User Manual

Default User Accounts

To install the Radiology Information System follow the instructions in the Installation_Instructions PDF located in the “1. Installation Instructions" folder. Following the instructions will set up the environment for the Radiology Imaging System. After installation you can run the Radiology Information System and sign in with the default users provided below. The default users generated correspond to the six user types with different permissions in the system.

Username: admin
Password: admin
UserRole: ADMIN

Username: doc
Password: doc
UserRole: REFERRAL_DOCTOR

Username: desk
Password: desk
UserRole: RECEPTIONIST

Username: tech
Password: tech
UserRole: TECHNICIAN

Username: radio
Password: radio
UserRole: RADIOLOGIST

Username: user
Password: user
UserRole: USER

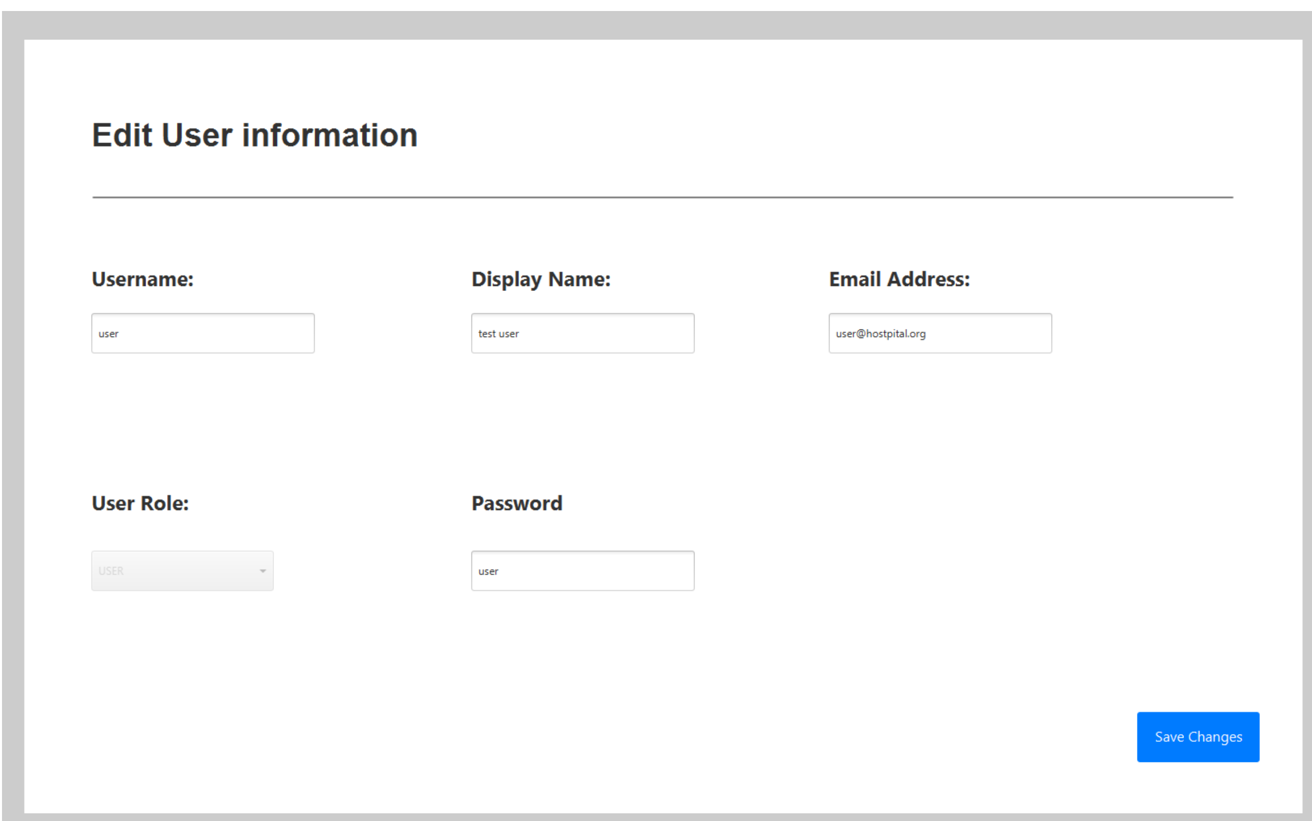
Layout of the User Interface

Navigation Bar

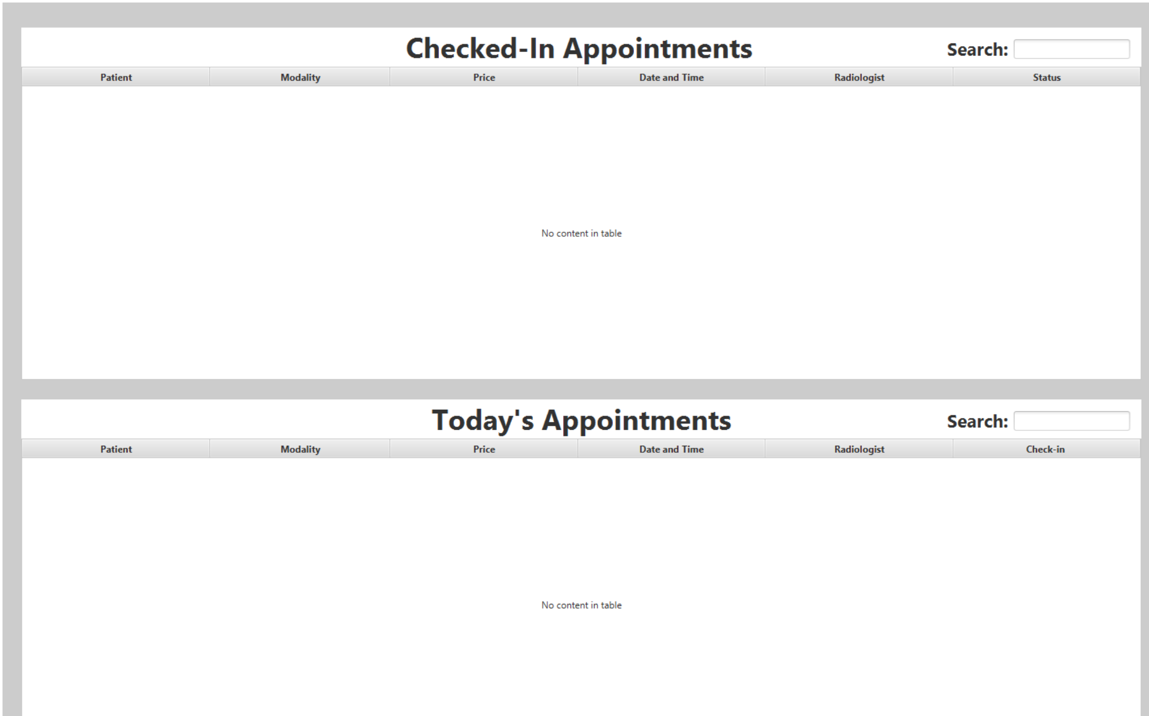
At the top of each page will be a Navigation Bar with role related buttons on the left and the current user's role and logout button on the right. By default all users will have a Home button and a User Info Button in the navigation bar. The Home button opens that user's home page where the majority of the time will be spent. The User Info button opens the Modify User Info page which allows the user to change their personal information including: Username, Display Name, Email Address and Password. The other buttons available will change depending on the logged-in user's role and the permissions that are provided to them.
A user can log out of the system by pressing the Logout button on the right of the Navigation Bar or by pressing the ESCAPE key on their keyboard. Once logged out another user can log in or the system can be closed by pressing the close button Most actions in the Radiology Information System can be performed through the usage of the TAB and ENTER buttons on a keyboard in the case that a mouse is not available.
For increased responsiveness of the system each button in the Navigation Bar will highlight when hovered over by the user's mouse.

User Info

The user info page in the navigation bar shows the information associated with the current logged in user. This page allows the user to change their login credentials as well.



