Homework 2

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ABSTRACT **by Stephanie Ayala**

Providing quality healthcare for the elderly can sometimes be tricky. One problem is polytherapy leading to the possibility of overmedicating patients and adverse drug interactions. It can be difficult for clients to remember health concerns between appointments and often important topics can be missed. Furthermore, there can be a lack of communication with doctors and miscommunications can arise. Many people with health concerns see multiple doctors for different conditions. During an appointment with one doctor, important information can be overlooked relating to symptoms or medications that other doctors prescribed. This can lead to unnecessary prescription of new medications that interact badly with what the patient is already on, and important symptoms of side effects being missed. As the baby boomers age, this problem will only become larger.

KEYWORDS

user; patient; caretaker; survey; report; notification, drug-drug interaction; side effect; symptom

1. FUNCTIONAL REQUIREMENTS

1.1 DEFINITION

The role of the application is to make it easier for elderly patients and their caretakers to manage medications, avoid dangerous medication interactions, and to ensure healthcare providers are well informed of the patient's current medications and recent symptoms.

The application will feature the functionality to: take a picture of a prescription label and record the details of the medication, as well as give users the flexibility to manually record over-the-counter medications and supplements; keep track of doctor's appointments and medication doses via a calendar; take a guided daily healthy survey to ensure the patient's medications are working as intended; and easily provide a report for patients to take to their doctors' appointments.

Since elderly patients are widely known to take more medications than the average person, and thus are at more risk to adverse effects, this application will also feature an alert system. The alert system is intended to help users be reminded about medication doses and doctor's appointments, and to avoid potentially dangerous reactions to medications.

Patients will also have the option to add one caretaker to co-manage their patient profile. Caretakers receive all notifications that the patient does, but are limited by account permissions given to them by their patient.

The ultimate role of these features is to aid in the reduction of the annual statistics on elderly patients taken to the hospital for adverse side effects of their medications.

1.2 SPECIFICATION

The application is intended for primary use on a mobile device. However, it will also be accessible on a desktop via a web application should a user want to take more control manually managing a patient account.

Before any of the other features of the application can be utilized, a user must record a medication. For ease of use, users take photos of their prescription label by which important data is extracted and filled into a new prescription form. The user has the ability to edit and/or add additional information, like the prescribing doctor's contact information and medication start date and reminder time, before saving the medication record. For over-the-counter medications and supplements the user must manually enter all pertinent information as the photo capture feature is only compatible with prescription labels.

After a new medication is recorded in the database, the application runs a query with all of the patient's current medications through a reputable open source medication database, much like the DrugBank DB API. If the query returns any new side effects not already in the patient's profile, then they will be added to the database. Similarly, if the query returns any known drug-drug interactions among the patient's medications, then they are also entered into the database and a notification is created and presented to the patient and, if applicable, their caretaker.

Besides recording medications, the next most important feature of the application is the daily health survey. For ease of use, the user is prompted at the same time everyday, specified by the user, to take the survey. The survey features only a few important questions that require the user to only respond via a 0 to 10 scale. After the user answers the brief questions they have the option to report any pain or discomfort they are feeling in more detail via a human body

diagram, separated into sections, for the user to click on and choose their symptom(s).

Survey data is stored in a database at the end of the survey and available to be queried and printed and/or emailed in a report at the user's will, particularly when they have an upcoming doctor's appointment. After each survey, the patient and, if applicable, their caretaker are notified of any potential problems regarding their medications.

As is common on mobile devices, pop-up notifications can be "swiped" across the screen to be removed. However, this application is calibrated to issue alerts of low, moderate, and severe natures. We don't want a notification of a severe nature to be "swiped" away to be forgotten. Thus, notifications are held in a repository, much like an email inbox, where they are color coded by severity and cannot be deleted. We also don't want the notifications to pile up, thus any notifications past more than 30 days are automatically archived.

Users will also have a calendar by which they can record their medication schedules and doctor's appointments. Medication schedules are automatically generated by the dosage information for their medications, which can be manually altered via the web application if needed. Doctor's appointments must be manually entered like in any calendar app (mobile or web app), but can draw from a list of the patient's known doctor's already recorded in the application.

Before each appointment, the user is prompted by a notification to print a report, which is automatically generated by the software application 24 hours before the appointment. Most doctors' offices ask patients to fill out wellness forms covering their well being over the past two weeks so the doctor has the most relevant information. The software report queries data from the most recent 30 days in order to ensure a patient does not forget to tell the doctor any potentially pertinent information during their appointment.

2. NON-FUNCTIONAL REQUIREMENTS

Reliability: The system should be very reliable. The reliability should be as close to 100% as possible since lives could be at stake. For example, if a patient needs to see a doctor for major surgery and cannot print out a report then there is a chance for drug interactions.

Efficiency: The efficiency of the system does not have to be very high. It should be about average, similar to what users experience with other applications.

Integrity: The integrity of the system must be very high. People will be using the system to manage their health and a faulty interactions warning could be dangerous. Since the data supplied in the system is private health information, all data should be encrypted as to prevent theft.

Usability: It should be very easy to use since the elderly and their caretakers are going to be using the software. In this regard, the interfaces will be simplistic (no frills), with large, bright action buttons, and large readable text.

Maintainability: Maintainability should be about average for a similar system. Though needed updates to bugs in the system should be accounted for, changing bits of code is not an important selling point of the application. Too many changes could make elderly patients frustrated with learning new features and less likely to continue to use the system.

Testability: Since reliability and integrity need to be high, the system must be very testable. This code must be highly modularized and pre-written tests must be created for each modular component.

Flexibility: Average to low flexibility for a similar application. The application must be simple for the elderly and their caretakers to understand and having many features does not contribute much to the main functionality. Users will have the option to manage their accounts with more flexibility via the web interface, however this is not a priority of the system.

Portability: The system needs to be reasonably portable. It needs to work on PCs, Macs, tablets, and smartphones in order to accommodate the most reasonable technologies that elderly patients may be comfortable using.

Reusability: There is not much need for reusability since the main intent is not to spawn additional apps in the future.

Interoperability: The interoperability needs to be reasonably high as the program includes a critical API that must work with as little problems as possible. The API is required to return known drug side effects and interactions that are potentially dangerous to a patient's life. Without seamless interoperability, the reliability of the system deteriorates.

3. USE CASES

As approved by our customer, though there are several use cases for this software application, the following three were determined to be of the highest priority.

3.1 RECORDING MEDICATIONS

Name: Record a New Prescription Medication

Actor: Elderly Patient or Caretaker

Preconditions:

1. User has a mobile device with a camera.

2. User has downloaded the software application on their mobile device.

3. User has set up their user account and is logged in.

4. Uer has the prescription container and physical medication in front of them.

5. If user is a caretaker, they have been invited, through the software, by the elderly patient to help manage the patient account.

6. If user is a caretaker, they have been given permissions by the patient account to record new medications into the patient's profile.

Postconditions:

1. User successfully recorded the new prescription into the patient's database.

2. Medication has been checked for side effects and interactions with the patient's other medications.

3. Software calendar is populated with the medication dosage schedule.

4. User can identify medication by referencing a stored photograph.

Flow of Events:

1. User taps on Add Prescription icon on the application home page.

2. App opens to camera image capture, looking for a prescription label.

3. User focuses camera over prescription label. May need to tap screen to initiate refocus.

4. User taps capture icon to take image of prescription label.

5. Screen presents the image just captured and SAVE and DELETE icons. The user may choose either based on their judgement of the image.

6. User is returned to the camera image capture to take as many photos of their prescription label as they want, each time previewing and saving or deleting the image.

7. When the user is done capturing images, they select the X icon in the top left corner to exit the camera feature and take them to the prescription profile form.

8. Application translates and fills the form fields for the medication name, dosage, instructions, expiration date, duration, frequency, doses, refills, prescription number, prescription expiration date and doctor's name.

9. User taps on form icon for the medication's profile picture.

10. App opens to the camera image capture.

11. User removes a physical sample of their medication from their prescription container.

12. User focuses camera over physical medication. May need to tap screen to initiate refocus.

13. User taps capture icon to take image of physical medication.

14. App presents a preview of the captured image for the user to SAVE or DELETE.

15. App returns to medication form.

16. USer has the option to manually add/update/delete the prescription images, dosage, instructions, reminders, schedule, refills, and doctor information before selecting SUBMIT.

17. User taps on PRESCRIPTION arrow to expand view and review all capture images of the prescription label.

18. User may delete an image by highlighting the image and selecting the DELETE icon. Alternatively, the user may take another photo by selecting the ADD IMAGE icon.

19. User taps on DOSAGE arrow to expand view and review dosage amount and unit.

20. User may increase or decrease the dosage by utilizing the - and + icons, and change the unit by selecting the down arrow to view a list of possible dosage units.

