

THM Content Design Document	
<b>Title:</b>	Filling Prescriptions
<b>Course:</b>	(the course code which this design is for)
<b>Due date:</b>	(when the demo is due, set by content manager)
<b>Instructions Text:</b>	
Practice filling out prescriptions by walking through the following scenario. When finished each section, click “Submit” to submit your answer. Then, click the Next arrow in the bottom popup bar to advance to the next question.	
<b>Description Text:</b>	
Simulate filling out various pharmaceutical prescriptions.	
<b>Subject Filter:</b>	
Pharmacy	
<b>Subject Tags:</b>	
Pharmacy	
<b>Special considerations / Additional resources:</b>	
The graphics in this design document are for explanation only; in the final demo, better graphics should be used.	
<b>Content manager approval:</b>	(Sign off for THM content manager)
<b>Professor approval:</b>	(Sign off for the commissioning professor)

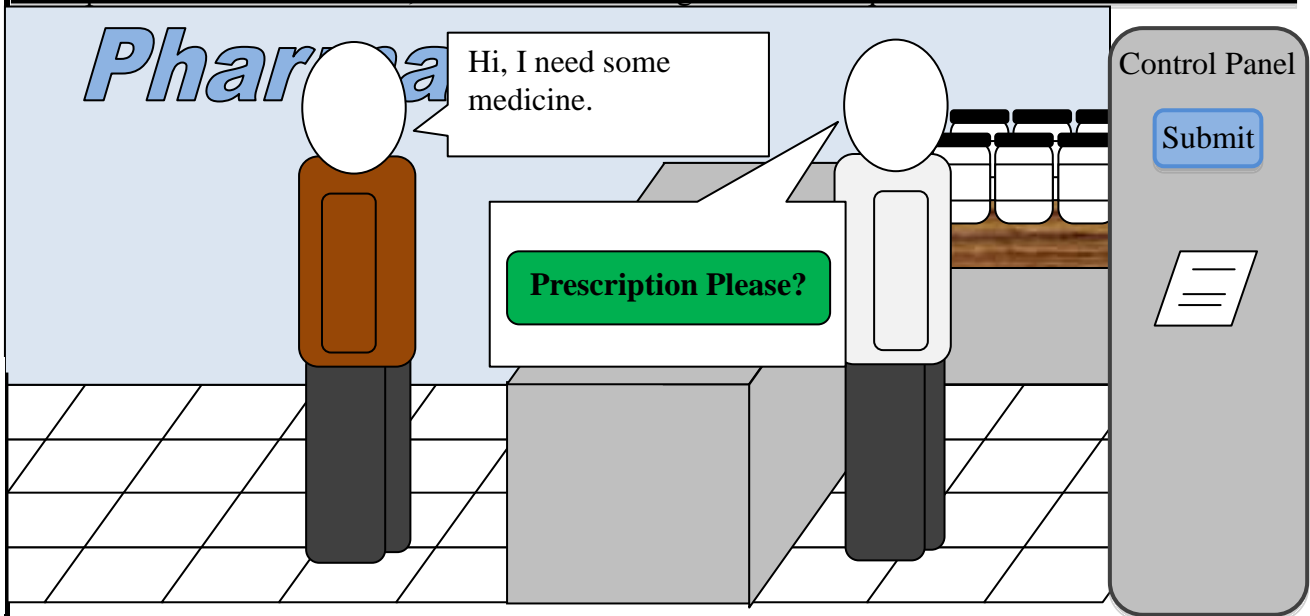
## Question storyboard

Question number: 1

Progress Bar

Title text block

Click “Ask” to first obtain the patient’s prescription. Then ask all other relevant questions. \*If\* there is a conflict with the prescription, open it from the Control Panel, and click any/all items that have problems. When finished, click “Submit” and go to the next question.



### Description:

There is a scene at a pharmacy counter, where a customer (left) is approaching the pharmacist (right). At this point, the demo randomly generates the patient and prescription to use for the rest of the demo: see **Appendix C** for the possible choices. Some are male and some are female – the graphic of the customer should match the gender of the prescription chosen.