Content Area



Each page in the Radiology Information System will have a main Content Area below the Navigation bar. The content area will be populated with tables populated with information needed by the user to complete their responsibilities.

The tables can be sorted in ascending/descending order by clicking on a columns header and can be filtered by using the search bar positioned alongside each table. Most pages will contain a single table in the Content Area, but a few pages will contain multiple tables which can be accessed by scrolling with the mouse or clicking and dragging the scrollbar on the right side of the page.

Initial Configuration of the Radiology Information System

To begin the initial setup of the Radiology Information System first log in as the default ADMIN user and navigate to the Admin Panel by clicking on the Admin button in the navigation bar at the top of the screen. From there a page will load with System Users at the top of the main content area

Configuring Modalities

For the initial configuration of the Radiology Information System adding modalities to the system corresponding to the modalities available by the imaging center is prudent. On the Admin Panel locate the Modalities Table and select the blue New Option. A pop-up should appear prompting to “Create New Modality” type a Modality Name and a corresponding price for the procedure. For inputting the price use the format 000.00 Submit the modality to the Radiology Information System by pressing the “Save Modality” button. The new modality should appear in the Modalities Table.

New **Modalities** Search:

Modaliy ID	Modality	Modality Price	Modify
1	X-ray	1500	Select
2	MRI	2000	Select
3	Ultrasound	1000	Select
4	CT	3000	Select
5	PET	2000	Select
6	PET-MRI	2500	Select
7	Fluoroscopy	1000	Select

Configuring Patient’s Alerts

The process of adding a patient alert is similar to the process for creating a new modality. From the admin panel navigate to the Patient Alerts table and select the blue New button. From here type in the name of the patient alert and save it by pressing the Save Alert Button.

New **Patient Alerts** Search:

Patient Alert ID	Patient Alert	Modify
1	Pacemaker	Select
2	Iodine Allergy	Select
3	Contrast Allergy	Select
4	Latex Allergy	Select
5	Shrapnel	Select

