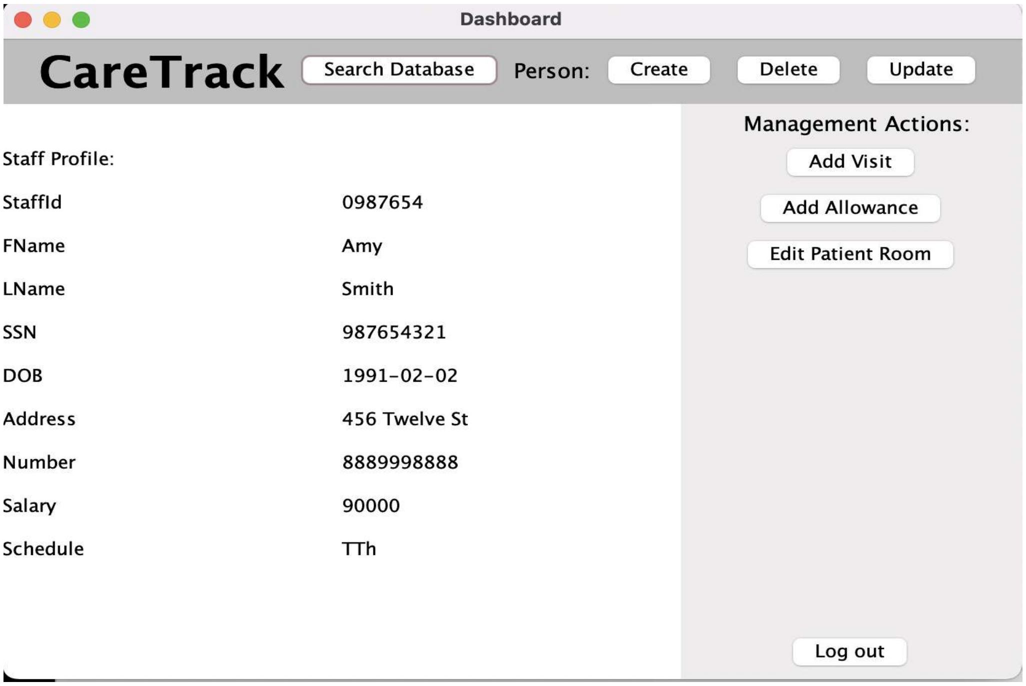



**Figure 3.2.1**

## 3.3 Search Database

The user can open the Search page by pressing the Search button next to the CareTrack logo in the header section of the Dashboard. The user can search for any person on the database using their ID and their Type. If the ID isn't known, the user can also just select a Person Type with no ID and search for every person of that type.

There are details beyond the Person's profile that are shown, depending on the Person Type. For Patients (Figure 3.3.1), it also shows the Patient's diagnoses and their medications for each one (if applicable). For Guests (Figure 3.3.2), it shows a log of all the guests' visits.
The Staff search is a bit more complicated because for Doctor Staff, it shows the patients that Doctor has diagnosed. For Nurse Staff, it shows the patients currently being treated by that Nurse. And Management Staff doesn't have any specific details returned. There are no extra details returned when the user searches for all Staff, because there isn't a specified Staff Type.