When the question begins, the two speech boxes are present. The patient’s speech box says “Hi, I need some medicine.” The pharmacist’s box has a single button labelled “Prescription Please?” When the student clicks this, a graphic of a piece of paper appears near the patient’s hand, and grows until it fills the screen. This displays the prescription generated in the beginning. There should be a small “x” in the upper right corner which closes the prescription.

When the prescription is closed, a small icon appears in the Control Panel. There it becomes a permanent button that can be clicked to display the prescription again.

After this, the pharmacist’s speech bubble becomes larger, and now includes the options shown in **Appendix A**. The student must select the correct options from **Appendix A** to get the answer correct.

Correct answer:

“Any allergies?” and “Taking other OTCs?” must be checked. “Taken this before” must not be checked.

If female, “Are you pregnant?” should be checked. If male, “Are you pregnant?” must not be checked.

**Incorrect answer animation:**

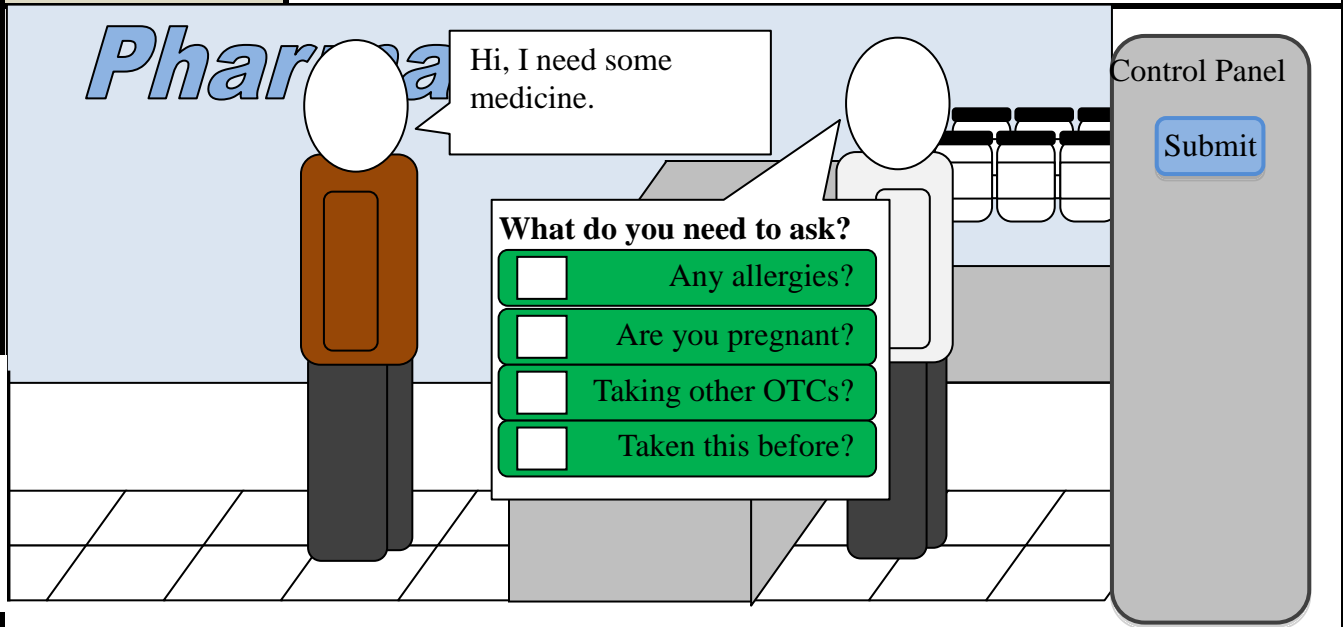
A popup appears that says, “Incorrect. Check off only the items that need to be asked to the patient.”

**“Show Answer” animation:**

The correct boxes become checked.

## Appendix storyboard

Appendix Number A



### Description:

The pharmacist's speech box now has several buttons with the text shown. Each button also contains a checkbox. Clicking a button causes the patient to respond to the question in his speechbox (response text given below). Clicking the button also causes the checkbox to get filled; this is the only way to fill the checkboxes. The student can uncheck the checkbox by clicking the checkbox instead of the button (this doesn't cause the patient to say anything).