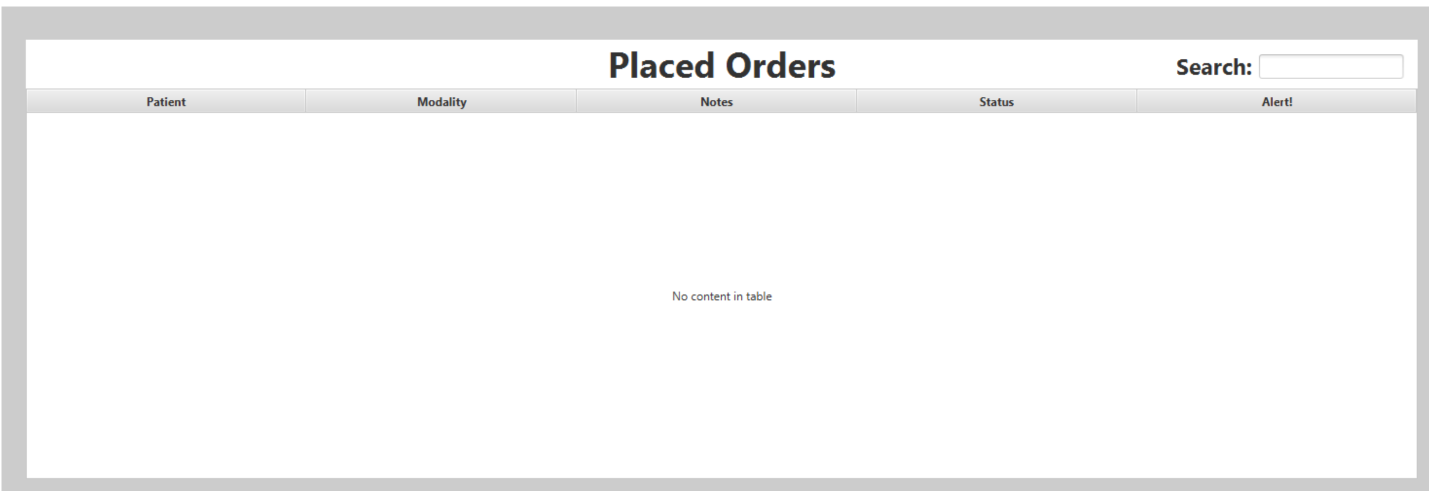
Doctor Usage

To begin, log into the Radiology Information System with a Doctor's credentials. Once logged in the Doctor home page will be visible with the options Home, User Info and Referrals in the navigation bar. Inside the main content area of the home page will be three tables, Placed Orders, Completed Orders and Closed Orders.

Doctor Home

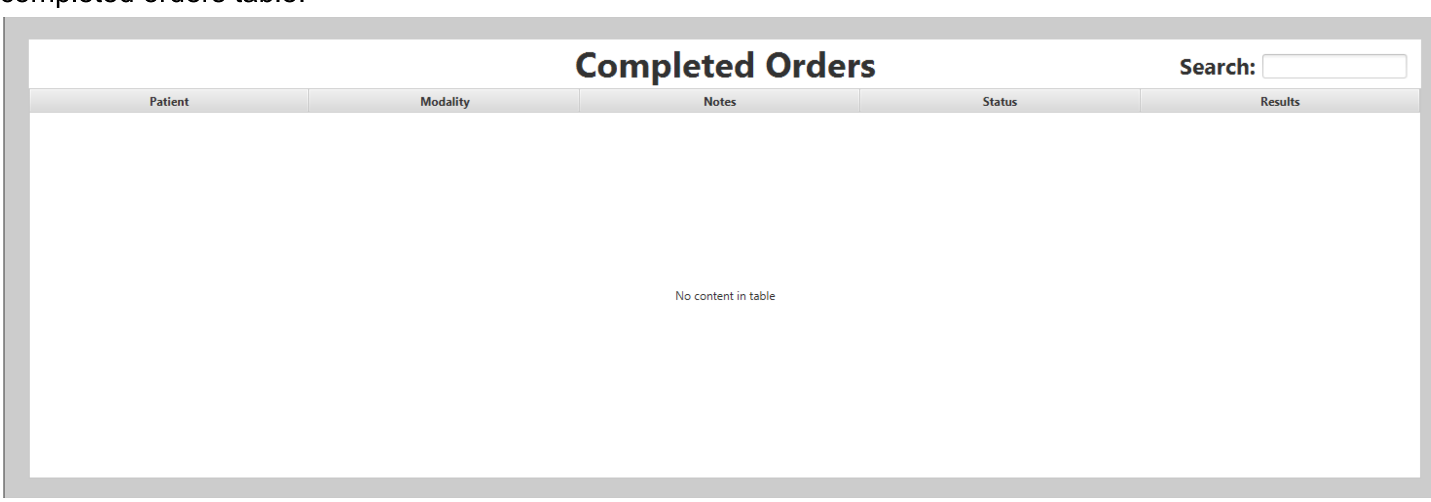
Placed Orders

The Placed Orders table shows all incomplete orders placed by the logged-in referring physician.