21. User taps on INSTRUCTIONS arrow to expand an review instruction information.

22. User may free-type changes to the instructions, and/or select additional instructions listed by selecting their corresponding checkboxes.

23. User may turn REMINDERS on or off by taping sliding icon.

24. If sliding icon is ON, then user taps REMINDERS arrow to expand and review daily reminders to take this medication.

25. User may increase or decrease dosage reminders per day by utilizing the - and + icons.

26. For each count of dosage reminders, a time selection is added. The user may change the hour, minute, and AM/PM by utilizing their respective down arrows and drop-down lists.

27. User may increase or decrease the count of doses to take at each reminder time by utilizing the - and + icons.

28. User taps on SCHEDULE arrow to expand and review schedule for the dosage reminders.

29. User may change the start date by taping the current start date, which populates a pop-up calendar for the user to change the date.

30. User may change the medication expiration date by tapping the current recorded date, which populates a pop-up calendar for the user to change the date.

31. User may change the duration of taking the medication between NO LIMIT and LIMIT.

32. If user chooses LIMIT, they may increase or decrease the count by utilizing the - and + icons, and change the LIMIT duration by utilizing the dropdown list (days, weeks, months, years).

33. User may change the schedule frequency by selecting EVERYDAY, utilizing the - and + icons for a count of days, or selecting CUSTOM.

34. If the user chooses CUSTOM, a pop-up list of days of the week is populated and the user may select which days of the week to be reminded to take their medication.

35. User taps REFILLS arrow to expand and review prescription refill information and reminder.

36. User may increase or decrease count of doses remaining, as well as count of refills remaining by utilizing - and + icons.

37. User may turn on/off refill reminder. If reminder is ON, user may increase or decrease at which dosage to receive the refill reminder by utilizing - and + icons.

38. User may change reminder time by selecting the hour, minute and AM/PM by utilizing their respective drop-down lists.

39. User may edit the prescription number by typing in edits.

40. User may edit prescription fill and expiration dates by tapping on current recorded dates, which populates a calendar by which to choose alternative dates.

41. User taps on DOCTOR arrow to expand and review the prescribing doctor’s information.

42. User may edit the doctor’s name, email address, phone number, and address by selecting the respective text field and typing in the information.

43. User scrolls to the end of the form and taps the SUBMIT icon.

44. Screen displays a message indicating their new medication was saved successfully. The user selects the CONTINUE icon.

45. If a new record could not be created, screen displays an error message. The user selects CONTINUE and is returned to event 18.

46. In the background, app runs all medication records in the patient’s database through a known “drug interactions” database from a reputable online source.

47. Any returned interactions generate new notifications that are recorded in a notifications table in the patient’s profile database.

48. The user is automatically brought to the ALERTS repository to view any new notifications generated from the query of their new prescription. A notification block will populate on the user’s companion account’s screen, which they can swipe right to remove.

49. User may select a notification, which splits the screen with the notification details on the bottom half.

50. User may exit the ALERTS repository by selecting the X icon at the top left corner, returning to the apps home page.

3.2 HEALTH SURVEY

Name: Submit the daily health survey

Actor: Elderly Patient or Caretaker

Preconditions:

1. The user has a mobile device or desktop.

2. The software is downloaded to the user's device.

3. The user has an active account.

4. The user is logged in to the home page of the application.

5. The user has received a notification to take their daily survey.

6. The daily report is not submitted yet.

7. If the user is a caretaker, they have been invited to help manage the account by the patient.

8. If the user is a caretaker, they have been given permission to fill the daily health survey.

Postconditions:

1. The survey results are stored in the database.

2. System alerts if there are cautionary side effects or medicines are not working.

3. Notification record created if there are any alerts for side effects and not working medicines.

Flow of events:

1. The user taps on the "Take Survey" icon.

2. The app opens to the Dail Survey activity, where the user is presented with instructions on how to take the survey.

3. The user may read the instructions or listen to them by selection the speaker icon.

4. User selects CONTINUE to move on to the survey questions.

5. The list of medications and their side effects are taken to produce survey questions that detect abnormal side-effects and the effectiveness of each medicine.

6. The survey questions are presented to the user one at a time.

7. The user answers the question by sliding a bar that represents a scale of 0 to 10 from right to left respectively, 0 representing none and 10 is the extreme.

8. When the user is ready to move on to the next questions, they select the NEXT arrow. Alternatively, if the user wished to return to a previous question they select the PREV arrow.

9. After answering the final survey question the user selects the SUBMIT icon.

10. A new page is presented to the use to inform them that the survey questions have been successfully completed, and based on the answers an informative message presents brief feedback to the patient regarding the severity of how they are feeling today.

11. After reading the brief report, the user selects the CONTINUE button to proceed to entering their daily symptoms.

12. The user is presented with instructions on how to complete the symptoms survey, which they can read or listen to using the speaker icon.

13. The user selects the CONTINUE icon to proceed to a human body diagram. After all questions are answered, a human body picture is presented on the screen.

14. The user clicks on a region of the body in the diagram to indicate where the symptom is located. The user can select a ROTATE icon to alternate between a backside and frontside view of the human body diagram.

15. Once a region is selected, a new page is presented with a list of known symptoms (pain, itch, color, etc.), as well as an ADD SYMPTOM icon.

16. If the user chooses the ADD SYMPTOM icon, a new page is presented where the user can type in their symptom and SAVE or CANCEL their entry.

17. After saving or cancelling their new symptom, the user is brought back to the list of symptoms for their chose region of the body.

18. After choosing all known symptoms, the user selects the SAVE icon to return to the body diagram.

19. The regions marked with symptoms are highlighted so the user can see where their symptoms have been recorded.

20. After the user has finished logging all their symptoms, they select the SUBMIT icon.

21. The symptoms recorded are queried to be compared to the side effects and interactions of the medications taken by the patient.

22. A new page is presented to the user to inform them that their symptoms have been successfully recorded, and based on the symptoms logged an informative message presents brief feedback to the patient regarding the severity of how they are feeling today.

23. If there are any present side effects, an alert is outputted to the user's companion account's (patient/caretaker) screen, while the user is automatically directed to the ALERTS repository where they can view any notifications resulting from their survey.

24. The notifications are color coded based on the severity of the alert, red for high risk, orange for moderate risk, yellow for for low risk, and green for no risk alert.

25. The user can exit the ALERTS repository by selecting the X icon at the top left to return to the home page. The companion account can dismiss the screen notifications by swiping to the right.

26. The notifications are stored in the database to be reviewed when needed in the future.

3.2 REPORTING TO DOCTORS

Name: Generate Health Report for Doctors Appointment

Actors: Elderly Patient or Caretaker

Preconditions:

1. User has an upcoming doctor's appointment

2. Health report has been generated and recorded in the database.

3. Health report has not been submitted by email or printed.

4. Software is pre-configured on mobile device and PC/Mac and has the latest edition.

5. User account is active on the database.

6. User has logged in and has access to records.

7. User has doctor's email address attached to the account. If email is not attached with the account, user must print the report and bring it to their appointment.

Postconditions:

1. User has submitted or printed health report in a reasonable time for their appointment.

2. Health report is received by the doctor.

3. Doctor can discuss the report with user at their appointment.

4. Report is available to the user on the mobile app for a predetermined amount of time, typically 30 days.

5. Health report is archived on the database, after 30 days.

Flow of events:

1. User selects the REPORTS icon from the application homepage.

2. Reports page populates and lists links to all reports generated as PDFs in the past 30 days from the database.

3. User has the option to generate a new report by selecting the GENERATE icon. This will create a report for the past 30 days of data from that moment, with no doctor or appointment information attached. This report will also appear as the newest report at the top of the list.

4. User selects the most recent report, typically no longer than 2 pages.

5. User is presented with a preview or the desired report to be submitted.

6. User reviews report data consisting of, chronological symptom events, line charts of severity of symptoms over the past 30 days, and a list of the patient's medications

7. User scrolls to the bottom of the report and selects the green SUBMIT icon in bold for readability

8. Another window pops up with the options to EMAIL or PRINT

9. If there is no known email for the doctor in which the patient has an appointment, then the EMAIL icon is disabled.

10. If the EMAIL icon is not disabled, and the user selects it, the user's email application opens with a new message to be composed, populated with the user's email address, the doctor's email address, and attached PDF of the report, and a generic message.

10.1 The user has the ability to edit the email.

10.2 User selects the SEND.

10.3 Screen returns to report with EMAIL and PRINT window still active.

10.4 Doctor receives the report and can be seen in the inbox of doctor's email account.

11. If PRINT icon is selected, the user's device defaults to it's print settings with a PDF of the report in its queue.

11.1 User can preview the document, select their print settings and then select the print icon.

11.2 Report is printed on hard copy.

11.3 If user's profile contains doctor's email, the user's email application opens with a generic message indicating the patient will bring a report in person.