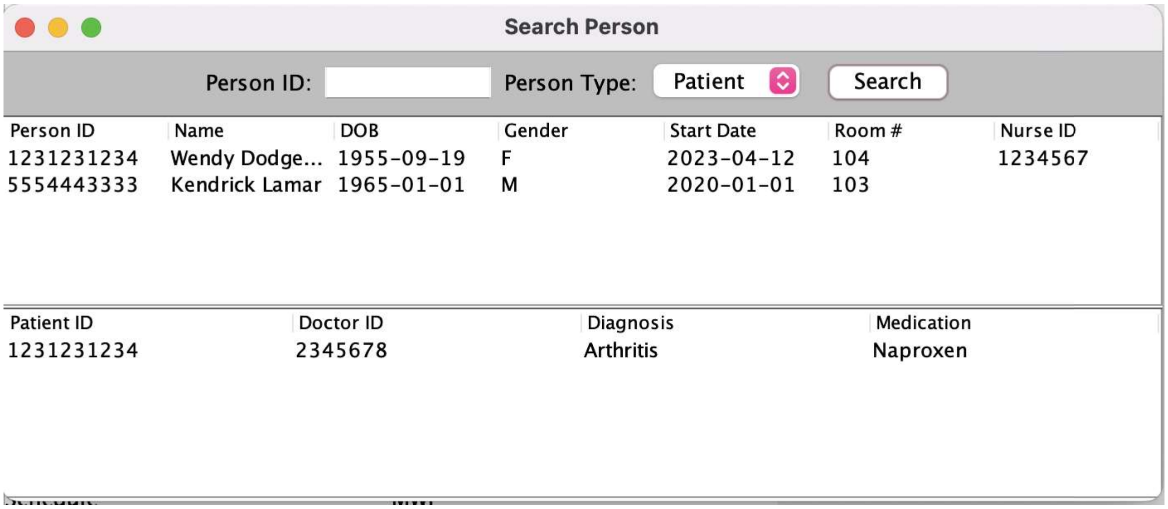



Figure 3.3.1

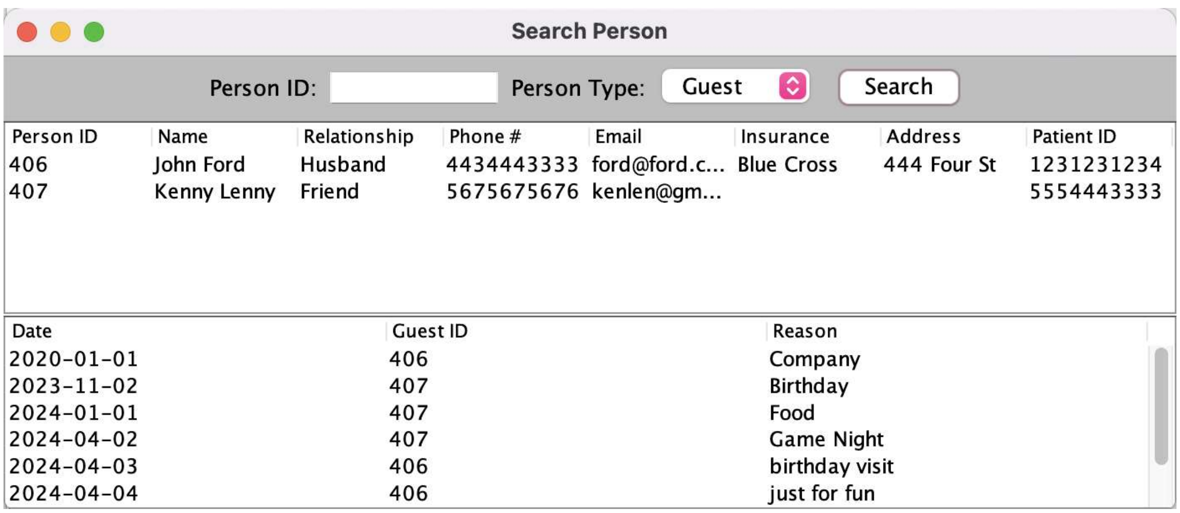



Figure 3.3.2

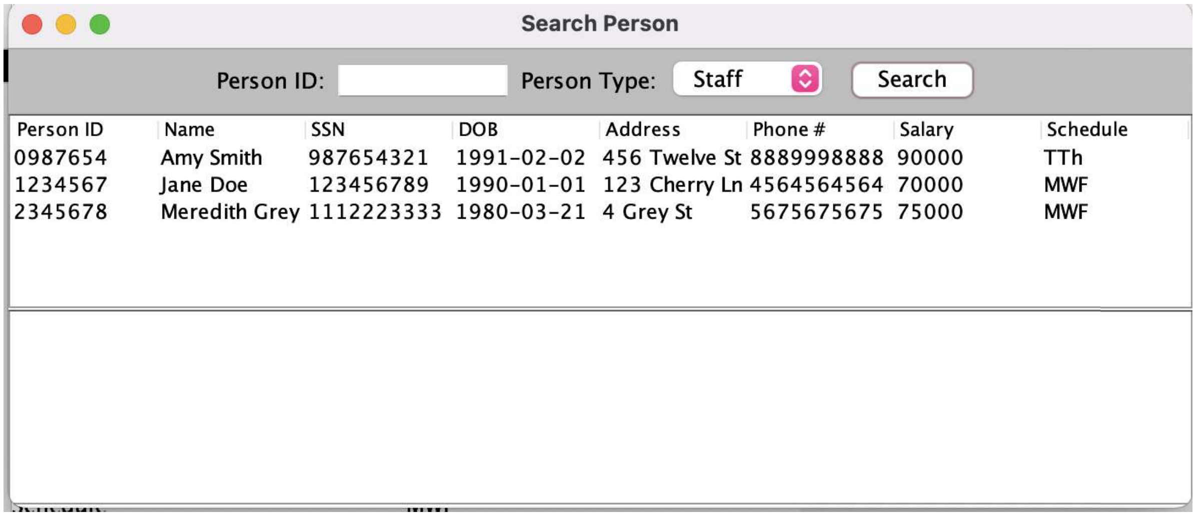



**Figure 3.3.3**

## 3.4 Add/Remove Employee

The Add function can be done by using the create button available on the dashboard's navigation bar.