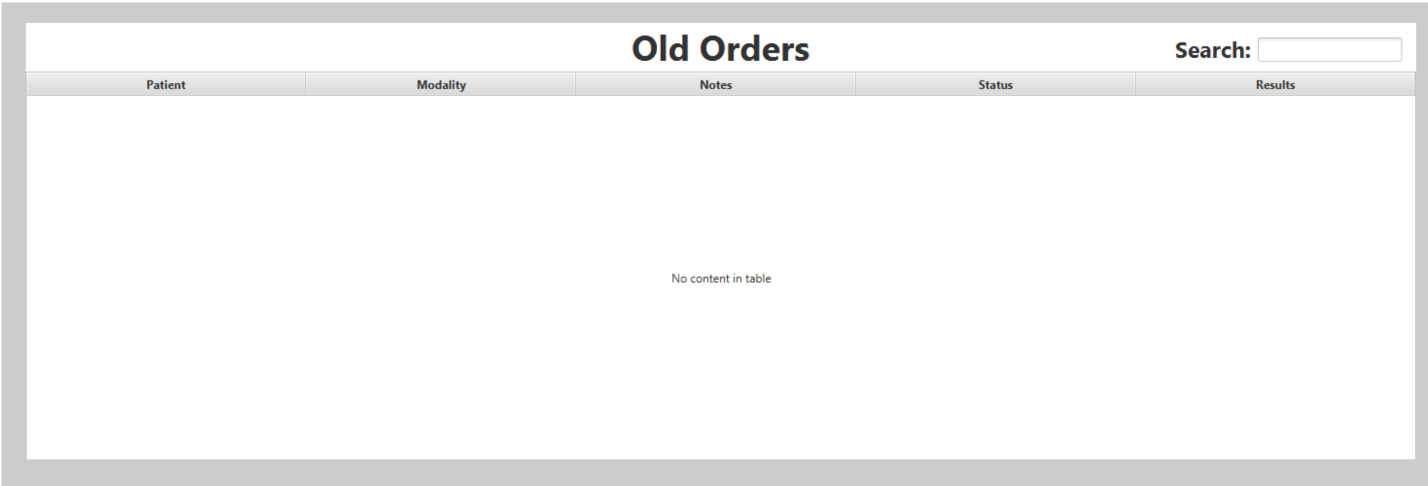
Completed Orders

The Completed Orders table shows all orders where the imaging and diagnostic report have been completed. The doctor can click on the blue "Review Order" button to view the diagnostic from the Radiologist and the Image taken by the Technician. When finished the doctor can select the "Close Order" button in the pop up to close the order and send it to medical history or they can press "Cancel" where it will remain in the completed orders table.



Closed Orders

The old orders table is where all orders that the doctor no longer needs will be sent. Once an order is closed it will appear in the patient's medical history tab.



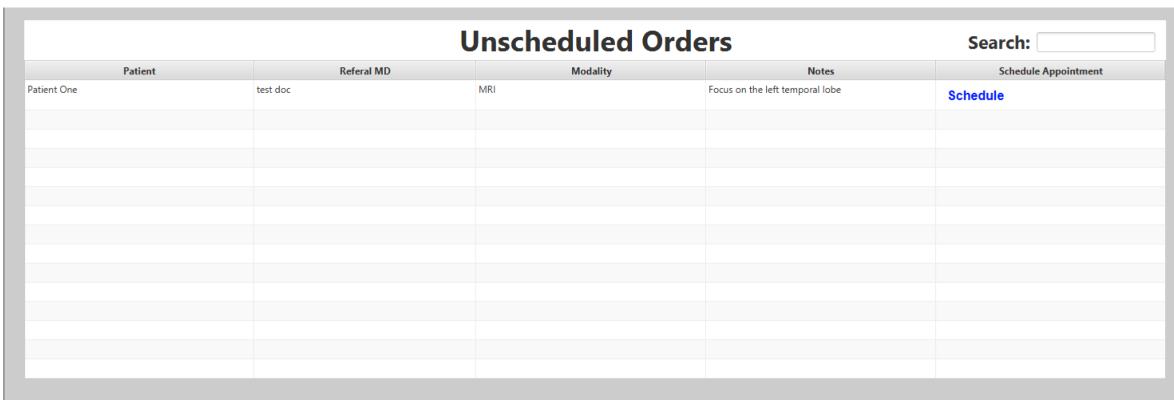
Receptionist Usage

To begin, log into the Radiology Information System with a Receptionist's credentials. Once logged in the Receptionist home page will be visible with the options Home, User Info, Appointments and Orders in the navigation bar. Inside the main content area of the home page will be three tables, Checked-in Appointments, Today's Appointments and Unscheduled Appointments.

Receptionist Home

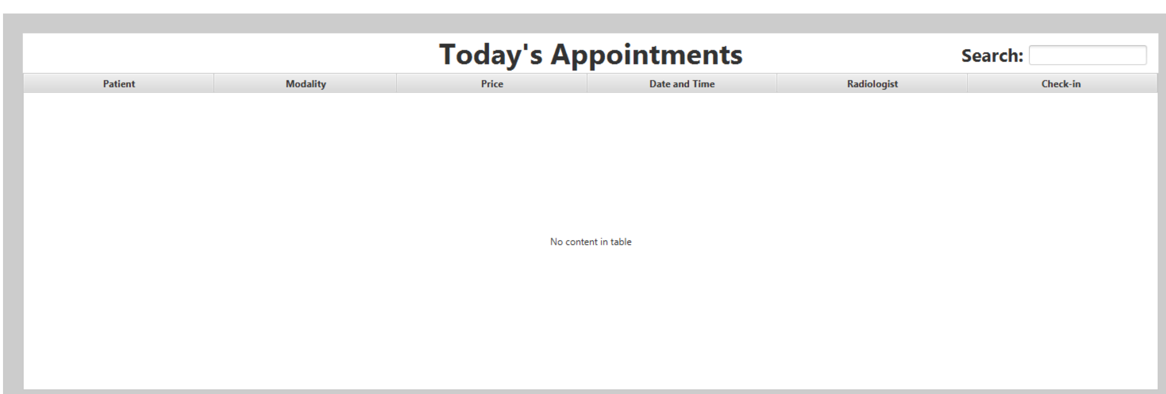
Unscheduled Orders

The Unscheduled Orders table shows all orders placed by a Physician that have not had an appointment made for the patient yet. By pressing the Schedule button next to the order you want to schedule an appointment for a pop-up page will appear allowing you to input information needed from the patient for their appointment. An option is also available for choosing the radiologist who will write the diagnostic after imaging is done.