Button	Response text
Any allergies?	"No"
Are you pregnant?	If female: "No" If male: "You're kidding, right?"
Taking other OTCs?	"Not currently"
Taken this before?	"I don't remember"

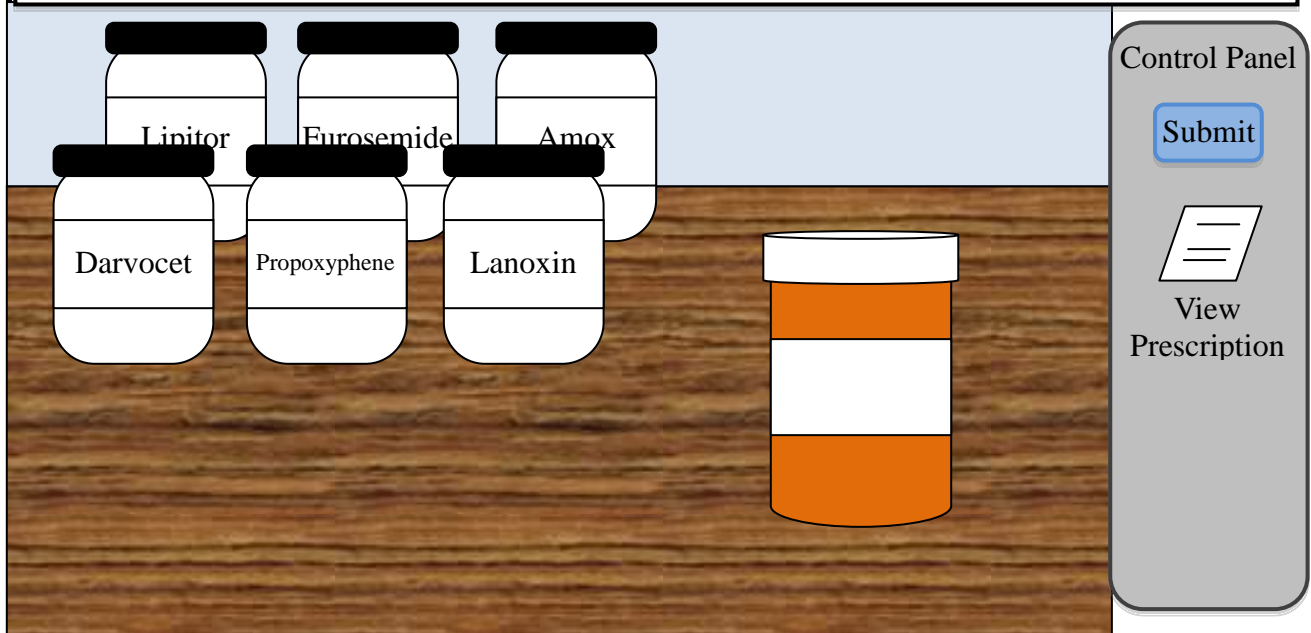
## Question storyboard

Question number: 2

Progress Bar

Title text block

Refer to the patient's prescription in the right-side panel. Then, click the correct medication and fill the prescription appropriately. Click the orange bottle to reset. When finished, click "Submit" and go to the next question.



### Description:

The demo now moves to a different screen, showing a table with 6 bottles of pills. There is an empty orange pill bottle to the right of these, with a blank white label. The piece of paper is still in the control panel, and can be clicked to show the prescription, as in Question 1.

The labels on the 6 white bottles depend on the prescription generated at the beginning of the demo. One of them should have the label of the correct medication from **Appendix C**, and the others should have the labels listed in the "Distractors" column in **Appendix C**.

The student can click any of the 6 white bottles. Doing so causes the lid to come off, and the bottle to be "picked up". The bottle should float to the middle of the screen, getting closer to the user (larger), and tilted at an angle, just above the orange bottle. Then, the cap on the orange bottle comes off, and rests on the table. See **Appendix B** for an illustration of this entire process.