To add any person to the database, you would first have to click the create button on the dashboard which brings up a dropdown for you to pick what type of person you want to add then after you click create (figure 3.4.1) which pull up the next page you to enter the information for that person.

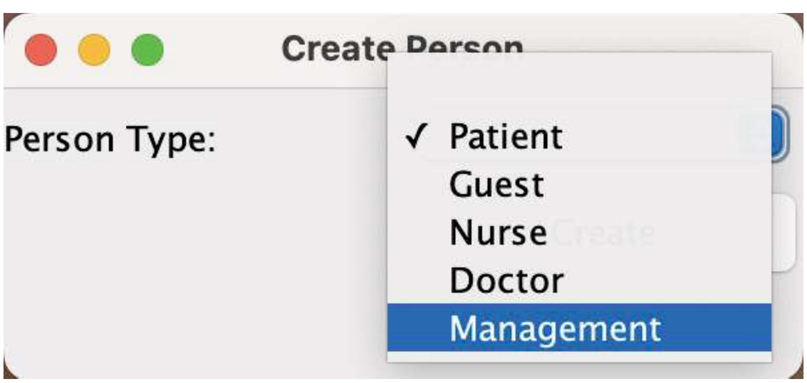



**Figure 3.4.1**

These images below show the page to add the patient, guest, nurse, doctor and management to the database.


**Figure 3.4.2**

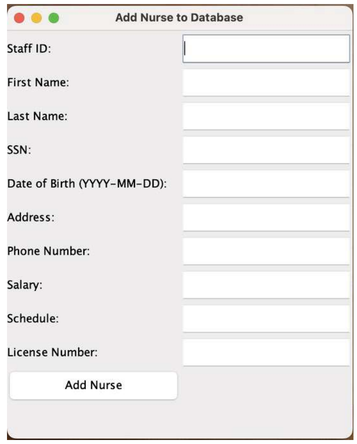



**Figure 3.4.3**

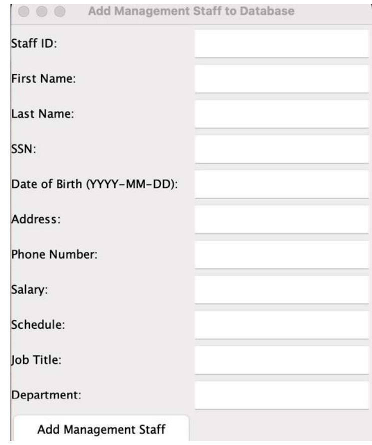



**Figure 3.4.4**

The remove function for employees is primarily done with the key, which in this case is the staffId. The delete button can be used to facilitate this task. As shown in Figure 3.4.1, by entering the Person's ID and selecting their Type, pressing the Search button will print out that Person's Name. This feature is to confirm the user has the correct person they want to delete. After the user is found in the database, you can remove their information by pressing the Delete button.

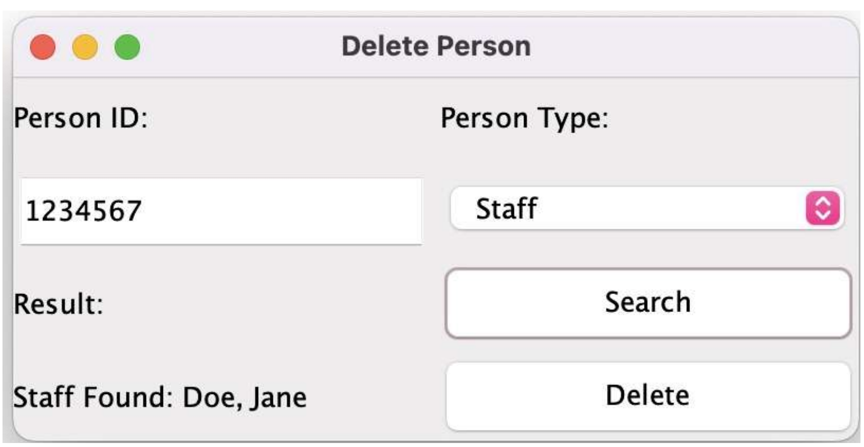



**Figure 3.4.5**

The update function for employees is primarily done with the key which in this case is the staffId. The staffId is used to locate the specific user in the database. The update buttons can be used to facilitate this task (Figure 3.4.2). After the user is found in the database, you can update their information. The database checks what kind of Staff the Person is and provides additional entry spots for that specific type. Each type of staff has a change in their functions, so their updates slightly differ as well. For example, a Nurse getting updated will have a License Number option to fill in (Figure 3.4.3). Then, a Doctor has a Specialty section to fill in (Figure 3.4.4). Lastly, a Management has a Job Title and Department space to fill in (Figure 3.4 .5).