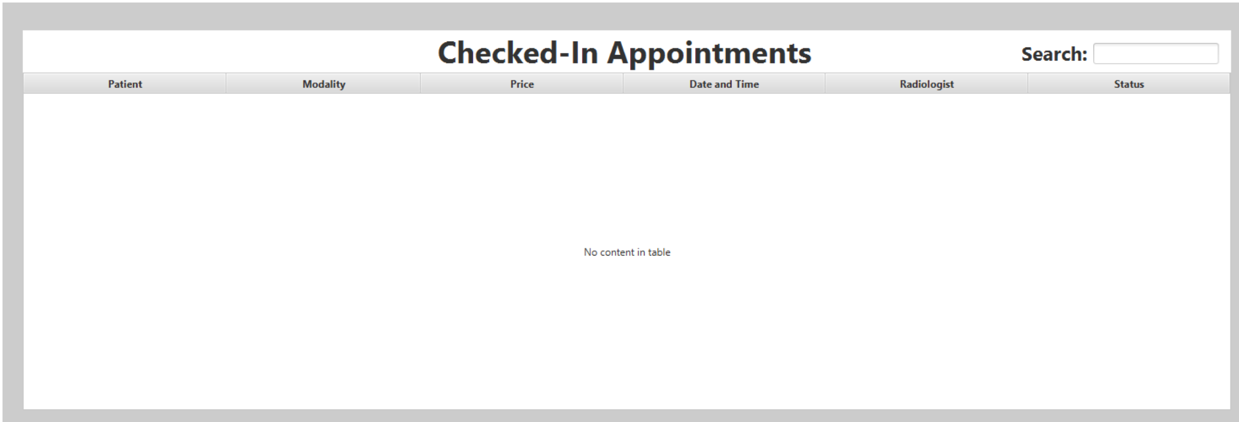
Today's Appointments

The Today's Appointments table shows all appointments that are scheduled to be scanned that day. When a patient with an appointment arrives at the office they can be checked-in by pressing the check-in button indicating to the technician that a patient has arrived and to send a transporter to receive them at the earliest convenience



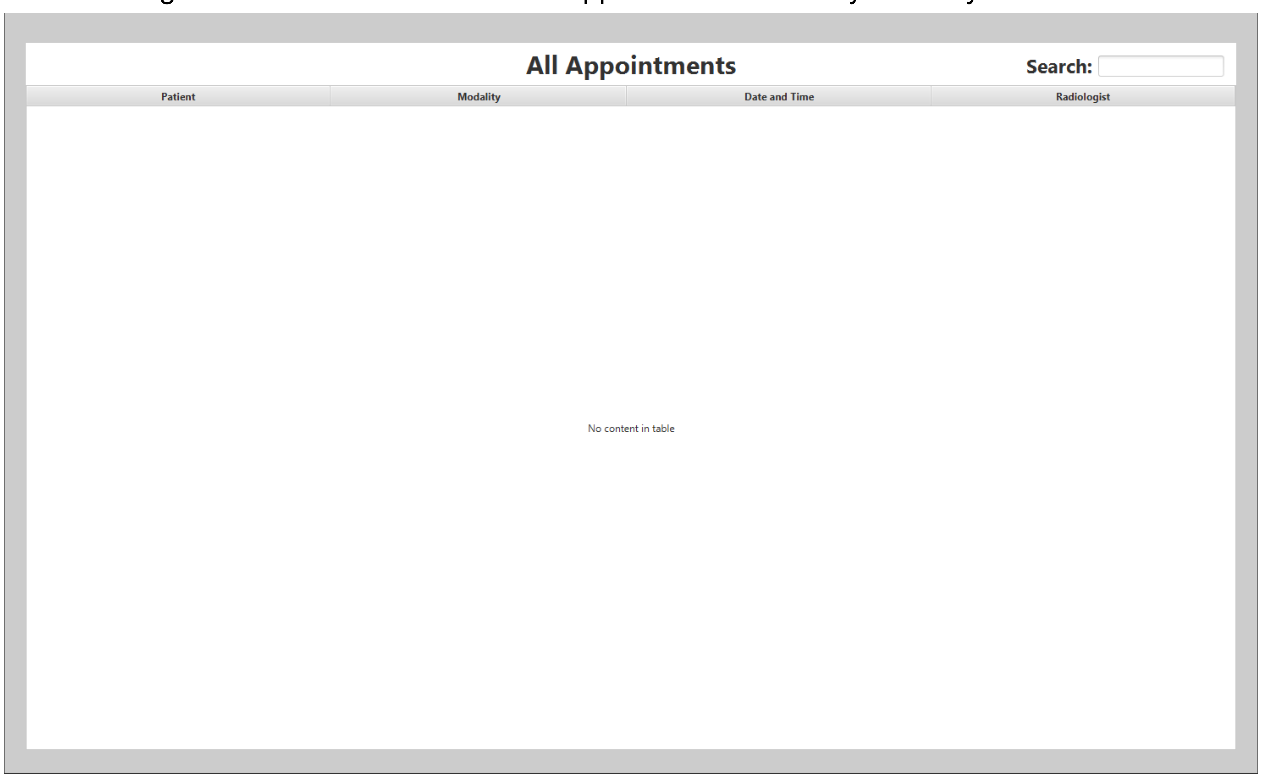
Checked-in Appointments

The checked-in appointments table shows a list of all appointments in the system that are currently checked-in to the office for imaging. Once the patient is finished being imaged by the technician and the images are recorded they will be removed from the Checked-in Appointments table.