Once this animation is finished, a popup appears, with dropdown menus labelled "Dosage:" and "# Pills:". The options in these menus depend on the prescription generated, and are given in the table in **Appendix C**. Once the user clicks "Ok", the popup closes, a pile of pills pours into the orange bottle, and the white bottle moves back to its initial position.

Once the pills are in the orange bottle, the white label gets filled with 3 lines of text. The first says the

name of the medication chosen; the next says the dosage selected (eg. “50mg”), and the third line says the number of pills (eg “50 pills”).

The user can click the orange bottle to reset the question; the pills in the bottle simply disappear and the label gets cleared.

**Correct answer:**

The student must select the correct white bottle, and the correct options in the popup window.

**Incorrect answer animation:**

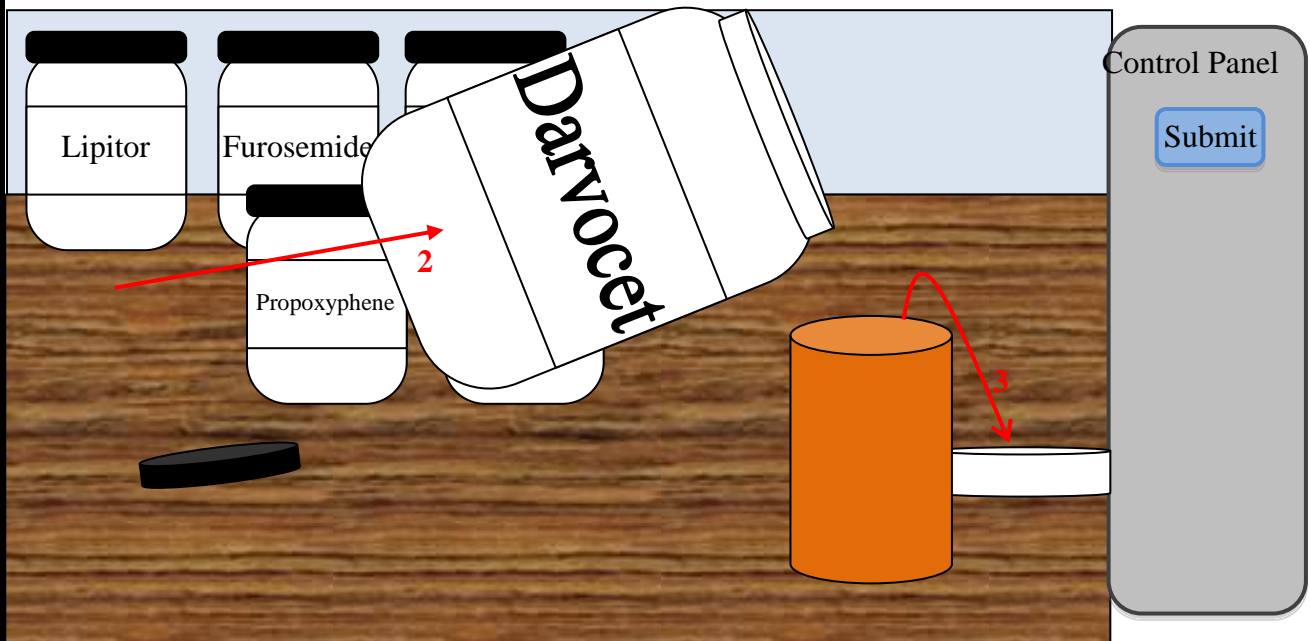
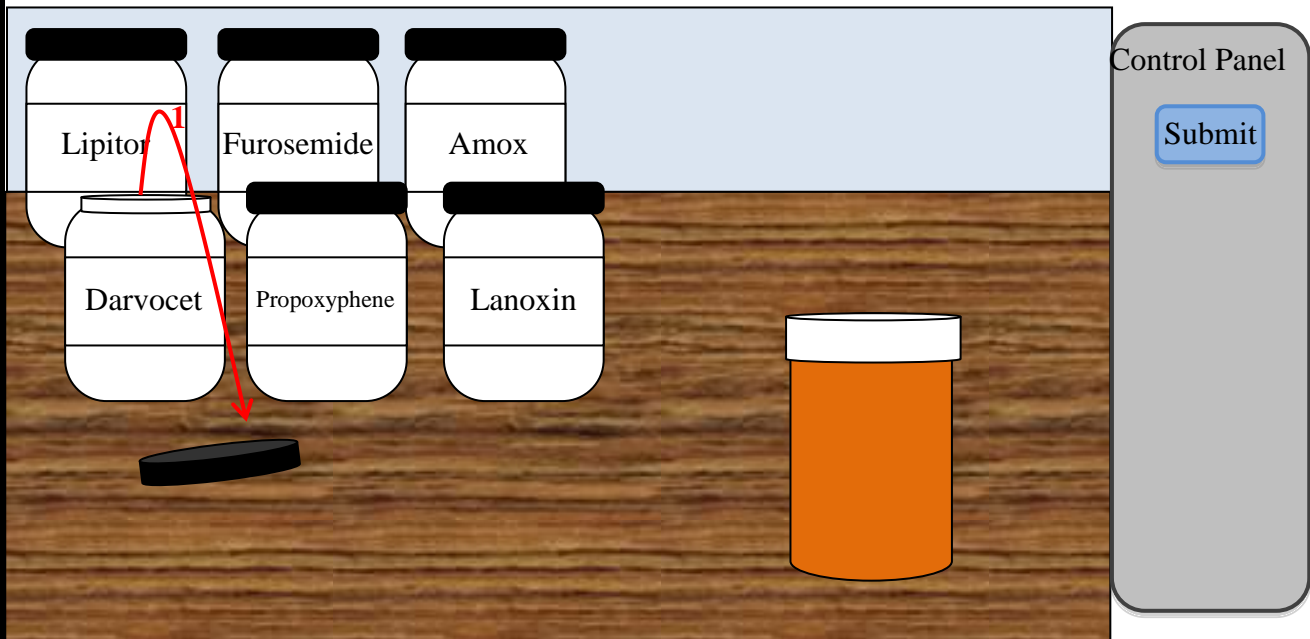
The control panel should slide out, and the piece of paper should turn red until the student clicks it.