11.4 User edits then sends or exits the email and returns to the software application.

12. After the report was submitted successfully, the app changes to a notification screen indicating the that report was emailed/printed successfully.

13. User selects the CONTINUE icon to proceed back to the application home page.

14. Health report is archived and stored in the database for future access.

15. User closes app and user is signed off with no loss in data.

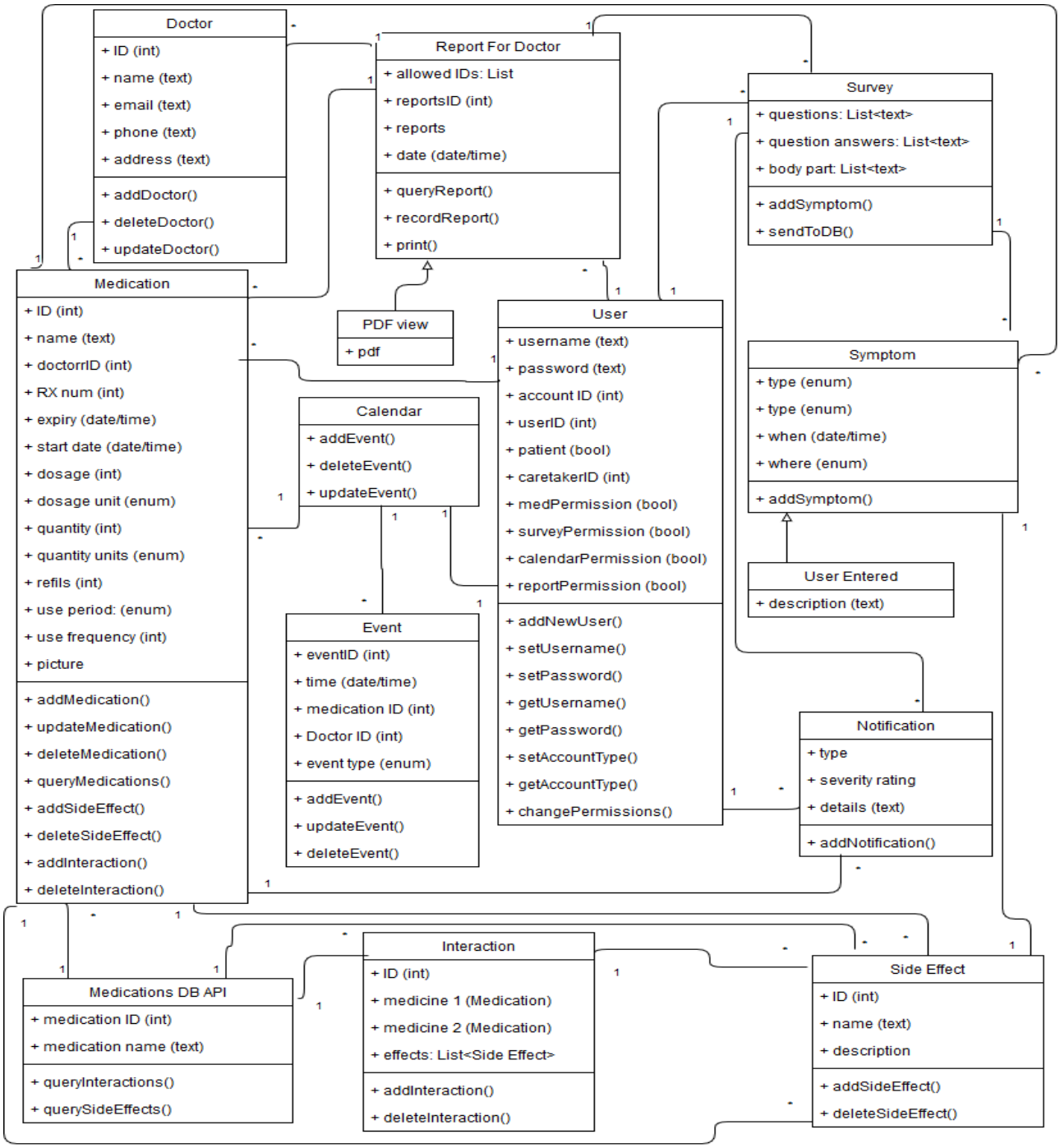
16. User disconnects from the software.

4. UML CLASS DIAGRAM

The diagram below shows all the components (classes) that make up the application. Each box is a class. The boxes are subdivided into 2 or 3 levels arranged vertically. The top level is the class name, below that the class variables, and at the bottom are the class methods. The lines between boxes are the connections between them.

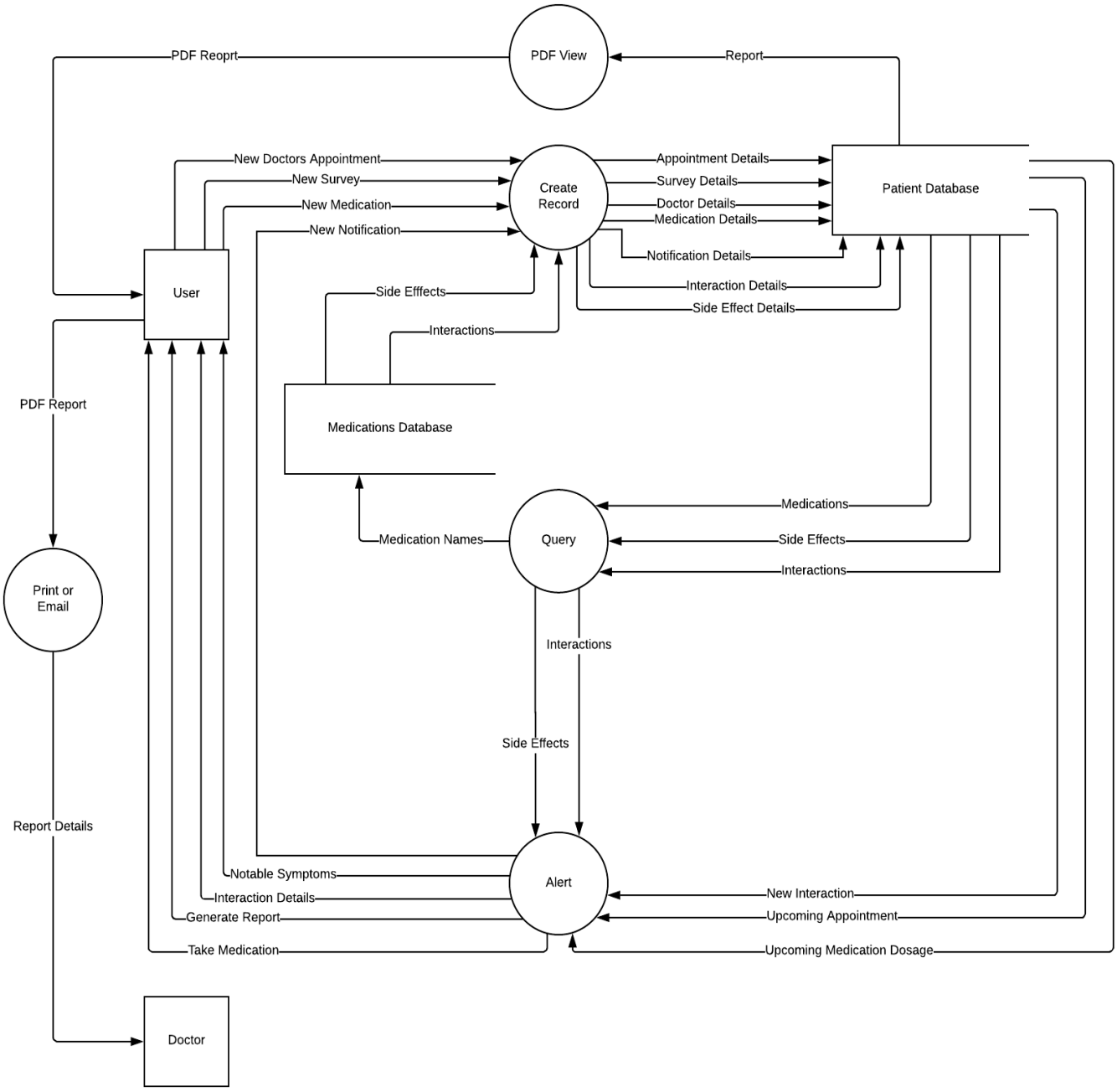
The numbers next to these lines show the cardinality between classes. So if class 1 has a "*" next to it and class 2 has a "1" next to it it means that there are many (potentially infinite) instances of class 1 for every instance of class 2. Finally the arrowheads show dependencies.