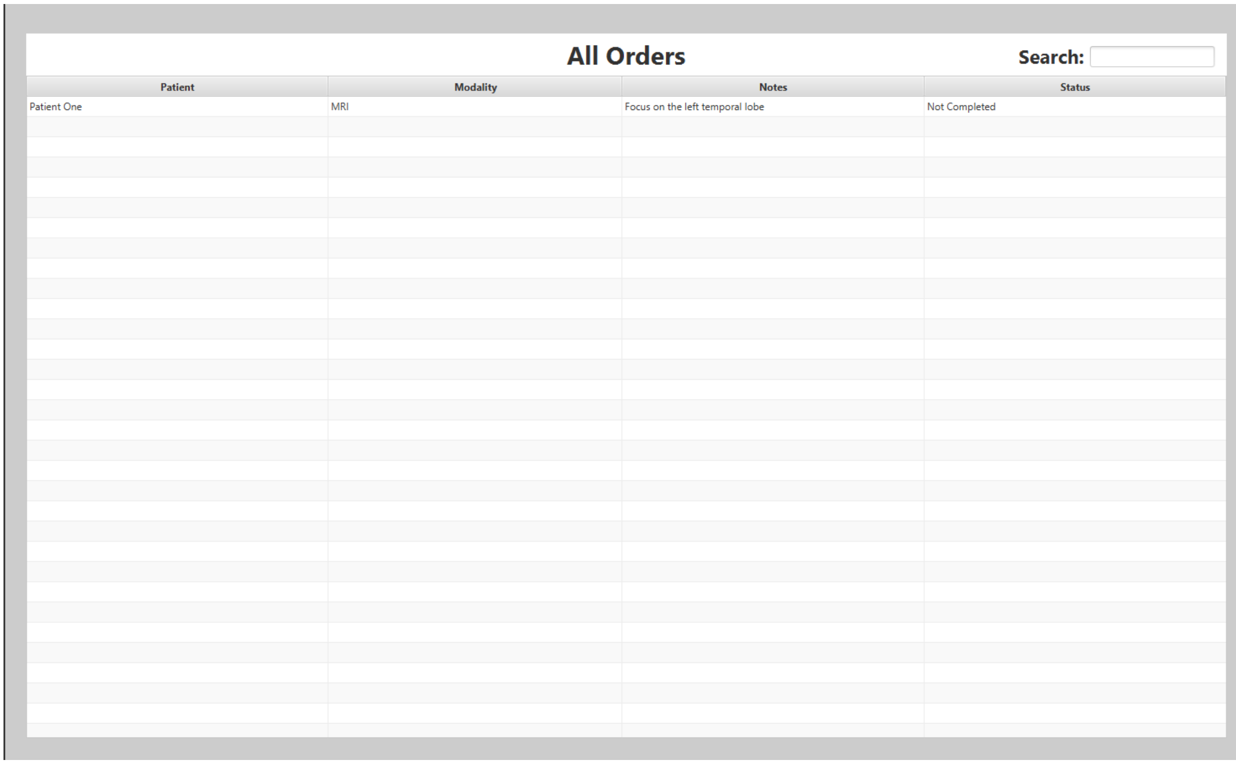
Receptionist Appointments

The All Appointments Table can be accessed by clicking on the Appointments button in the Receptionist's Navigation Bar. The table shows all appointments currently in the system.



Receptionist Orders

Navigating to the All Orders table through the Orders button in the Receptionist Navigation Bar shows all the Orders Currently inside the system regardless of the status of the order.



Technician Usage

To begin, log into the Radiology Information System with a Technician's credentials. Once logged in the Technician home page will be visible with the options Home, User Info and Appointments in the navigation bar. Inside the main content area of the home page will be a tables, Checked-in Appointments which is where the majority of the Technician's tasks will be completed

Technician Home

Checked-in Appointments

The checked-in appointments table shows a list of all appointments in the system that are currently checked-in for imaging. Once the patient has arrived at the modality the technician will have 2 potential buttons to choose from. If the patient has an alert related to them a red "Alert!" button will appear requiring the Technician to view the alert and continue to the complete order process. Otherwise a blue "Complete Order" button will appear. Once the Complete order process has begun a pop-up will appear requesting the Technician to upload a consent pdf form for the patient before continuing with the scan. Once the consent form has been submitted into the system the Technician can scan the patient and after uploading the images with the next pop-up complete the order by pressing the Complete Order button in the bottom right.

