Usage and Installation Manual

Contents

Default User Accounts and Installation

Follow the installation instruction in the folder titled "Installation." After completing the installation steps and booting the system, six default user accounts will be created. One account for each of the different user levels. Those being: ADMIN, USER, REFERRAL_DOCTOR, RECEPTIONIST, TECHNICIAN, RADIOLOGIST:

Username: admin

Password: admin

UserRole: ADMIN

Username: user

Password: user

UserRole: USER

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

Modality and Patient Alerts Setup

By logging into the system as "admin", the user passwords can be set and new user accounts can be created. To do so, login as "admin" and navigate to the admin dashboard by selecting the "Admin" button on the header navbar. Then navigate to the "Users" data-table, locate the user to be modified and select "Modify".

User ID ▲	Username	Display Name	Email Address	System Role	
1	admin	Test Admin 1	admin@example.com	ADMIN	**Modify**
2	user	test user	user@example.com	USER	**Modify**
3	doc	test doc	doc@example.com	REFERRAL_DOCTOR	**Modify**
4	desk	test desk	receptionist@example.com	RECEPTIONIST	**Modify**
5	tech	test tech	tech@example.com	TECHNICIAN	**Modify**
6	radio	test radiologist	radio@example.com	RADIOLOGIST	**Modify**
7	finaltest	test user 2	testmail@mail.com	USER	**Modify**

System Users — New — Search:

The next step in configuring RIS is to create Patient Alerts and Modalities. Patient Alerts and Modalities vary from office to office depending on equipment available and type of imaging. To create Patient Alerts and Modalities, navigate to the Admin Dashboard as before, locate the Patient Alerts or Modalities data-table, select "New" and enter in the desired Patient Alert of Modality phrase or name.

Note: Patient Alerts will appear in patient records as a drop down with "Yes" or "No" options and will default to "No"

Note: Modalities also include a price field which should be input as a string in the format "$dollars.cents"

After setting up user accounts and configuring Patient Alerts and Modalities, RIS is configured for office use.

Referral Doctor Usage

To use this RIS as a Referral MD, first begin by logging in as a recognized REFERRAL_MD user.

The Referral MD Dashboard will be presented, listing all orders placed by this user. Individual orders can be viewed by selecting "View". This will redirect to the Order Overview page where patient information, order details, imaging files, and diagnostic reports are displayed. By selecting "View Patient Overview", users can view the complete medical record as cataloged by this RIS including patient demographic information and Patient Alerts.

To place a new order, select "Referrals" in the header navbar to open the Patient Lookup page. Here, patients can be searched for by date of birth, last name, or first name. Select "Select" to view the full patient information and then select "Begin Order" to begin the process of placing a new order if the patient already exists in the Patient data-table. Otherwise, new patients can be entered into the system by selecting "New" on the upper right corner of the Patients data-table. New patient information can be entered including patient identification, patient demographic information, and Patient Alerts. Select "Begin Order" to create the new patient and start the process of placing a new order.

From the New Order page, patient identification information is automatically populated into the respective fields. Select "View Patient Overview" to see complete patient information. In the Order Info section of the New Order page, select a Modality option and enter in important order notes that receptionists, technicians, and radiologists may need to know. Then select "Submit Order" to place the new order. This will redirect back to the Referral MD Dashboard where order progress can be checked by locating the Status column of the Place Orders data-table.

There are three primary statuses which Referral MD's will be able to view. "Order Placed" signifies that a new order can been placed, but has not yet been fulfilled by the radiology office. "Imaging Complete" signifies that the radiologist office has completed the imaging order, but the radiologist has not yet completed the diagnostic report. "Diagnosis Complete" signifies that the imaging order has been completed and the diagnostic report has been completed.

Receptionist Usage

To use this RIS as a Receptionist, first begin by logging in as a recognized RECEPTIONIST user.

      The Receptionist Dashboard will be presented, listing three data-tables: Checked-In Appointments, Today's Appointments, and Unscheduled Orders. Checked-In Appointments displays the patient, modality requested, date and time of appointment, radiologist assigned, technician assigned, and appointment status.