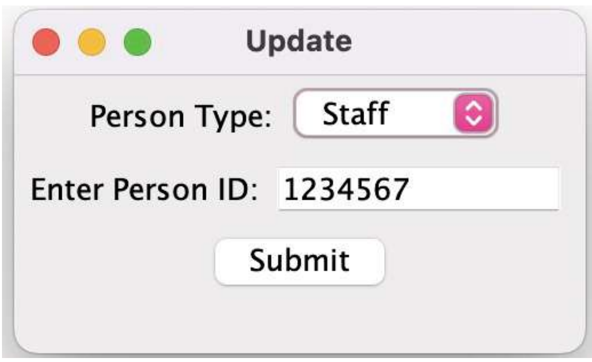



**Figure 3.4.6.**


**Figure 3.4.7**


**Figure 3.4.8**


**Figure 3.4.9**

## 3.5 Add/Remove Patient

The Add function can be done by using the create button available on the dashboard's navigation bar. This is the same as Section 3.4. When Patient is selected Figure 3.5.1 is shown to enter all the guest profile information into the database. Once the “Add Patient” button is pressed, a confirmation or error page will appear.

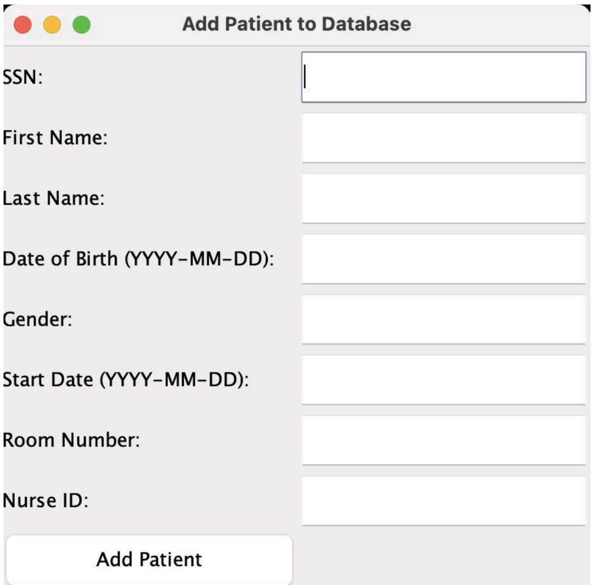



**Figure 3.5.1**

The remove function for patients is mainly done with the key, in this case, the SSN. The delete button can be used to facilitate this task. After the user is found in the database, you can remove their information. This is the same as removing an Employee (Section 3.4).

The update function for patients is mainly done with the key, in this case, the SSN. The SSN is used to locate the specific user in the database. The update buttons can be used to facilitate this task as shown in Figure 3.5.2. After the patient is found in the database, you can update their information. Only the first and last name and the patient’s gender can be updated here (Figure 3.5.3). The rest is updated in other locations or won’t need to be updated (i.e. birthday or start date).

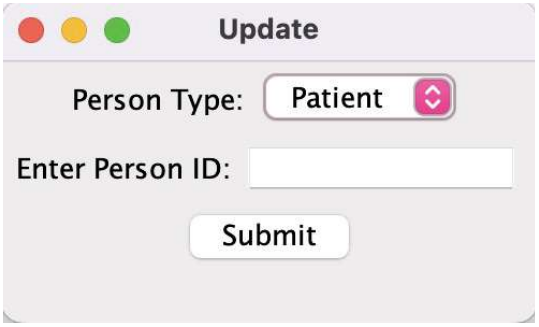


Figure 3.5.2

Figure 3.5.3

## 3.6 Add/Remove Guests

The Add function can be done by using the create button available on the dashboard's navigation bar. This is the same as Section 3.4. When Guest is selected Figure 3.6.1 is shown to enter all the guest profile information into the database. Once the "Add Guest" button is pressed, a confirmation or error page will appear.

