

SHOT TRACKER LOGIN

Username:	<input type="text" value="Enter Username"/>
Password:	<input type="password" value="Enter Password"/>
<input type="button" value="Login"/> <input type="button" value="Forgot"/> <input type="button" value="New"/>	

SHOT TRACKING FORGOT PASSWORD

Please enter the email on file with your account.

<input type="text" value="Enter Text"/>
<input type="button" value="Submit"/> <input type="button" value="Go Back"/> <input type="button" value="New"/>

NEW ACCOUNT REQUEST FORM

Last Name:	<input type="text" value="Enter Text"/>
First Name:	<input type="text" value="Enter Text"/>
Middle Name:	<input type="text" value="Enter Text"/>
SSN:	<input type="text" value="Enter Text"/>
MRN:	<input type="text" value="Enter Text"/>
Sex:	<input type="text" value="Enter Text"/>
Street Address:	<input type="text" value="Enter Text"/>
City:	<input type="text" value="Enter Text"/>
State:	<input type="text" value="Enter Text"/>
Zip Code:	<input type="text" value="Enter Text"/>
Primary Phone:	<input type="text" value="Enter Text"/>
Secondary Phone:	<input type="text" value="Enter Text"/>
E-Mail:	<input type="text" value="Enter Text"/>
E-Mail (verify):	<input type="text" value="Enter Text"/>
Password:	<input type="password" value="Enter Text"/>
Password (verify):	<input type="password" value="Enter Text"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/> <input type="button" value="Help"/>	

CSCE3513 SOFTWARE ENGINEERING PROJECT GROUP 3 | PHARMACY SHOT TRACKING

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LOGIN PAGES

The shot tracker login page is a pretty standard set up from any system commercially available.

A user would enter a username (possibly email address as an alternative) and a password. The system will check against stored values in a database (password should be hashed), if verified as an existing user with proper credentials then the user object would be created from information stored in the database and updated as necessary.

If the login values do not match any database stored information, wrong password, or account not found, etc. then a counter is started that increments with each failed login attempt, at 3 failed attempts a forgot password screen is loaded (screen also available from the main login).

From the forgot password screen the user may enter their account email address and have a temporary password sent to them. Alternatively, they may return to the main login page or request a new account.

If login attempts continue to fail the account becomes locked out if found in system (suggest 5 failures, then lock), and an alert is displayed stating that the account is locked out (whether existing or not). An alert may be sent to the application administrator with system information if available.

If a new user account is requested an application form is displayed showing required fields (those shown may not end up in final product). Once completed and submitted these values are stored in a temporary table in the database and an alert is registered for the administrator to review, verify, and finalize account creation.

NEW USER

Account ID:	<input type="text" value="Enter Text"/>
Username:	<input type="text" value="Enter Text"/>
Last Name:	<input type="text" value="Enter Text"/>
First Name:	<input type="text" value="Enter Text"/>
Middle Name:	<input type="text" value="Enter Text"/>
Street Address:	<input type="text" value="Enter Text"/>
City:	<input type="text" value="Enter Text"/>
State:	<input type="text" value="Enter Text"/>
Zip Code:	<input type="text" value="Enter Text"/>
Primary Phone:	<input type="text" value="Enter Text"/>
Secondary Phone:	<input type="text" value="Enter Text"/>
E-Mail:	<input type="text" value="Enter Text"/>
E-Mail (verify):	<input type="text" value="Enter Text"/>
Password:	<input type="text" value="Enter Text"/>
Password (verify):	<input type="text" value="Enter Text"/>
Active:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Access Level:	<input type="text" value="Drop Down"/>

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USER ADMINISTRATION

This sections will be accessible by system administrators and allows them to modify and activate requested user accounts.

Just another component of the User object with some methods used by an administrator subclass that allows for the admin functions.

