
Radiology Information System

User Manual

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Logging In Module

This module will be used by all users to login to the system with proper privileges, and to modify their personal information and/or the password.

Steps:

1. Enter your username then password.
2. Press the login button.
3. If you have the correct combination you will be signed in.
4. Depending on the type of user you are logging in as will give you different links to other functions that the system can do.

A. Login As a Patient

Given links:

[Searching \(Can only view his/her own records\)](#)

[Edit Personal Info](#)

B. Login As a Doctor

Given links:

[Searching \(Can only view records of his/her patients\)](#)

[Edit Personal Info](#)

C. Login As a Radiologist

Given links:

[Upload Image](#)

[Searching \(Can only view records done by oneself\)](#)

[Edit Personal Info](#)

D. Login As an Administrator

Given links:

[Report Generating](#)

[Searching \(Can view any records\)](#)

[User Management](#)

[Data Analysis](#)

[Edit Personal Info](#)

Edit Personal Info

Steps:

1. You can click on this link to edit your personal information as well as change your password.
2. Enter in new values into the displayed text fields which correspond to your personal information.
3. Press submit once you are satisfied with the changes you have entered.
4. If successful the updated information will be displayed.

Logging Out

Steps:

1. At the top right corner of mostly every page there will be a logout link.
2. This will take you back to the welcome page.

User Management Module

This module allows a system administrator to manage (to enter or update) the user information, i.e., the information stored in tables users, persons, family_doctor.

Steps:

1. You will be able enter/update the user_name, password, and class in the users table.
2. The first_name, last_name, address, email, and phone in the persons table.
3. The doctor_id, and patient_id in the family_doctor table.
4. Depending on what you want to manage you will be able to enter the Person's ID, the Person's Username, or the Person's Family doctor ID in text fields provided.
5. This will allow you to update the information of the latter (1 - 3).
6. Once you enter in the Person's ID, Username, or family doctor, you will be displayed texted fields which will allow you to edit the corresponding information depending on what the user first chose to enter in (ID, Username, Doctor).
7. Enter the new information into the text fields given to update the information.
8. Press submit and you will be displayed the newly updated information.

Report Generating Module

This module will be used by a system administrator to get the list of all patients with a specified diagnosis for a given time period. For each patient, the list must contain the name, address and phone number of the patient, and testing date of the first radiology record that contains the specified diagnosis. For example, a system administrator shall be able to use this tool to generate the list of all patients who have been diagnosed having breast cancer in 2014.

Steps:

1. You must first enter in a diagnosis followed by the start date and end date in the given text fields.
2. Once done, press submit
3. You will then be displayed the report.

Uploading Module

This module will be used by radiologists to first enter a radiology record, and then to upload medical images into the radiology record. In reality, all radiology images are atomically uploaded from various radiology diagnostic equipments to the database. In this project, however, you are asked to implement this module to upload an image stored in the user's local file system to the database.

Steps:

1. You will be given a radiologist record id text field and a browse button below which will allow you to upload their image to the database.
2. Once you has entered in the radiologist record id and an image press submit
3. You will be notified if the image was successfully added to the database.

Search Module

This module will be used by all the registered users to search the database for a list of relevant radiology records and to view medical images with the zoom-in facility. The search condition includes a list of keywords, and/or a time periods. The search module, upon receiving the above condition, will display a list of all radiology records that satisfy the search condition, and are accessible to the user by the security module. Each record displayed shall contain all the information, including the list of thumbnails of medical images, of the record.

Steps:

1. Enter in a keyword into the Query text field.
2. You can then enter in a start date and end date in the proper format specified.
3. Note that you have the option to search using the Query text field only, the start and end date text fields only, or you can fill in all the fields.
4. There is a drop down menu that will sort your search by default (score), most recent first, most recent last. You may choose to select whichever option you like.
5. Once you finished all the previous steps press submit.
6. A table will then be displayed showing you your search results.

Data Analysis

This module will be used by the system administrator (i.e., a user named "admin") to generate and display an OLAP report for data analysis. A user of this module may choose to display the number of images for each patient, test type, and/or period of time. For example, a user may choose to display the number of images for each patient; or display the number of images for each test type for each month.

Steps:

1. You can choose any combination of patient, test type, and/or period of time via checkboxes.
2. If you checkbox time period you must also choose the type of time period (week, month, year) from a dropdown menu.
3. If you do not select any option or a time period type, a message will prompt the user to select options.
4. Once you have selected your options press submit.
5. Your report will then be displayed.