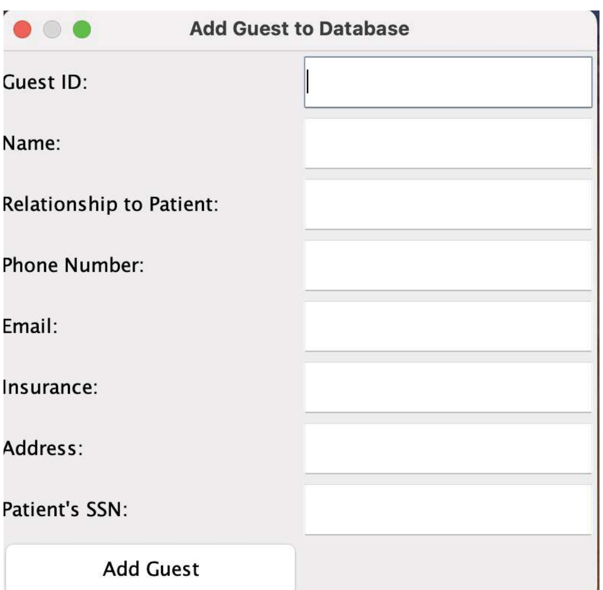
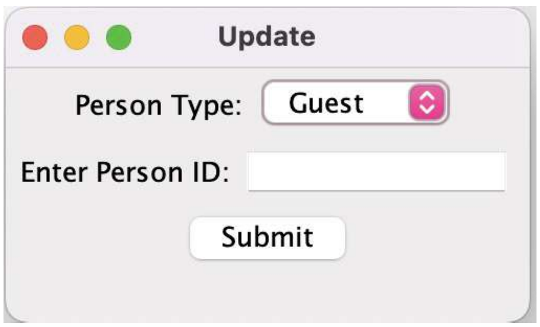


Figure 3.6.1

The remove function for guests is mainly done with the key, in this case, the Guest ID. The delete button can be used to facilitate this task. After the user is found in the database, you can remove their information. This is the same as removing an Employee (Section 3.4).

The update function for patients is mainly done with the key, in this case, the Guest ID. The Guest ID is used to locate the specific user in the database. The update buttons can be used to facilitate this task as shown in Figure 3.6.2. After the patient is found in the database, you can update their information. The Address and Insurance Text Fields can be left empty if the guest isn't an emergency contact (Figure 3.6.3).



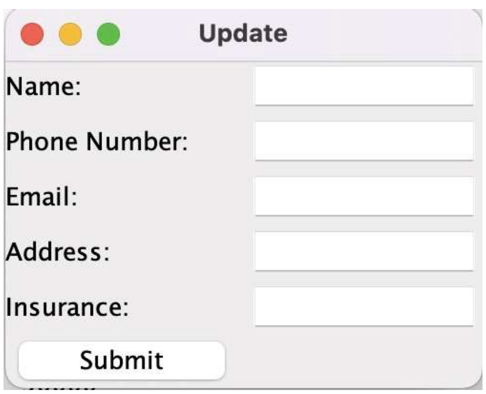




**Figure 3.6.2** **Figure 3.6.3**

## 3.7 Add Patient Allowance

The user can give allowance to a patient by clicking the 'Add Allowance' button which is the second choice down under management actions section in the dashboard.

The details beyond this point are further explained. Shortly after, a prompt is displayed inquiring for the patient's social security number (Figure 3.7.1). Entering the patient's SSN helps identify which patient is getting which allowance. After pressing submit, another prompt shows that an amount must be entered into the system (Figure 3.7.2). Depending on the number, input the desired amount that the patient should receive, and press submit. This should update the allowance and assign it to the patient that should have that amount. After completing these steps, the system will let the user know that the allowance was updated and that the patients cannot use this money on drugs, alcohol, tobacco, or gambling. This also ensures trust and makes sure that patients use their allowance money responsibly. Patients are our responsibility, so it is important that we help them and make sure they are moving safely.


**Figure 3.7.1**

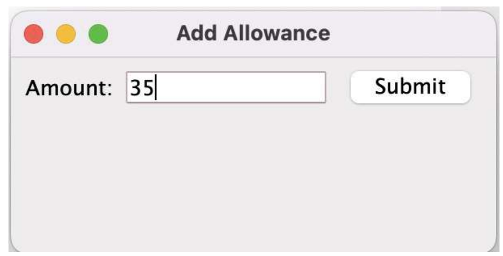



**Figure 3.7.2**

## 3.8 Manage Guests

To manage guests here, the user can do this by clicking the ‘Add Visit’ button which is the first choice down under management actions section in the dashboard.

Shortly after, a prompt is shown like Figure 3.8.1, which asks for the guest's information as the ID number. Input the necessary data that is asked so that they are properly put into the system. Next, you will be asked to provide more details about the visit such as the date, which should be input in a certain format. The date should be in the format of year-month-day (ex: 2024-05-02). In addition, the reason for the visit should be recorded just to keep records. For example, things such as a birthday, or a regular checkup visit should be kept as a reason in the system. All of this is displayed in Figure 3.8.2.