The class' methods indicate the functions used to manage records of class objects in the software database. Each class is a table, each object is a record, and most attributes are columns in their respective tables.



5. DATA-FLOW DIAGRAM

The following diagram depicts the flow of parameters and outputs within the software application system, as a collaboration of the system's use cases. Squares are actors, circles are functions provided by the system, rectangles are data stores, inward arrows are parameters, and outward arrows are outputs. Lucid Charts was used to create the chart, and thus the symbols used reflect the Lucid Charts tutorial for data flow diagrams.



6. USE CASE STATE CHARTS

6.1 RECORDING PRESCRIPTIONS

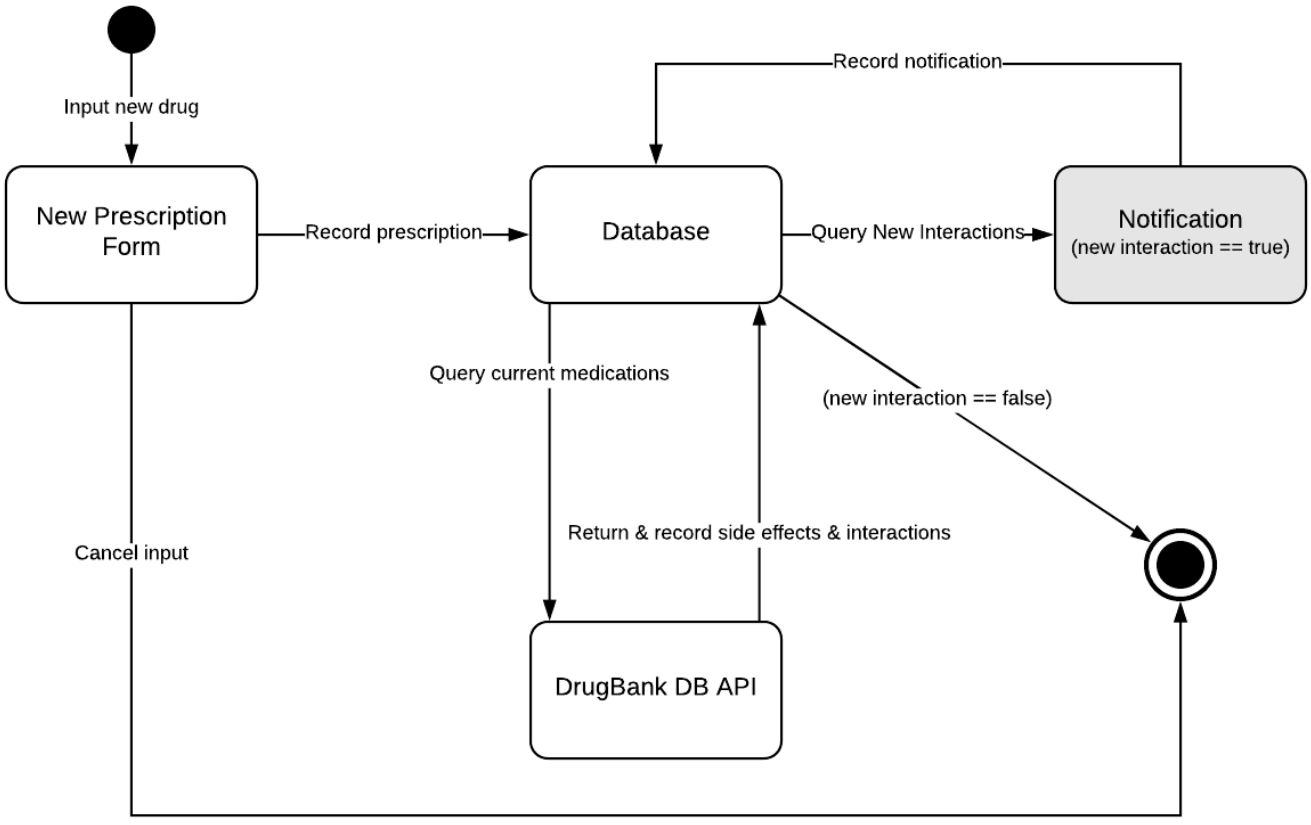
The purpose of this software is to keep track of an elderly patient's medications and reactions in order to help reduce the risk of drug interactions with potentially dangerous side effects. Before the software can monitor a patient's reactions, or report any side effects, the system must first obtain the data for the patient's medications.

In this process, the patient or the patient's caretaker has obtained a new prescription and needs to record it in their application. The user inputs the drug's information into a new prescription form by taking a picture of the prescription label. The application translates the label and generates the relevant data in the form, allowing the user to make manual changes. Once the user has confirmed the correctness of the information, the data is stored in a new medication record in the database.

A new medication record triggers a query which runs all the patient's current medications through a reputable open-source medication database, like the DrugBank API. If the query finds any new side effects or drug-drug interactions among the patient's medications, then the returned records from the query are recorded in the appropriate tables in the database.

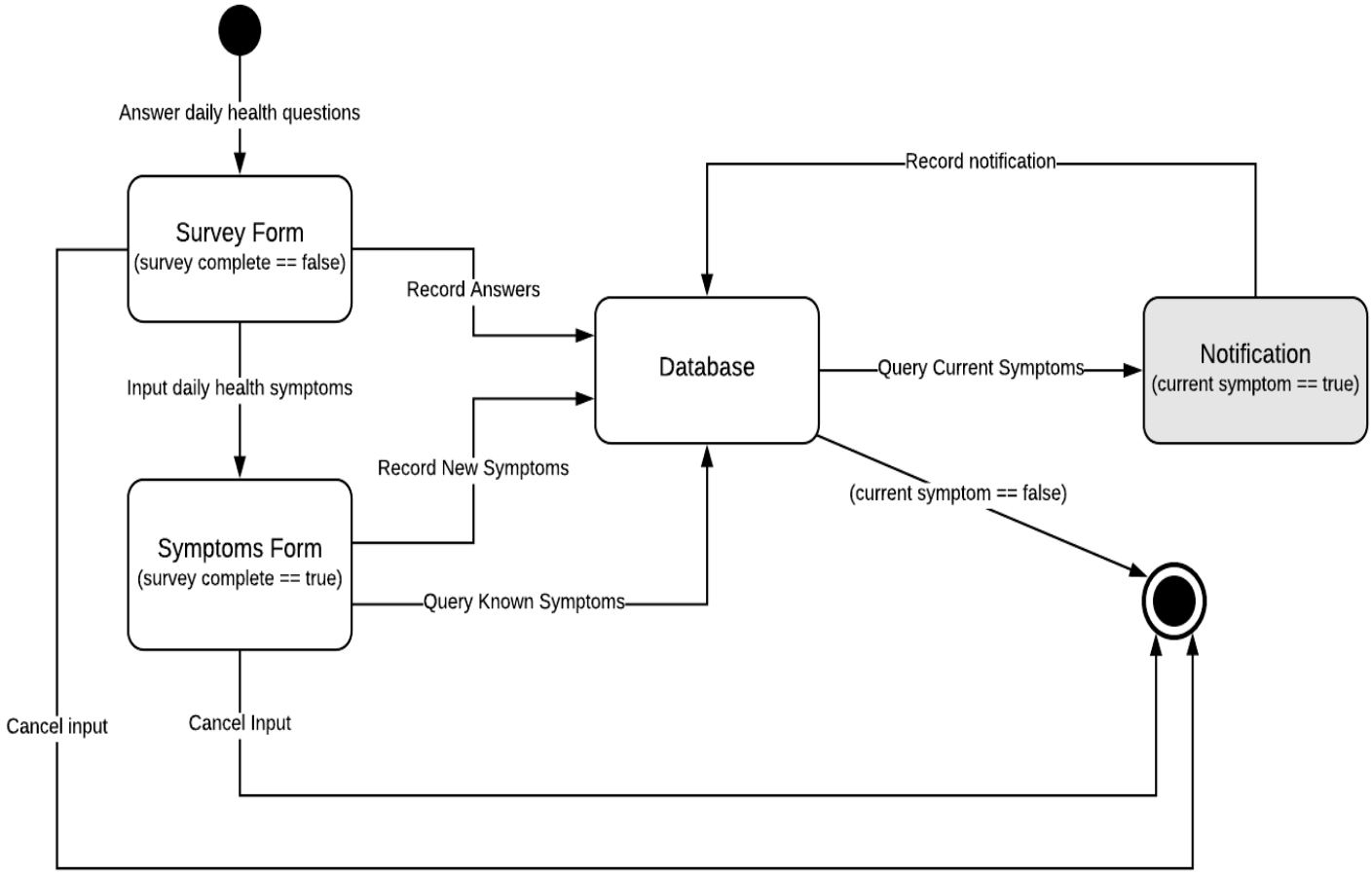
If a new record is recorded in the Interactions table, then a notification is generated and outputted to the patient and their caretaker. The generation of a new notification creates a new record in the Notifications table in the database. Notifications are created for every query record of interactions returned from the API. Each interaction is tagged as "new" until a notification has been issued for it. Therefor, the software stays in a loop of [interaction == new -> output notification -> record notification] until there are no remaining interactions considered "new".