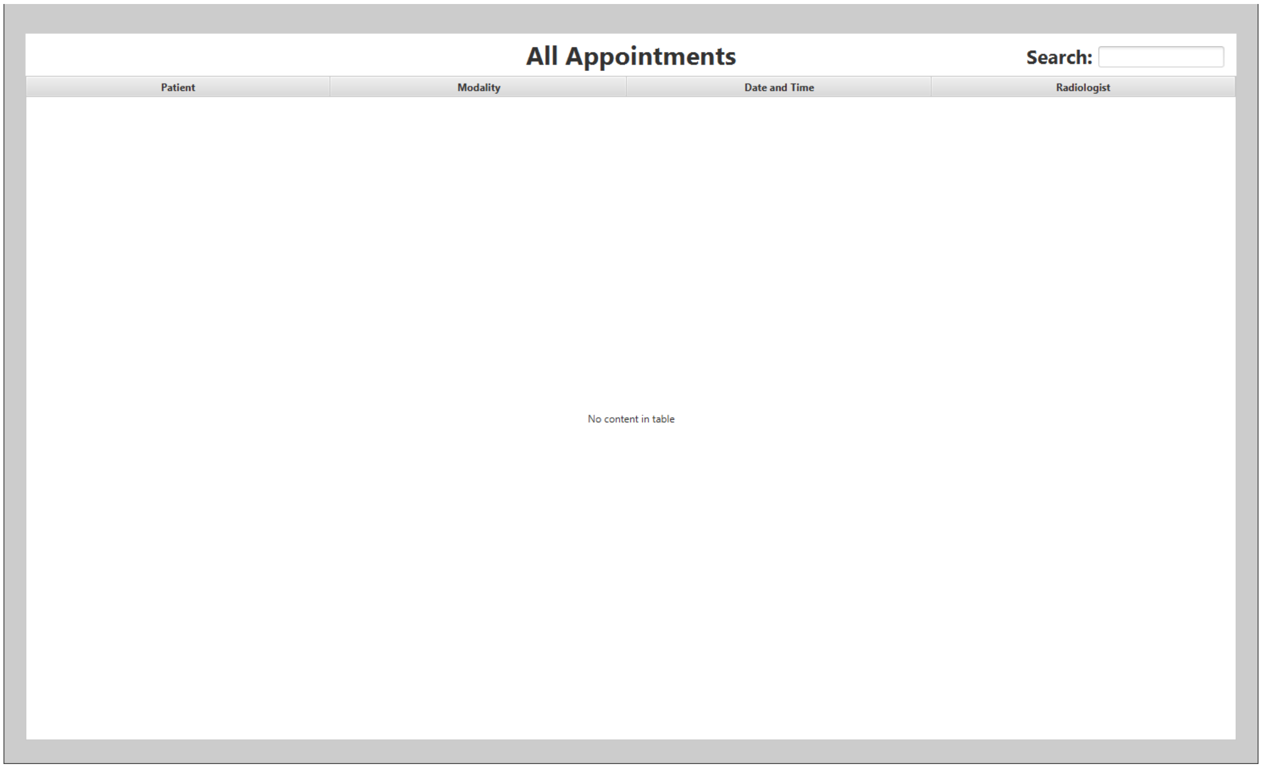
Checked-In Appointments

Search:

Patient	Modality	Price	Date and Time	Radiologist	Complete Order
Patient Alert	MRI	2000	2022-04-15	test radio	Alert!
Patient One	CT	3000	2022-04-15	test radio	Complete Order

Technician Appointments

The All Appointments Table can be accessed by clicking on the Appointments button in the Technician's Navigation Bar. The table shows all appointments currently in the system.



Radiologist Usage

To begin, log into the Radiology Information System with a Radiologist''s credentials. Once logged in the Radiologist home page will be visible with the options Home, User Info, Appointments and Orders in the navigation bar. Inside the main content area of the home page will be a tables, Review Imaging Orders which is where the majority of the Technician's tasks will be completed

Radiologist Home

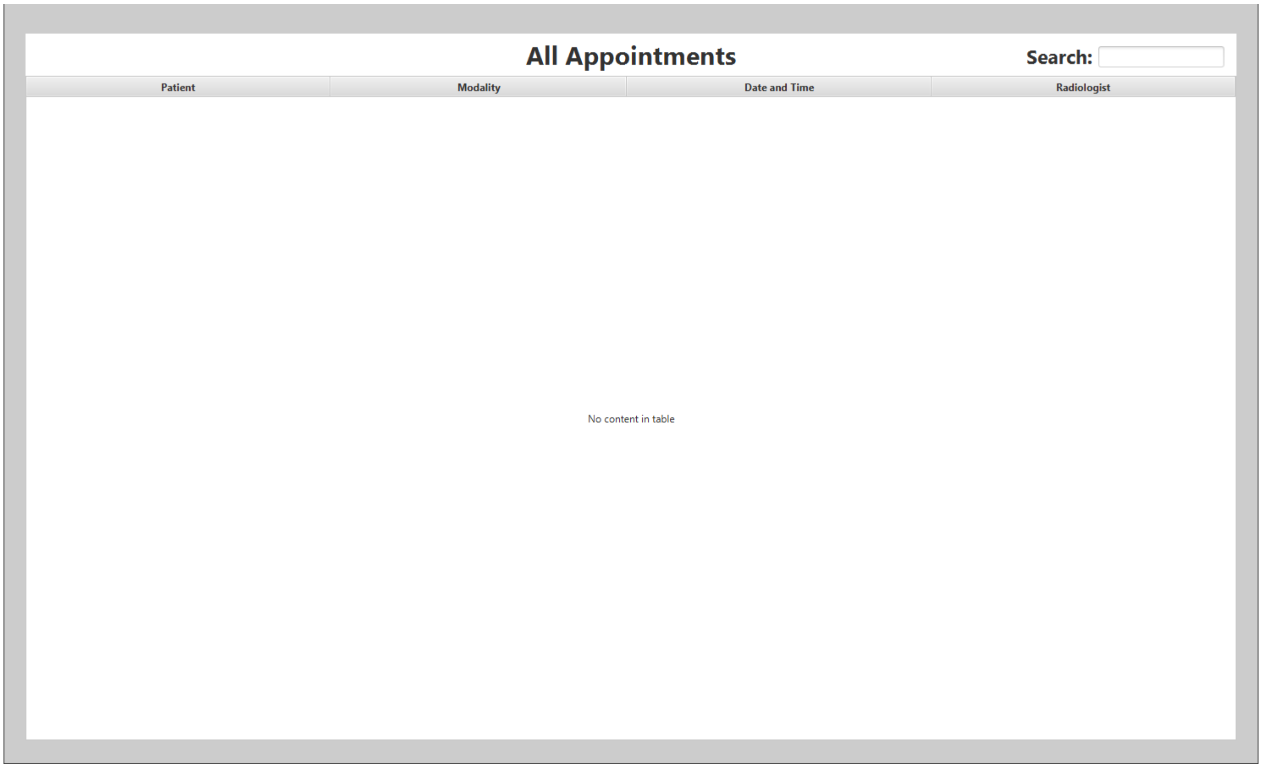
Review Imaging Orders

The Review Imaging Orders table shows a list of the orders in the system registered for the logged-in Radiologist that are done being imaged and are ready for diagnosis. Pressing the "Review Order" button next to the order will open the create diagnostic report pop-up. On the new pop-up page the Radiologist can view the image by pressing "Show Image" and diagnose the image writing the diagnostic in the Report section. Once finished the radiologist can submit the report and send it back to the referring physician by pressing the "Create Report" button.