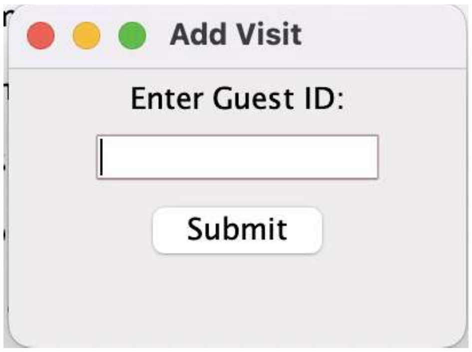



**Figure 3.8.1**

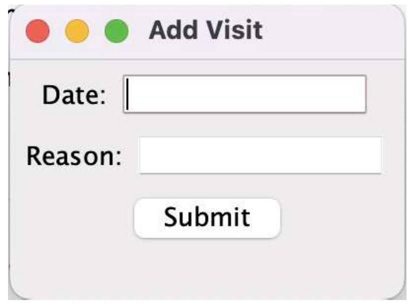



**Figure 3.8.2**

## 3.9 Edit Patient Room

To edit a Patient's room, the user can select the "Edit Patient Room" button. This will prompt the user to enter the Patient's SSN that they want to edit. Once pressing the "Submit" button (Figure 3.9.1), the database will check that Patient exists.

Then a Text Field will be offered to enter that Patient's new room number. When that submit button is pressed, the database will attempt to update the Patient's Room. If that room exists in the database, then a confirmation message will appear. Otherwise an error message will appear, informing the user that the Patient's room couldn't be changed.

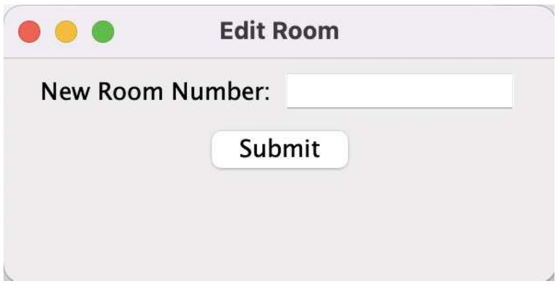




**Figure 3.9.1** **Figure 3.9.2**

## 3.10 Log Out

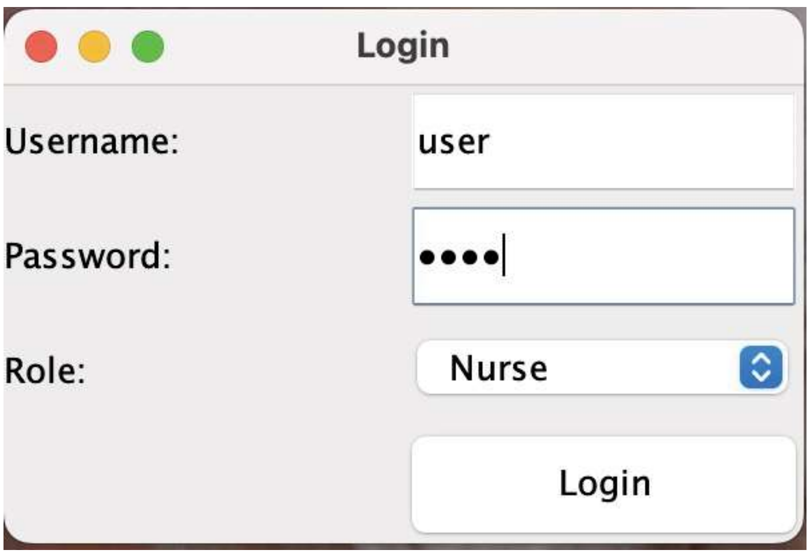
In order to log out of the system, the user must click the button labeled "Logout" in the bottom right corner of the Dashboard. When the user is logged out, CareTrack will return to the Login page.

# 4 Nurses: A Guided Tour

This section teaches nurse users how to use the features of the careTrack System.

## 4.1 Login

Upon launching the application, users will see a login window (Figure 4.1.1) with input fields for username and password. To log in and access the careTrack System, users must enter a username and password and then click the "Log In" button.




## 4.2 Dashboard

The administrative interface is divided into four main sections:

1. The top navigational bar allows for management to search, create, delete, or update participants.
2. The right sidebar serves as a navigational bar for specific functions. On this side there are only actions that can be done by a member of nursing.
3. The main display area shows current user's information. It shows that participants personal information.

4. The footer area is a narrow strip along the bottom of the application window that contains the “Logout” button in the bottom right-hand corner.

Upon launching, the nursing interface always displays the currently logged in user’s information which it pulls from the database (Figure 4.1.4) first since accessing patient personal information is one of the most common uses of management.