The medication data was confirmed, side effects and interactions have been recorded, and notifications have been issued, thus the process is considered complete.



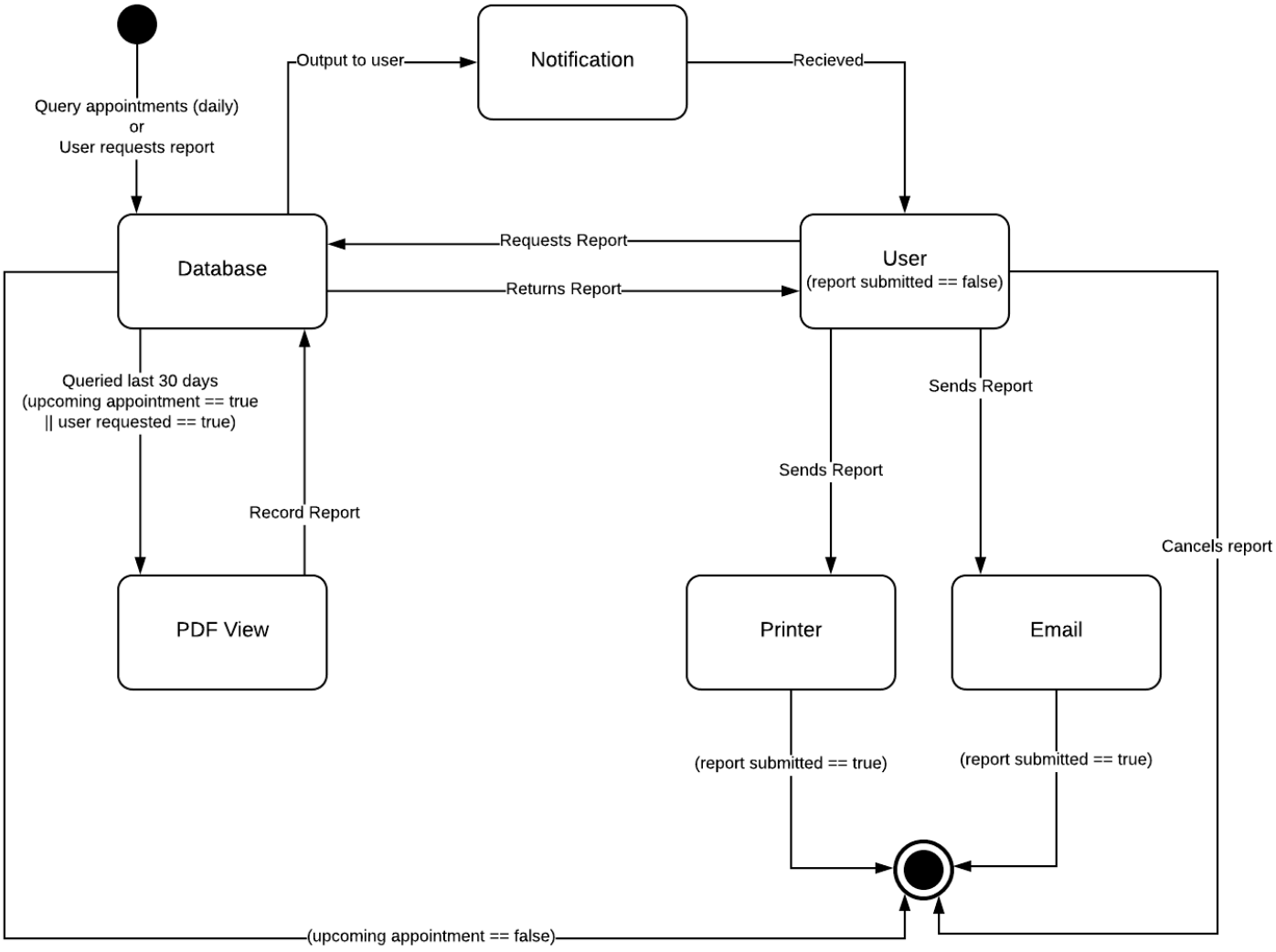
6.2 HEALTH SURVEY

Two of the main functions of the software are to keep track of a patient's well being and to notify them in case of any symptom they feel is potentially dangerous. This is carried out through a daily health survey. The diagram below shows how data flows through the health survey functionality. The data is created when the user answers the survey questions and inputs their current symptoms, and it is then stored in the database. If the user has input a previously unknown symptom, a new record is created in the Symptoms table with the details of the user's input. If the user chose a known symptom from the human body image Symptoms Form, then the symptom is queried from the database to return its known severity. Notifications are created for each level of severity of the symptoms entered in the Symptoms Form, and are merged according to said severity. The symptoms entered by the user are tagged as "current" until a notification has been issued, then the tag for "current" is set to false. When there are no more symptoms tagged as "current" the loop ends and the survey exits.



