**PressCryption**

**Background**

A trip to a doctor’s office for a consultation or follow up appointment is usually paired with a hand-written prescription. The prescription contains details such as what medicine to take, frequency of intake, dosage, and occasional add-on instructions.

Hand-written prescriptions are prone to misinterpretation. Human error may stem from purchase of medicine from a pharmacy all the way to reading of instructions done by the actual patient. Scenarios such as the fore mentioned are undesirable because these may lead the illness to become more severe or in worst case scenarios, may even cause death.

**Vision**

PressCryption is a system that aims to revolutionize the doctor-patient experience. The system aims to automate hand-written prescriptions in order to eliminate misreading and misinterpretation of what the doctor really intended to prescribe.

On top of this, PressCryption will be the doctor’s partner in making every patient visit hassle free and error free.

Main Function

1. System Settings Module

All settings needed to operate the system optimally are included in this module. The system settings module will be accessible through a gear button shown in the upper right corner of the screen.

1. User Registration

Upon system load and during first installation, user will be informed that he/she has to create a username and password. The registered username and password are readily editable in the system settings screen. User will only be allowed to edit the username but will not be allowed to ADD an additional user.

In the system maintenance module, upon first installation, the user will be able to register the doctor’s name, license #, pta #, s2 #. Registration of the details fore-mentioned is required. If registration is incomplete or unsuccessful, the prescription module will not be accessible.

Before saving, user has to make sure that the registered details are correct because when the save button is clicked, the said fields will automatically be greyed out; only the doctor’s name will be editable in case the doctor marries and changes last name.

1. Hospital or Clinic Registration Module

User will be allowed to register until three clinic/hospital names, contact number and their respective addresses. User will also be allowed to edit and delete these details anytime.

1. Username and Password Module
2. Email address Registration

Upon initial installation, user will be required to register an e-mail address. When registration is successful, e-mail address will not be editable and viewable in the system anymore. A “change e-mail address” button will be provided for e-mail address change; this operation will only be useful if the user still has access to the currently registered e-mail address. Clicking the “change e-mail address” button will send a link to the currently registered e-mail address. Clicking this link will allow user to register a new e-mail address.

For security reasons, when e-mail address change is needed and user no longer has access to currently registered e-mail address, user (official contract signatory) has to send a request via e-mail at **(put e-mail address here)** an attached letter requesting for change of e-mail operation.

1. Password Reset

In the login screen, a “forgot your password?” link will be shown. The user has to connect to the internet before clicking the “forgot your password?” link; an error message will remind the user of this as well. When the user clicks the link, the system will ask for the registered e-mail address. If the typed in e-mail address is the same as the registered e-mail address in system maintenance, instructions on how to reset his/her password will be included in the body of the e-mail. The e-mail will provide a link, when clicked, will be redirected to a different page and will be asked to provide a new password.

1. Password security

System should only allow a password that has at least one capital letter, one number and one special character. It should also be at least 6 characters long and a max of 20 characters.

1. Password expiry

When password validity has already been reached (30 days), upon login, user will be asked to input a new password.

1. Password Change

User will be allowed to change his/her password anytime.

1. Medicine Maintenance Module

This is the module where the user will register if not all, the most frequently prescribed medicines in order to make prescribing medicines faster and easier.

1. Generic Name Registration

User can register up to 1000 generic medicine names. Upon accessing this module, the first thing the user will see is a blank field, save, and clear button to aid in registration of a new generic name. Every time a new generic name is registered, this will show up as a list or table below along with the list of generic names already registered.

1. Medicine Brand Name Registration

User will have the power to register up to 20 sets of brand name, dosage, frequency and intake instructions under each generic name. User will also have the option to choose which set is the default. By choosing a default, this means that it will appear on the prescription page when that specific generic name is typed or chosen. If no default set is chosen, the said fields will be left empty in the prescription page when a generic name is typed or chosen.

1. Prescription Module

The prescription module screen is made to look like the actual prescription pads the doctors are use to writing in. Instead of writing everything manually in a paper pad, the system will allow the user to type in the needed information – only quicker! Medicine names and intake instructions will automatically be available with the aid of type-ahead function as well.

1. Clinic/Hospital Name Selection

On the top screen of the prescription pad, the user will see a drop down box where he/she should choose which clinic/hospital name should be shown. Upon choosing the clinic/hospital name, the other fields such as address and contact number will automatically be filled out.

1. Patient Information

Below the clinic name selection is the patient information section. User will have the provision to type in the patient’s name, age and gender

1. Add prescribed medicine

After filling up the patient details, we move on to the core part of this module which is the medicine prescription part. A “+” button will show up on screen, when the “+” button is clicked, fields such as: generic name, medicine name, dosage, frequency and intake instructions will show up on screen. When the user types in first few characters of a generic medicine name, a bunch of suggestions will show up as a drop down box. The user can simply select the correct value or carry on typing the whole thing. This same action can be done in the medicine brand name field. When the user types in a medicine brand, a bunch of suggestions will again show up in a drop down list and the user can simply click which one he/she is pertaining to.

When the user types in or selects a generic name, all the other fields setup as default in the medicine maintenance module will automatically be filled up; this is also the case when it is the medicine brand that is typed or selected. All fields, though automatically filled up are still editable. When there is no default set chosen in the medicine maintenance module, these fields will be left blank and the user will be required to fill up all the fields except for the intake instructions part.

Note: Max of 10 medicines can be added per prescription creation.

1. Important details shown on printed prescription

Details such as: doctor’s name, date (automatically set to date today), license #, pta #, s2 #, blank field for signature will show up on the printed prescription.

1. Printing and Saving

When prescription is complete, user will have the option to print the prescription or save it as soft copy. The soft copy will be stored as docx file format.

1. Create new prescription

When printing is complete, a pop up window will ask user if he/she wants to write a new prescription or simply go back to the main menu.

Timelines:

March 10-12 – finish Business Requirements and Functional Requirements document

March 13- 19 – development estimate deadline

(UI, main functions, deployment)

Pending

QA estimate

UAT timeline

Development phase other tasks:

Meetings for add-on functions (brainstorming)

Business and functional requirements document for add-on features

Future:

Development for add-on features

Presentation material for flagship product (basic feature)

Door to door selling