Ris-Pacs Project Functions and features documentation

By: Kyle Remillard, Daniel Schrader, Nick Grimaldi, Robert Cromer

This document goes over all of the features and systems created for the 2018 Spring Semester 4400Advanced Software Engineering Radiology Information System project.

The system has a standard login page that will deactivate and hide any non-relevant feature tabs based on role. The username and password fields will indicate which field is incorrect if entered login credentials are not valid. For testing purposes and convenience, the password for each user is the same as the username. The administrator role has access to all tabs.

The receptionist staff role has access to only two tabs: registration and the invoice tab. The registration tab has a basic form with form validation. If the user tries to insert a new patient, any missing fields will highlight red. If the user populates all but one of those missing fields, the previously red highlighted field will return to normal. Patients can only be inserted into a database if every field sans the middle initial field is populated. At successful insertion, the form is cleared to insure that no duplication can occur. The reception user is able to search the database for any user based on name entered. The system will return with any users whose name is like the entered text. This searched patient can be updated if selected which populates the form automatically and disabled certain buttons to stop duplications. At successful update, the form is cleared. The invoice tab has a table the populated with every patient and at selection an invoice table is populated with every unpaid procedure. These procedures, if selected, can be paid for.

The physician has access to every available patient and can request procedures for any patient selected. At patient selection, a table will populate with every procedure requested for the patient for physician viewing. New procedures can be created for the selected patient but medical popup will occur at procedure appointment to insure patient safety. If this popup is approved the procedure will be requested and scheduled automatically by the system. If it is denied then the procedure form is cleared the previous request will be nullified. Selected procedures can be updated or deleted as long as they are not scheduled or scheduled. Physicians have access to report completed procedures as well as their relevant images within the patient history subtab. If there are multiple images, the physician has the ability to scroll through the list of images through next and previous buttons or simply selecting the image of choice in the image list.

The modality technician has access to only a single view which is the technician view. The technician view has every schedule procedure and can begin any selected procedure. From there is a separate view is created where the technician is able to take images and save them to the database. If there are any notes that must be created, the technician is able to write notes per image.

The Radiologist has access to every procedure completed procedure. At selection of one of these procedures, the radiologist has access to any prior procedure of the patient and their images. From there they can write a report and save it for the selected procedure.