SHOTS ADMINISTRATION

Shot Type:	<input type="text" value="Enter Text"/>		
Common Name:	<input type="text" value="Enter Text"/>		
Vendor:	<input type="text" value="Enter Text"/>	Manufacturer:	<input type="text" value="Enter Text"/>
Vendor Item:	<input type="text" value="Enter Text"/>	Manufacturer Item:	<input type="text" value="Enter Text"/>
Cost:	<input type="text" value="Enter Text"/>		
Exclusions:	<div>Exclusions List</div>	Interactions:	<div>Interactions List</div>
Details:	<div>Exclusions Details</div>	Details:	<div>Interactions Details</div>

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SHOTS ADMINISTRATION

There is going to be a need for a couple screens in this section of the application. One for loading the information for each type of shot and another for inventory control.

Shots administration is the section that would be used to add or modify a shot type by type, manufacturer, vendor, etc. This is where all the attributes for a shot object would be added or modified.

Also within this section is an exclusions list that allows shot restrictions based upon IE answers and other risk factors (such as age), if noted in the patient demographics section then when a shot is attempted to be scheduled or assigned then a warning flag would be raised alerting the provider that the shot should not be attempted or that there are special procedures that need to be noted.

Additionally, there is an interactions section for each shot that will allow tagging of other shots in system that may have side effects when used in combination during a specified time-frame.

This may lead to cases where some interactions are known with a given shot type, but the shot that causes the interaction is not loaded in the system. In some cases, simply loading the missing shot would solve the problem, but if there are no plans to have that type as part of inventory then other steps need to be defined.

The shot inventory screen is pretty much what it says on the box. It shows how much of what type of shot is available, inventory levels can be modified directly here as well as through the patient shot screen by applying a shot.

Shot inventory would be very similar in design to the IE Survey, as an array of shot objects with methods for initiating shot object methods as well.

SHOT INVENTORY

[illegible]

INCLUSION / EXCLUSION ADMINISTRATION

New Factor

Add

Clear

All kinds of personal questions up in here

Question Behavior

When

Demographic or IE Question

Is Equal / Is Not Equal...

Some Value

Show / Don't Show

Edit

Delete

All kinds of personal questions up in here

Behavior Settings

Edit

Delete

All kinds of personal questions up in here

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INC/EXC ADMINISTRATION

This section is where administration of IE questions should be maintained, there may end up being lot less to this than planned since putting behavior builds into the site may be more complex than time allows.

Either way, there is an archive of questions that comprise the lower majority of the page that can be modified if needed by clicking the 'Edit' button. Or they may be deactivated by clicking the 'Delete' button.

Editing a question should fill out the top portion of the page with the question information that already exists and allow the user to change as needed.

Adding a new question should be as simple as just filling out the new information and clicking 'Add'.

A new question should be entered into the large textbox located at the top of the page. Behavior of the question should be determined by the drop down boxes which have selections for demographic information or a previously answered question. Once a target has been identified it's value should be noted and the behavior of the current question should be selected. Control of this part can likely get tricky, for example, if question 'A' relies on the answer of question 'B' to determine specific behavior, what happens if the wording of question 'B' changes? We might have to place some reliance tracking in here as well.

The Inclusions / Exclusions questionnaire should be an array of questions objects, with each of the questions having an identifier, questions, initial author, initial date added, modified by author array, modified date array, and behavior settings attributes. The questions objects should have methods for changing and logging this information within the database.

The questionnaire object would need to build the questions array on an as needed basis depending on which part of the program the user is in and which access rights the user has. For example, if reviewing a patient's history the questionnaire object would not need to pull in all questions ever built in the system, conversely, if administering the Inclusion / Exclusion questions, the array would likely need to view every question ever entered. This object should also include methods that allow interaction with the question objects in order to make changes and view data.

PATIENT INFORMATION AND QUESTIONNAIRE

DEMOGRAPHICS INFORMATION

First Name:	<input type="text"/>	Middle Name:	<input type="text"/>	Last Name:	<input type="text"/>
Street:	<input type="text"/>	Home Phone:	<input type="text"/>	E-Mail:	<input type="text"/>
City:	<input type="text"/>	Mobile Phone:	<input type="text"/>		
State:	<input type="text"/>	Zip Code:	<input type="text"/>		
Date of Birth:	<input type="text"/>	Sex:	<input checked="" type="radio"/> Female <input type="radio"/> Male		
SSN:	<input type="text"/>				
MRN:	<input type="text"/>				

INCLUSION / EXCLUSION

[illegible]

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INFORMATION AND QUESTIONNAIRE

This section of the application is filled out by the patient or staff in attendance.