**“Show Answer” animation:**

The correct white bottle is “clicked”, and moves to the center of the screen. The pills pour into the orange bottle, the white bottle moves back to its initial position, and the label on the orange bottle gets correctly set.

## Appendix storyboard

Appendix Number B



### Description:

1. The lid comes off the white bottle.
2. The bottle moves closer to the user, to the center of the screen, tilted, just above the orange bottle.
3. The lid comes off the orange bottle. The popup now appears for the student to select the dosage & number of pills.

## Question storyboard

Question number: 3

Progress Bar

Title text block

You have now given the customer his prescription. Explain to the customer the correct dosage instructions, then Submit.

The illustration shows a pharmacist (brown figure) and a customer (white figure) in a pharmacy setting. The pharmacist is speaking into a large speech bubble that contains dosage instructions. The background features a 'Pharmacy' sign and shelves with pill bottles. A 'Control Panel' is visible on the right side of the scene.

Pharmacy

Here you go. You should take:

1 pill(s), 1 times per

day

☐ in the morning  
☐ at bedtime  
☐ with orange juice  
☐ as needed

Control Panel

Submit

View Prescription

### Description:

This question goes back to the scene in Question 1. Now, the pharmacist's speech box has 2 number steppers, as well as a dropdown menu and 4 checkboxes (along with text – all as drawn above).

The options in the dropdown menu are:

4 hours  
Day  
Morning  
Evening  
Week

### Correct answer:

The correct answer depends on the prescription randomly chosen; see **Appendix C**.

### Incorrect answer animation:

The incorrect boxes turn red until the student changes them.

### “Show Answer” animation:

The values in the speech box change to the correct values.



## Appendix storyboard

Appendix Number B


OFFICIAL NEW YORK STATE PRESCRIPTION  
The Presidential Health Care Clinic  
John Adams, MD • Tomasz Jefferson MD • G. Cleveland NP  
1600 Pennsylvania Avenue  
Amherst, NY 14226 • 716 555 2223 • 716 555 2224 fax  
Where your health is in our constitution!