Patient	Referral MD	Modality	Notes	Review Order
Patient One	test doc	CT	testing	Review Order

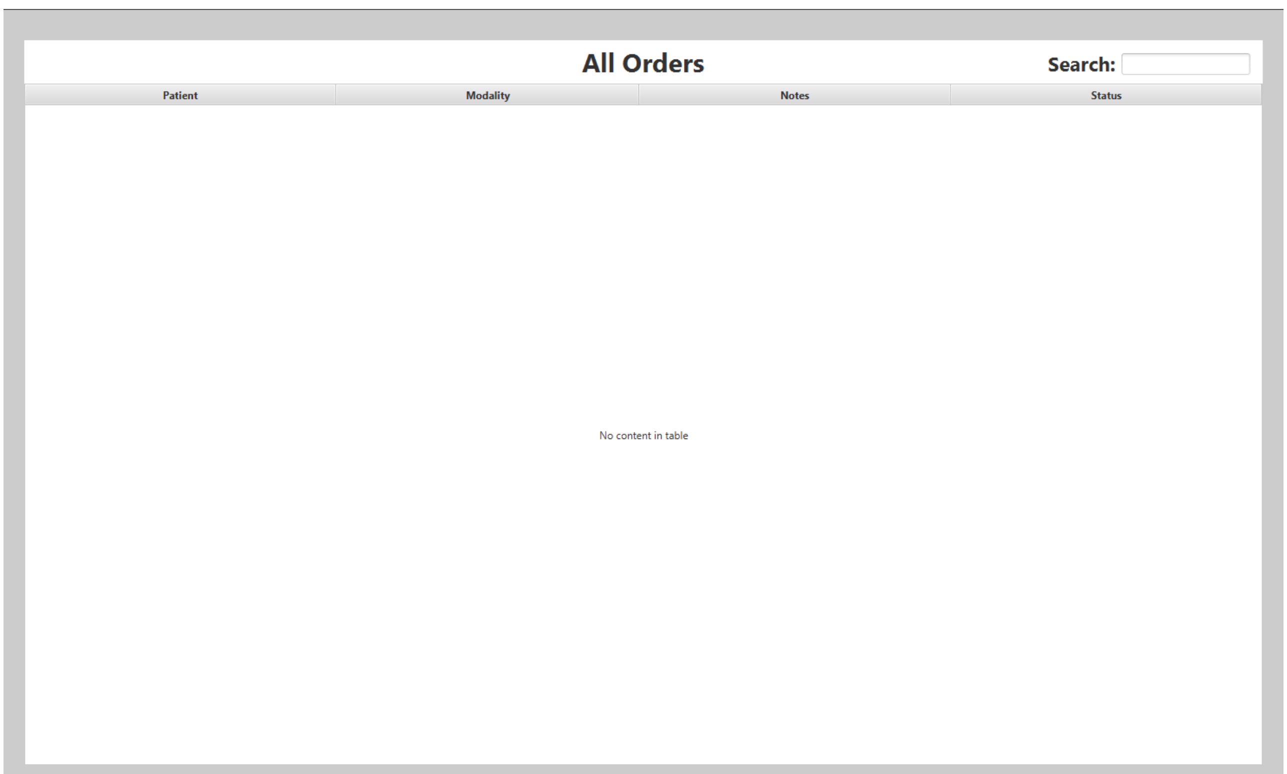
Radiologist Appointments

The All Appointments Table can be accessed by clicking on the Appointments button in the Radiologist's Navigation Bar. The table shows all appointments currently in the system.



Radiologist Orders

The All OrdersTable can be accessed by clicking on the Order Button in the Radiologist’s Navigation Bar. The table shows all orders currently in the system.



Admin Usage

To begin, log into the Radiology Information System with an Admin's credentials. Once logged in the Admin home page will be visible with the options Home, User Info, Admin, Referrals, Appointments and Orders in the navigation bar. The Navigation bar contains the same buttons as all the system users except the Admin Panel button which is unique to the Admin User.

Admin Overview

Inside the main content area of the Admin home page will be all the tables that the other users use allowing the full processing of a patient from start to finish.

Admin Panel

The majority of Administrative work will occur in the Admin Panel. Admin panel serves as a point of access to the database with tables for System Users, Modalities, Patient Alerts, Patients, Orders, Appointments, File Uploads and Diagnostic Reports. Each of these tables will have an option available to select the current row and modify its entry in the database. Each table will also have a "New" button in the top left allowing the Admin to create a new entry in the table. This feature must be used carefully though because it can cause tables to not load if done incorrectly.

Create New User

A common action for an Admin to take will be adding new users to the Radiology Information System. To accomplish this use the "New" button next to the System Users table. A pop-up will appear allowing the admin to create a new user and assign them a roll.