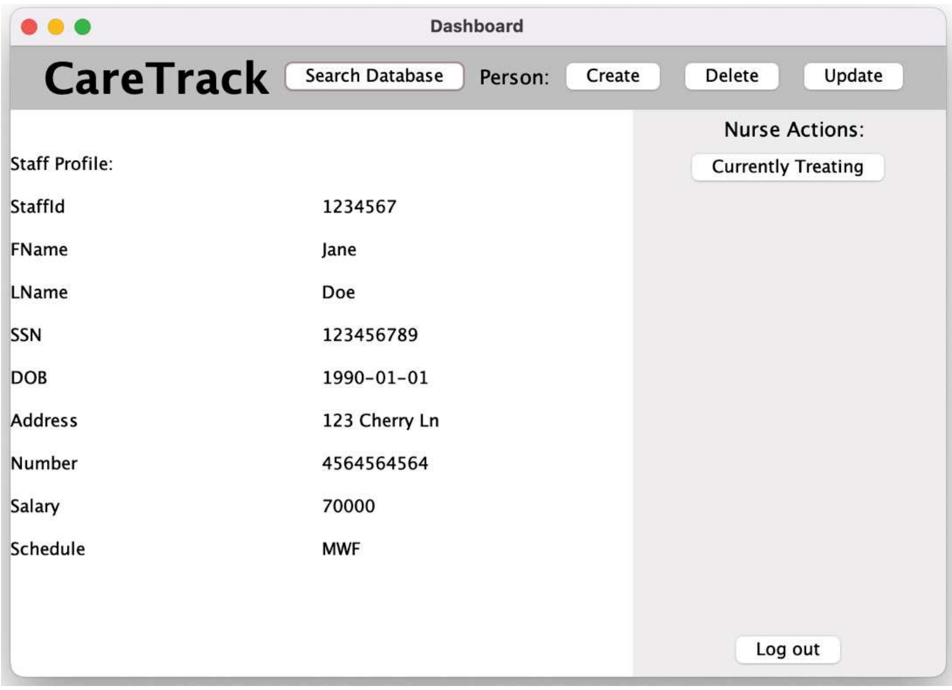



**Figure 4.1.4**

## 4.3 Search Database

Consult Section 3.3, as the search process is the same for management, nurse, and doctor users.

## 4.4 Add/Remove Person

Consult Section 3.4 as the add/remove employee process is the same.

Consult Section 3.5 as the add/remove patient process is the same.

Consult Section 3.6 as the add/remove guest process is the same.

## 4.5 Manage Patients

On the nurse dashboard, they have a special ability to add patients to the list of patients they are currently treating. To do this, they navigate to the left side of the screen, click on the "Currently Treating" button, then it pulls up a tab for them to look up a patient by SSN then add them to their list of patients (Figure 4.5.1). If the patient is found and added to the list, they get a message stating that the action was successful (Figure 4.5.2).


**Figure 4.5.1**


**Figure 4.5.2**

## 4.6 Log Out

Consult Section 3.7, as the login process is the same for management, nurse, and doctor users.

# 5 Doctors: A Guided Tour

This section teaches doctor users how to use the features of the careTrack System.

## 5.1 Login

Consult Section 3.1, as the login process is the same for management, nurse, and doctor users.

## 5.2 Dashboard

Consult Section 3.2, as the Dashboard information is the same except for the special function. Those functions include Add medical condition and add diagnosis for doctor (Figure 5.2.1).