PRACTITIONER DEA NUMBER  
A A 1 2 3 4 5 6 B

Patient Name **Sarah-Jane Smith** Date \_\_\_\_\_  
Address **267 Jefferson Avenue**  
City **Williamsville** State **NY** Zip **14221** Age **68** Sex ☒ M ☐ F  
Rx  
**Atenolol N 100**  
**#200**  
**Sig: i po qd**

Prescriber Signature X *John Adams, MD*  MAXIMUM DAILY DOSE (controlled substances only)  
THIS PRESCRIPTION WILL BE FILLED GENERICALLY UNLESS PRESCRIBER WRITES "daw" IN BOX BELOW

REFILLS ☐ None   
PHARMACIST  
TEST AREA: Dispense As Written



### Description:

The prescription page that gets shown when the user clicks the button in the control panel should look like the one shown above. Each time the demo is run, the information in the prescription gets generated randomly from the following tables. The address and city stay the same each time. The fields that change are Name, Age, Sex, Rx, Maximum Daily Dosage (the box beside the signature), and Refills.

#### Names:

Sarah-Jane Smith (female)

Tom Baker (male)

#### Age:

Random number between 25 and 70

#### Rx:

There are 4 parts to this section: Medication, Dosage, #Pills, and Instructions. Medication should be randomly selected from the following table. Dosage and #Pills should be randomly selected from the given options in the same row. Instruction should be chosen from the Instructions table.

**Maximum daily dosage:** random number between 2 and 5

**#Refills:** random number between 2 and 5

Medication	Dosages	#Pills	Distractors (Used in Q2)
Atenolol	25 mg, 50 mg, 100 mg	30,60,100,200	Metoprolol, Bisoprolol, Captopril, Tenormin, and Lopressor
Ambien	5mg, 10mg, 12.5mg	30,60,100,200	Zolpidem, Zebeta, Zestril, Amlodipine, and Sertraline
Glyburide	1.25mg, 2.5mg, 5mg	30,60,100,200	Diabeta, Glynase, Glipizide, Actose, and Glucotrol XL
Diabeta	1.25mg, 2.5mg, 5mg	30,60,100,200	Randomly selected from distractors above
Zolpidem	5mg, 10mg	30,60,100,200	Randomly selected from distractors above
Zebeta	5mg, 10mg	30,60,100,200	Randomly selected from distractors above
Bisoprolol	5mg, 10mg	30,60,100,200	Randomly selected from distractors above
Zestril	2.5mg, 5mg, 10mg, 20mg, 30mg, 40mg	30,60,100,200	Randomly selected from distractors above
Lisinopril	2.5mg, 5mg, 10mg, 20mg, 30mg, 40mg	30,60,100,200	Randomly selected from distractors above
Amoxicillin	250mg, 500mg	30,60,100,200	Randomly selected from distractors above
Pravachol	10mg, 20mg, 40mg, 80mg	30,60,100,200	Randomly selected from distractors above
Pravastatin	10mg, 20mg, 40mg, 80mg	30,60,100,200	Randomly selected from distractors above

Instruction	Meaning (used in Q3)
1 po qd	take <b>one</b> (tablet or capsule) by mouth <b>once daily</b>
1 po bid	take <b>one</b> (tablet or capsule) by mouth <b>twice daily</b>
1 po qid	take <b>one</b> (tablet or capsule) by mouth <b>four times daily</b>
1 po q4h prn	take <b>one</b> (tablet or capsule) by mouth every <b>four hours as needed</b>
1 po qd hs	take <b>one</b> (tablet or capsule) by mouth once <b>daily at bedtime (evening)</b>
1 po qd am with oj	take <b>one</b> (tablet or capsule) by mouth once <b>daily</b> in the <b>morning</b> with <b>orange juice</b>

The Rx should then be written out in the format shown below (example shown on image above).

<Medication> N <Dosage>

#<#Pills>

Sig: <Instruction>