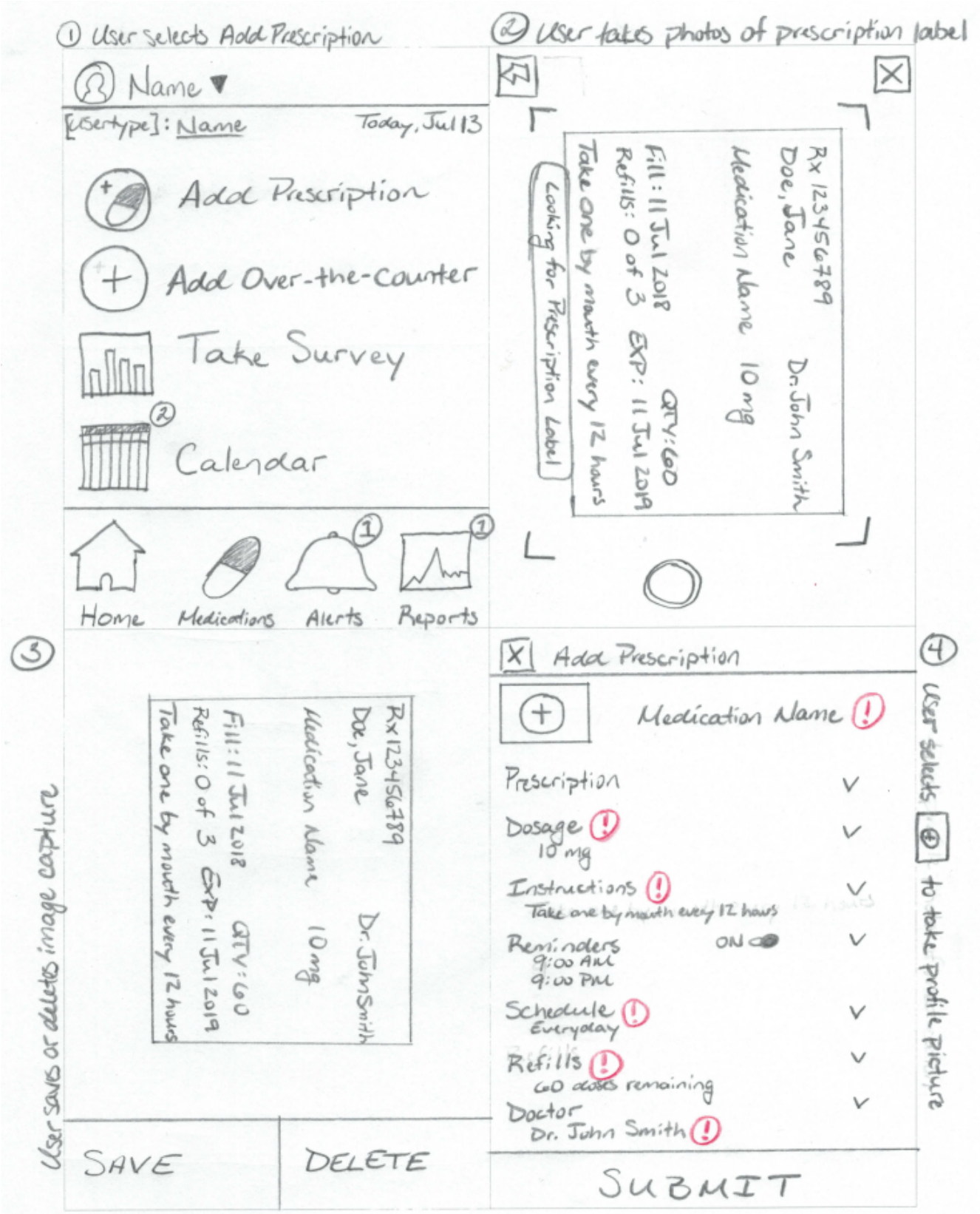
6.3 REPORTING TO DOCTORS

In order to ensure the best possible care for the patient a medical report can be printed out and brought to or emailed to their doctor. This report lists the patient's current medicine, chronological symptom events, and statistical charts of the patient's well being survey results. The chart below shows how a report is generated and accessed by the user to review themselves and/or give to their doctor. The patient's calendar is queried daily for upcoming doctor's appointments. If there are no appointments within the next 24 hours (default, user may change), then no report is generated automatically and the user is not notified. If the query does return any appointment records, then this triggers a query to analyze and report the patient's data for the past 30 days. Similarly, if the user requests a new report, this also triggers a query to analyze and report the patient's data for the past 30 days. The report is created in PDF format and stored for the patient to recover. A notification is sent to the patient and, if applicable, their caretaker on-screen and/or by email indicating the creation of a new report. The user can then request the report from the software to be printed, or emailed to their doctor. After the report has been sent, the process ends. The process can also end by the user cancelling their request for a report.



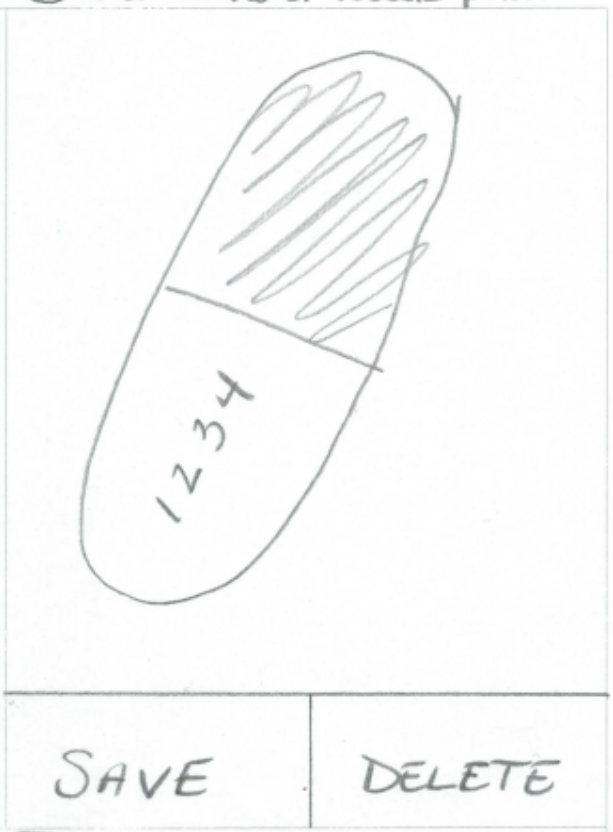
7. USE CASE PROTOTYPES

7.1 RECORDING PRESCRIPTIONS



⑤ User takes photo of medication

⑥ User saves or deletes photo



⑦ Add Prescription

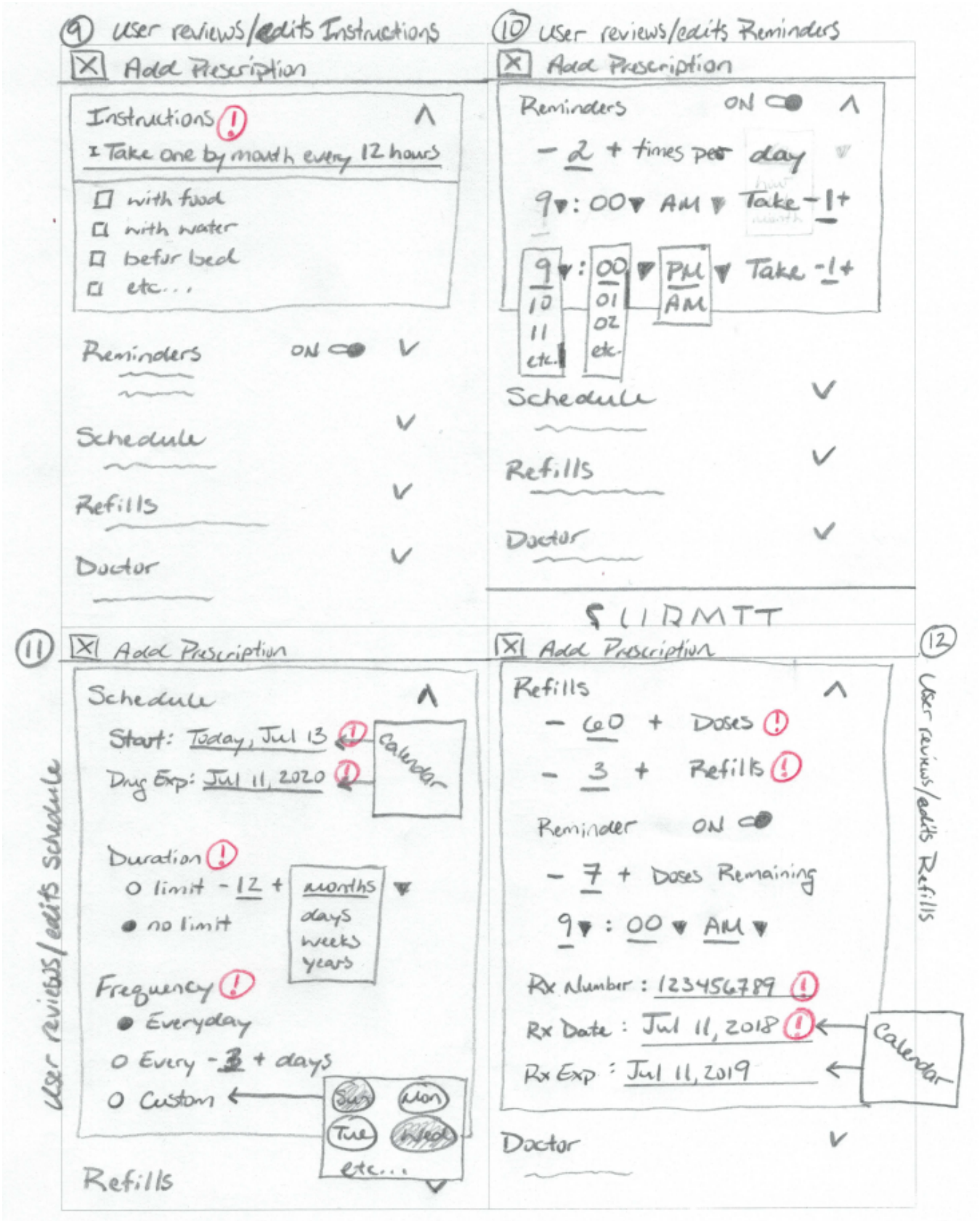
Prescription
Add image
DELETE
Dosage
10 mg
Instructions
Take one by mouth every 12 hours
Reminders ON
9:00 AM
9:00 PM
Schedule
Everyday
Refills
60 doses remaining
Doctor
Dr. John Smith

User reviews images of Prescription label

⑧ Add Prescription

Dosage !
- 10 +
mg
g
tsp
Tbsp
patch
Spray
drops
etc...
Instructions
Reminders ON
Schedule
Refills
Doctor

User edits dosage


9 User reviews/edits Instructions
Add Prescription
Instructions
1 Take one by mouth every 12 hours
with food
with water
befor bed
etc...
Reminders ON
Schedule
Refills
Doctor
10 User reviews/edits Reminders
Add Prescription
Reminders ON
- 2 + times per day
9 : 00 AM Take - 1 +
9 10 11 etc.
00 01 02 etc.
PM AM
Schedule
Refills
Doctor
SUBMIT
11 User reviews/edits Schedule
Add Prescription
Schedule
Start: Today, Jul 13
Drug Exp: Jul 11, 2020
Calendar
Duration
limit - 12 + months days weeks years
no limit
Frequency
Everyday
Every - 3 + days
Custom
Sun Mon Tue Wed etc...
Refills
12 User reviews/edits Refills
Add Prescription
Refills
- 60 + Doses
- 3 + Refills
Reminder ON
- 7 + Doses Remaining
9 : 00 AM
Rx Number : 123456789
Rx Date : Jul 11, 2018
Rx Exp : Jul 11, 2019
Calendar
Doctor

(13) User reviews/edits Doctor

Doctor ^

Dr. John Smith (!)