Checked-In Appointments

Search: [   ]

Patient	Modality	Price	Date and Time	Radiologist	Technician	
Patient, Example	X-Ray	$175.00	2021-07-08 01:30:00	test radiologist	test tech	Concluded
Mace, Zachary	CT Scan	$200.01	2021-07-08 11:00:00	test radiologist	test tech	Concluded
Patient, Example	CT Scan	$200.01	2021-07-08 03:30:00	test radiologist	test tech	Concluded
Mace, Zachary	X-Ray	$175.00	2021-07-13 01:00:00	test radiologist	test tech	Concluded
Musk, Elon	MRI	$400.00	2021-07-14 10:30:00	test radiologist	test tech	Concluded
Musk, Elon	MRI	$400.00	2021-07-21 08:00:00	test radiologist	test tech	Concluded
Patient, Example	CT Scan	$200.01	2021-07-26 08:00:00	test radiologist	test tech	Concluded
Mace, Zachary	CT Scan	$200.01	2021-07-28 10:30:00	test radiologist	test tech	Concluded
Mace, Zachary	X-Ray	$175.00	2021-07-28 01:00:00	test radiologist	test tech	Concluded
Mace, Zachary	MRI	$400.00	2021-07-28 11:30:00	test radiologist	test tech	Concluded
Mace, Zachary	CT Scan	$200.01	2021-07-28 11:30:00	test radiologist	test tech	In Progress

Today's Appointments

Search: [   ]

Patient	Modality	Price	Date and Time	Radiologist	Technician	
			No data available in table			

Unscheduled Orders

Search: [   ]

Patient	Referral MD	Modality	Notes	
Mace, Zachary	Test Admin 1	X-Ray		Schedule Appointment

There are two (2) appointment statuses, "In Progress" and "Concluded". "In Progress" signifies that an appointment is currently underway and that a final diagnostic report has not yet been submitted. "Concluded" signifies that an appointment is complete and that a diagnostic report has been submitted for the order. Today's Appointments displays the appointment information for appointments scheduled on this day. Once arrived, patients can be checked-in by selecting "Check-In". This will notify the assigned technician and radiologist and place the order in the technicians "Checked-In Appointments" data-table. It will also send a simple billing statement including all relevant information to the patients email on file. Unscheduled Orders displays placed orders which have not yet had an appointment scheduled to fulfill the order. By selecting "Schedule Appointment", appointment information can be entered including patient contact info, appointment date and time, office info such as assigned radiologist and assigned technician, and billing info including total cost of the visit.

Additionally, patient identification info is displayed as well as the modality requested. By selecting "Schedule Appointment" a new appointment is created and the order is removed from the Unscheduled Orders data-table. To view all appointments in this RIS system, select the "Appointments" button in the header navbar. From here, all appointment information is displayed in the "All Appointments" data-table. To view all orders in this RIS system, select the "Orders" button in the header navbar. From here, general order information is displayed in the "All Orders" data-table. To view a specific order's complete information, select "View" in an order row to be redirected to the Order Overview page.

Technician Usage

To use this RIS as a Technician, first begin by logging in as a recognized TECHNICIAN user.

The Technician Dashboard will be presented, displaying the "Checked-In Appointments" data-table. Appointment information will be displayed. Select "Complete Order" to be redirected the Imaging Order page. The Imaging Order page displayed patient identification information, order information and a new section for uploading files. Select "Choose File" to choose a file on the local machine to upload to this RIS. Then select "Upload" to upload the file. Uploaded files appear below the "Uploaded Images" label. By selecting any of the file names listed, the file will download via the web browser to the local machine. By selecting "Complete Order" after all files have been uploaded, the order is marked as "Imaging Complete" and is placed in the radiologist's "Review Imaging Orders" data-table.

To view all appointments in this RIS system, select the "Appointments" button in the header navbar. From here, all appointment information is displayed in the "All Appointments" data-table.

Radiologist Usage

To use this RIS as a Radiologist, first begin by logging in as a recognized RADIOLOGIST user.

The Radiologist Dashboard will be presented, displaying the "Review Imaging Orders" data-table. General order information will be displayed. Select "Review Order" to be redirected to the Diagnostic Report page. Patient identification information, order information and file uploads are displayed, as well as a new section for composing a diagnostic report based on the modality imaging. Once the diagnostic report is completed, select "Complete Report" to finalize the order and set the order status to "Diagnosis Complete". This will remove the order from the radiologist's "Review Imaging Orders" data-table.