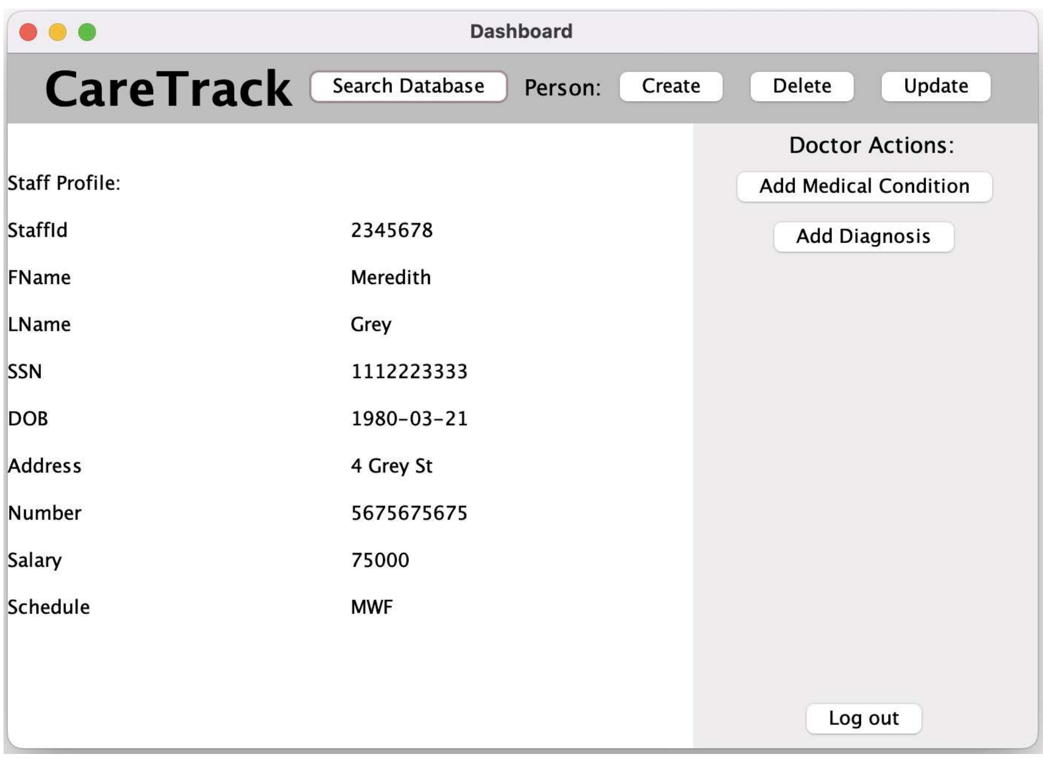



**Figure 5.2.1**

## 5.3 Search Database

Consult Section 3.3, as the search process is the same for management, nurse, and doctor users.

## 5.4 Add/Remove Person

Consult Section 3.4 as the add/remove employee process is the same.

Consult Section 3.5 as the add/remove patient process is the same.

Consult Section 3.6 as the add/remove guest process is the same.

## 5.5 Manage Diagnoses

A Doctor patient can assign a diagnosis to a patient by selecting the "Add Diagnosis" button under the Doctor Actions on the Dashboard.

The user can enter the Patient's SSN and the Medical Condition name into the corresponding Text Fields (shown in Figure 5.5.1). Pressing the "Treat Diagnosis" button will add the relationship between the Patient, the Doctor, and the diagnosis into the database. A confirmation screen will pop up if the diagnosis is added correctly, otherwise an error will appear.

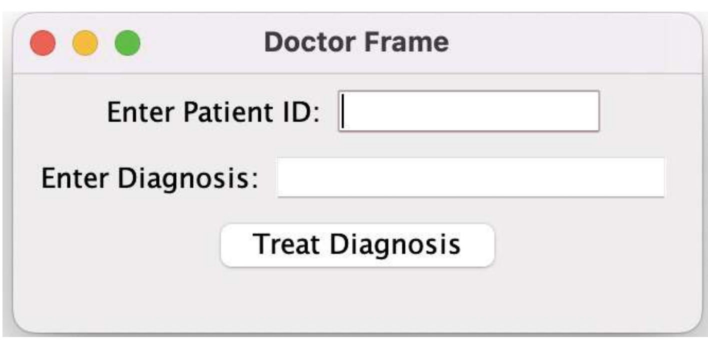



**Figure 5.5.1**

## 5.6 Add Medical Condition

A Doctor must add a Medical Condition to the database before being able to diagnose patients with that condition. To add a Condition, the Doctor must select the "Add Medical Condition" button under the Doctor Actions on the Dashboard.

The user can then enter the Medical Condition name and any Medications needed to treat that condition (if applicable) into the Text Fields shown in Figure 5.6.1. The user should then press the Add button to add the condition to the database. If there is already a condition with that same name in the database, an error message will show. Otherwise, a confirmation screen will pop up saying that the Medical Condition was added successfully.

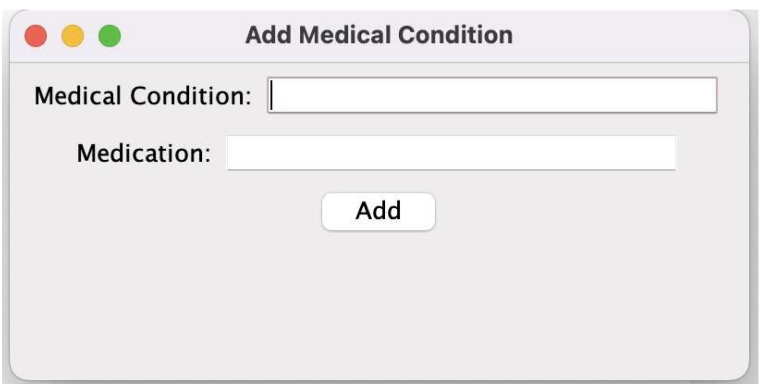



**Figure 5.6.1**

## 5.7 Log Out

Consult Section 3.7, as the log out process is the same for management, nurse, and doctor users.