Email

Phone

Address

SUBMIT

(14) User Submits with all required info

Thank you, user.

Your prescription for [Medication Name] was saved successfully.

CONTINUE

(15) User tries to submit without all required info

Required information is missing.

Take more pictures of your prescription label, or manually enter.

CONTINUE

(16) User chooses to exit out of Add Prescription

Discard Entry

Are you sure you want to quit without saving?

CANCEL QUIT

(17) Interaction found between new and existing medication

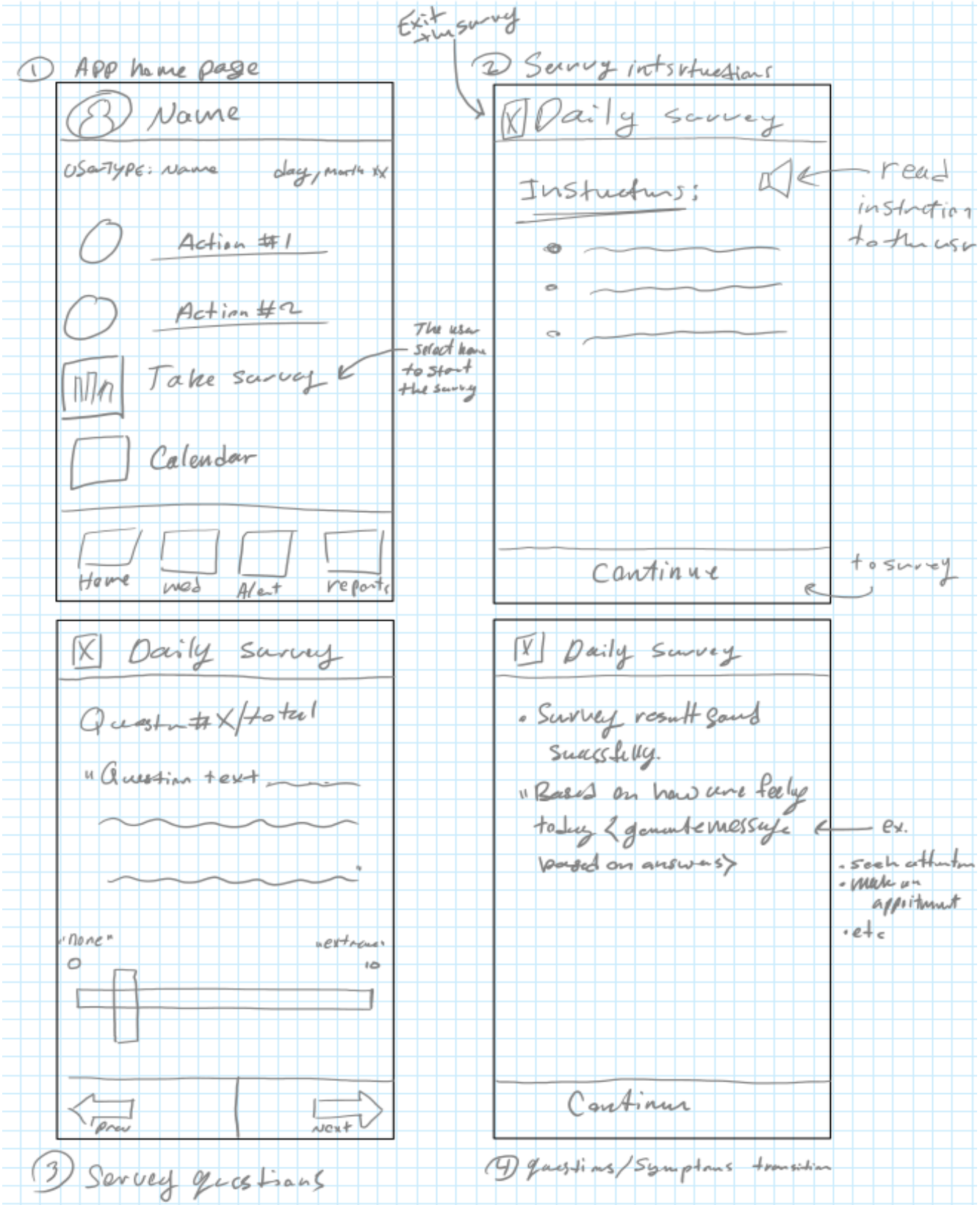
[X] Alerts

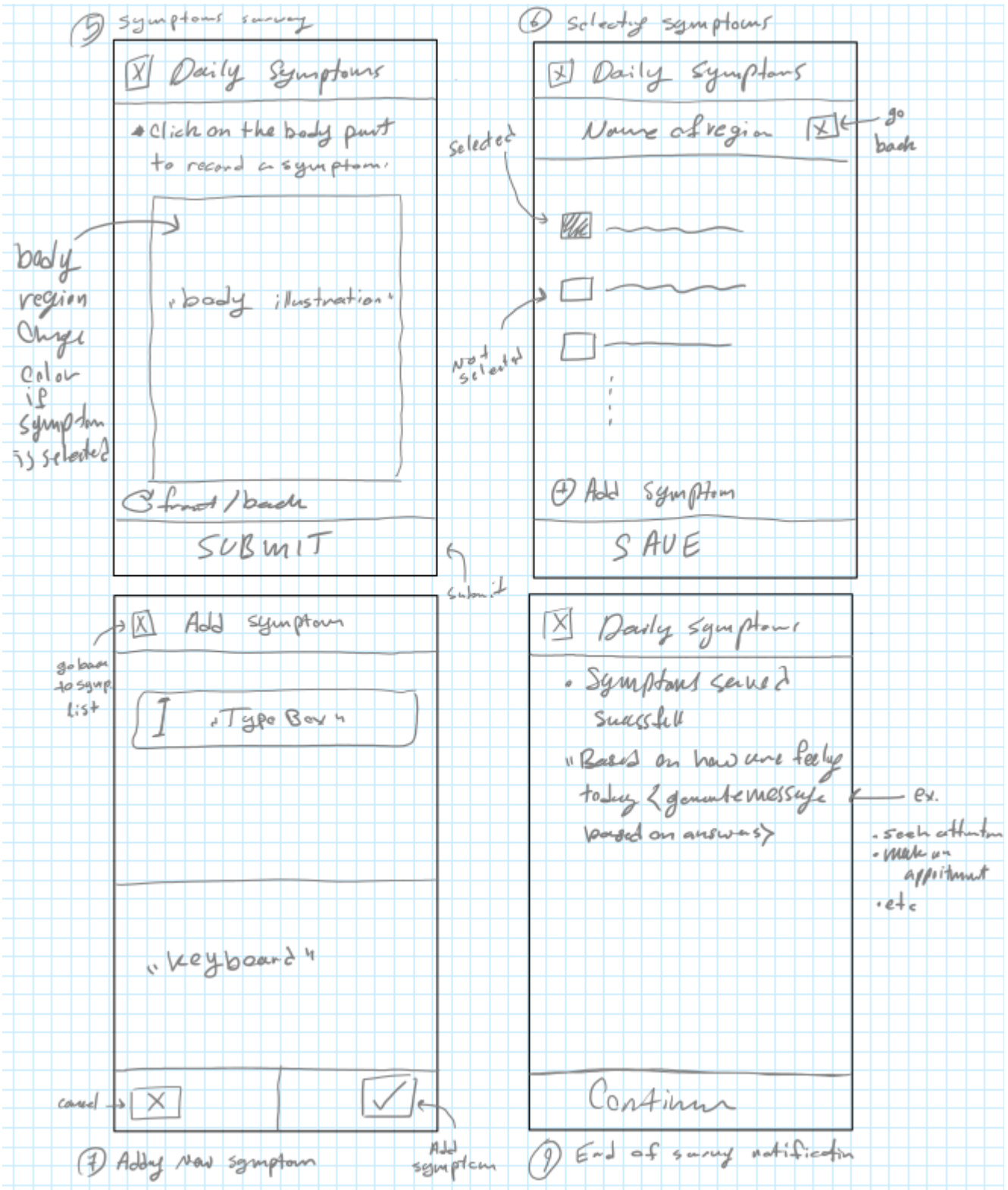
- Notification (unread & selected)
- Notification (unread)
- Notification (read)

!