To view all appointments in this RIS system, select the "Appointments" button in the header navbar. From here, all appointment information is displayed in the "All Appointments" data-table.

To view all orders in this RIS system, select the "Orders" button in the header navbar. From here, general order information is displayed in the "All Orders" data-table.
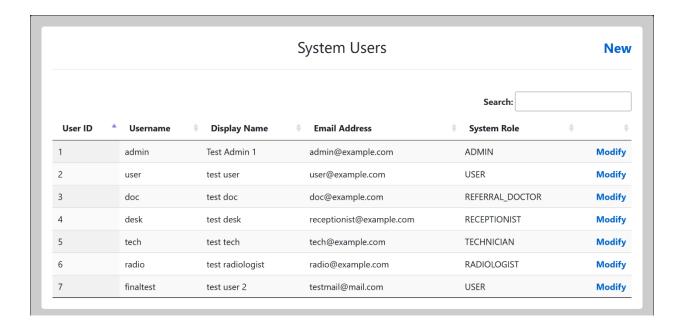
To view a specific order's complete information, select "View" in an order row to be redirected to the Order Overview page.

Admin Usage

To use this RIS as an Admin, first begin by logging in as a recognized ADMIN user.

By default, all RIS dashboards will be displayed on the landing page, included Referral MD Dashboard, Receptionist Dashboard, Technician Dashboard, and Radiologist Dashboard. All specified dashboard options will be made available to Admin's, however, data-table which show only information assigned to certain users will still only be made visible to those specified users. This means that Admin users will only be able to see orders placed by that Admin user or orders assigned to that Admin user.
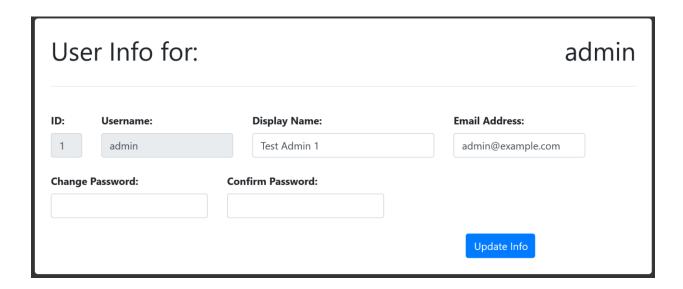
To view the Admin Dashboard, select "Admin" in the header navbar to redirect to the Admin Dashboard page. The Admin Dashboard page displays all tables and data used in this RIS. Data-table which are displayed include: System Users, Modalities, Patient Alerts, Patients, Orders, Appointments, File Uploads, and Diagnostic Reports. All data-table data can be modified by selecting "Modify" on the respective data-table row. New rows can be created by selecting "New" in the upper right corner of any given data-table.

System Users   New

Search: [   ]

User ID ▲	Username ⇕	Display Name ⇕	Email Address ⇕	System Role ⇕	⇕
1	admin	Test Admin 1	admin@example.com	ADMIN	Modify
2	user	test user	user@example.com	USER	Modify
3	doc	test doc	doc@example.com	REFERRAL_DOCTOR	Modify
4	desk	test desk	receptionist@example.com	RECEPTIONIST	Modify
5	tech	test tech	tech@example.com	TECHNICIAN	Modify
6	radio	test radiologist	radio@example.com	RADIOLOGIST	Modify
7	finaltest	test user 2	testmail@mail.com	USER	Modify

Supplementary Information

Users which do not have a specified role assigned will be defaulted to USER. USER user accounts do not have access to any parts of this RIS and are displayed a short message on the Home page (Also called [UserRole] Dashboard) stating to contact this RIS admin to have an UserRole assigned.

The User Info page, located in the navbar for all users with a role, allows any user to change his/her password, email, and display name. It does not allow for the modification of roles, user id, or username in order to preserve the security and functionality of the system.

The header navbar displays the currently logged in user in the top right next to the Logout button.

All data-table are searchable to any data in any column.

File Uploads are automatically encrypted on upload and decrypted on download, and are stored locally in this RIS application's root directory.