The demographic information is to be verified by the patient and can be altered to update the database as needed.

Demographics information will also be used to generate information for risk assessment.

The inclusion / exclusion information is built from the database listing of IE information and rule-sets and will add or remove fields based on some demographic information and answers to previous questions (don't need to ask a male if he is pregnant).

The IE answers list will have to be a multidimensional array that associates with the questionnaire object that builds each time the patient object is updated. New questions that are unanswered should populate the top of the list and be color coded to alert that action needs to be taken.

The rest of the patient object that is built in this part would include the attributes generated at the top of the form in addition to the IE answers array and include methods for adding, changing, and removing information as well as keeping an audit log of all changes being made.

PATIENT SHOT TRACKING SYSTEM: SHOT LOG

Patient Name:

Patient MRN:

Edit

Alert

Patient Demographics

Full Name:

Sex:

Age:

Phone:

Patient Risk Factors

Type:

Type:

Type:

Type:

Type:

Shot History

Shot: Date:

Location:

Given By:

Ordered:

Notes:

☐ Shot: Date:

Location:

☐ Shot: Date:

Location:

☐ Shot: Date:

Location:

Inclusion / Exclusion Responses

Y N NA

☐ ☐ ☐ INCLUSION / EXCLUSION QUESTION HERE

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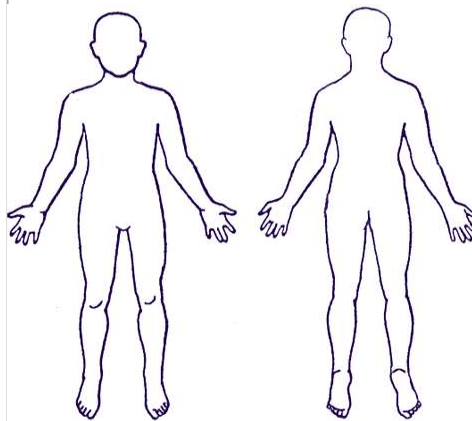
☐ ☐ ☐ INCLUSION / EXCLUSION QUESTION HERE

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Visual Location Tracking



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PATIENT SHOT LOG

The shot log shows the details for an individual patient such as demographic details, shot history, location of previous shots, and the inclusion / exclusion responses and additional risk factors.

All sections of the page will be expandable in order to show the entirety of demographic information if allowed by access level.

The demographics section will show identifying information such as name, age, sex, etc.

The risk factors section shows information pertaining to the patient that may affect health shot effectiveness but are also demographic values, such as age, ethnicity, etc.

Inclusion / Exclusion responses show the values entered by the patient on the questionnaire as a reference point for the attending employee.

Risk factors or IE responses that are deemed critical are given top of list priority and flagged with red outline or text (or anything else to differentiate from lower risk responses).

All these values will be stored across separate tables in the database.

An edit button will allow changes to be made and an alert button to log an account error.

The shot history section shows all recent shots and should be able to be organized by history, risk, alphabetically, or other methods. Additionally, a new shot addition may be started by beginning data entry into the shot history section of the log. Once the 'Add' button is clicked a pop-up should display asking to verify the patient (such as SSN).

There should be a due date for the shot in order to request one in the future as well as a back and forth communication between the shot inventory entry, patient risk factors, IE responses, and history in order to insure that a patient will not be given a shot that compromises their health.

An additional section is placed that shows a visual location tracking of the shot, for example a TB test or smallpox injection site. If a historical shot record is selected the shot site will pull up the location of the shot so that the attending staff may verify if visual recognition on the patient is required.

The patient object in this section consists of multiple values that pulls from a number of tables across the database as well as requiring a number of updates both to and from the database in order to ensure that accurate, reliable data is displayed.