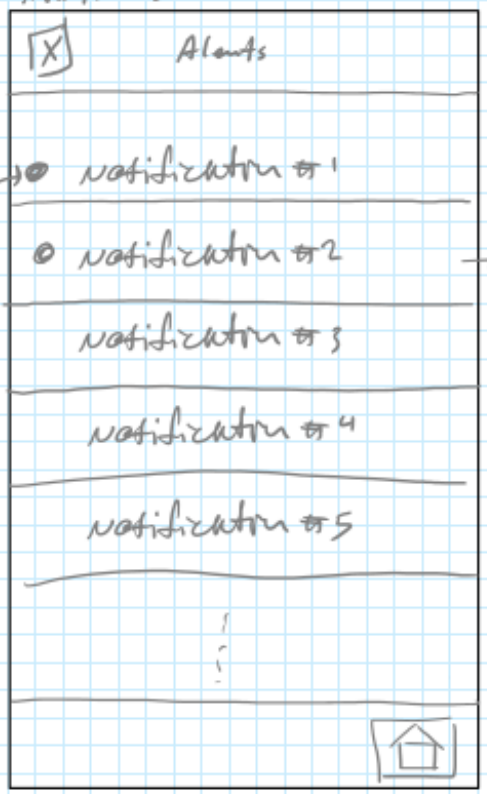
Interaction found between [medication name #1] and [medication name #2]. Take caution. Consult doctor(s): Dr. John Smith, Dr. Jane Smith

7.2 HEALTH SURVEY




5 symptoms survey
Daily Symptoms
• Click on the body part to record a symptom.
"body illustration"
front / back
SUBMIT
body region changes color if symptom is selected
6 selecting symptoms
Daily Symptoms
Name of region
go back
selected
not selected
Add symptom
SAVE
submit
Add symptom
"Type Box"
"keyboard"
go back to symp. list
cancel
Add symptom
7 Adding new symptom
Daily symptoms
• Symptoms saved successfully
"Based on how you're feeling today <generate message based on answers>"
ex.
• seek attention
• make an appointment
• etc
Continue
9 End of survey notification

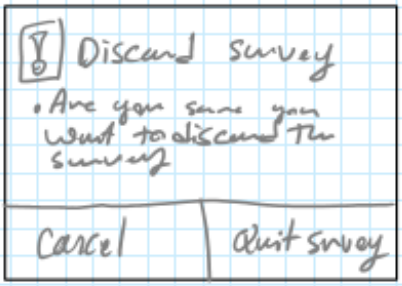
⑧ New Alerts



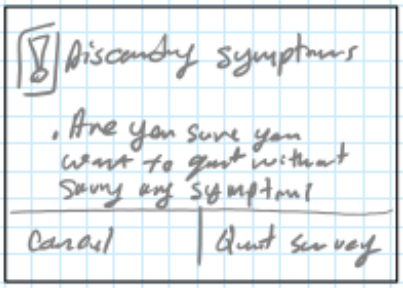
New Alert Indicator

Notifications Are color coded based on the severity of the alert

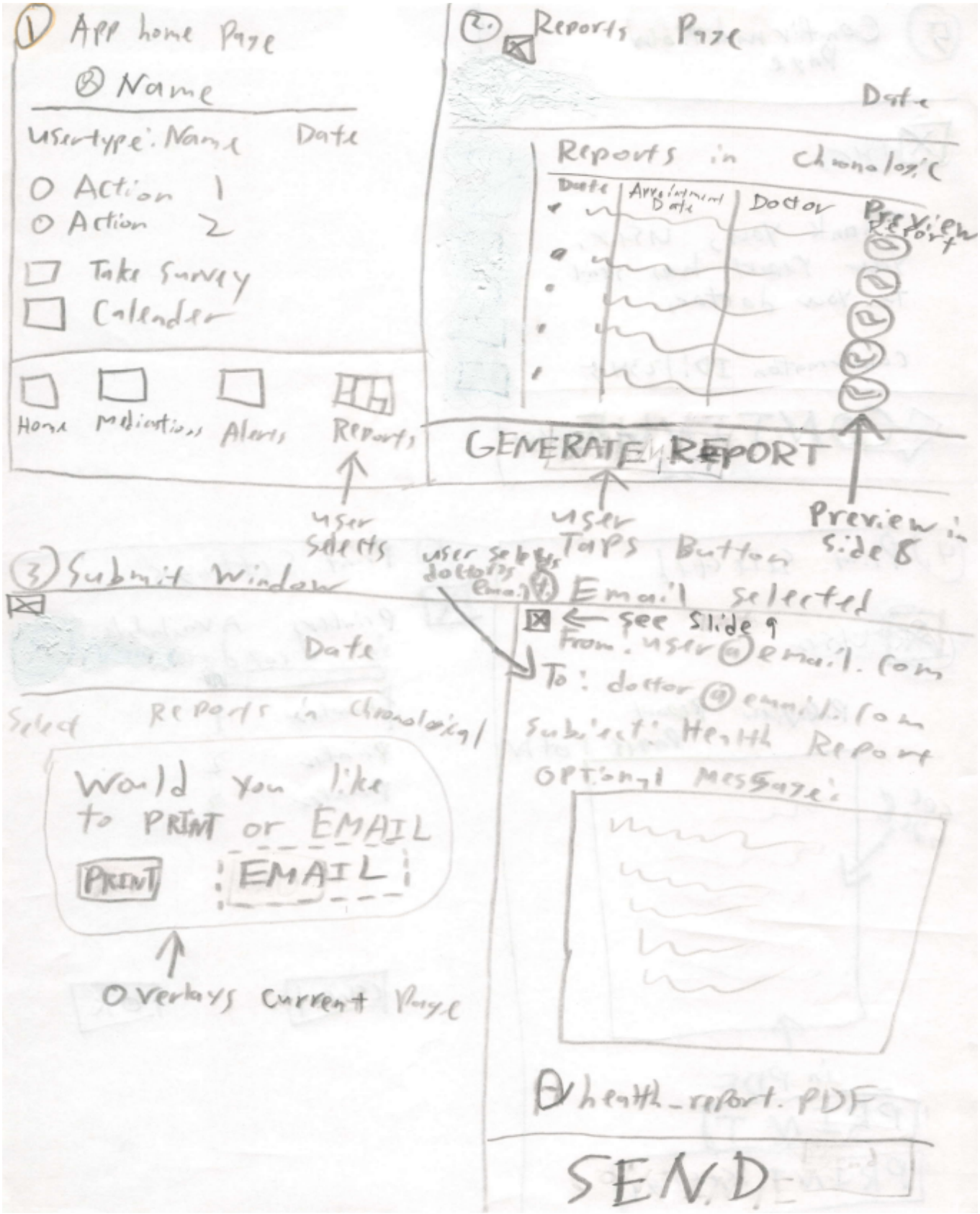
⑨ When the user try to discard the survey this pop-out show in the middle of the screen



⑩ pop-out, When the user try to Exit without submitting symptoms.



7.3 REPORTING TO DOCTORS



5. Confirmation Page

[X]

Thank you, User,
Your report has sent
to your doctor,

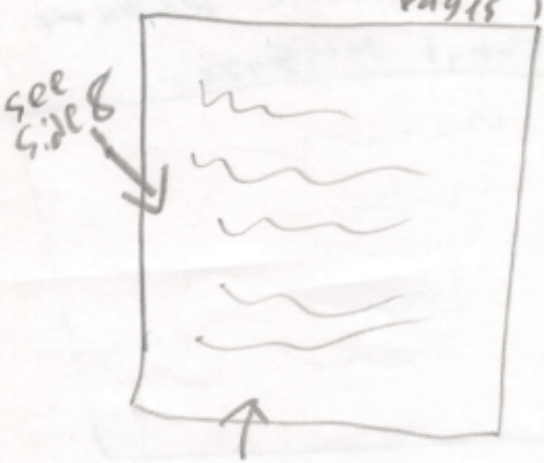
Confirmation ID: 12345

CONTINUE

4. Print Selected

[X]

Preview Report
Pages 1 of N



in PDF

[PRINT]

[PRINT Settings]

5 Print Settings

[X]

Printers Available in drop down

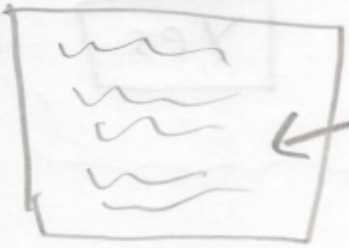
Printer 1
Printer 2
Printer 3

[cancel] [ok]

(6.) Print Report Ready

[X]

Preview Report



PRINT

PRINT Settings

(7) Confirmation Page

[X]

Thank you, user, Your report has sent to your doctor.

confirmation ID: 12345

CONTINUE

↑ Takes back to homePage

(8) Preview Report

[X] [Dates]

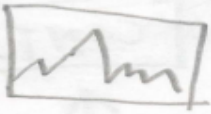
Patient Name ____

Medications ____

Symptoms in chronological ____

Survey Results

Question 1



Question 2

SUBMIT

(9) Discard Email

Would you like quit without saving?

NO Yes

↑ overlays Email