

VIRTUALPT CLINICIAN

Instructor Manual

Student Manual



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GETTING STARTED

Accessing a VirtualPT Patient Case

1. Make sure you have the Web site location and the name of the case you have been assigned to work on. Navigate to that location in your browser.
2. Find the case on the Web site address provided by your instructor or in VirtualPT's waiting room. Click on the case file [See Figure 1].
3. Enter your name and assigned password in the spaces provided. Click Enter. If there has been a log-in error, a warning message will appear. Check to make sure your name and ID are entered exactly as your instructor requires. Once your name and ID are properly entered, click Start. (If this isn't the first time you've accessed this case, follow the steps above and click Continue Case.)

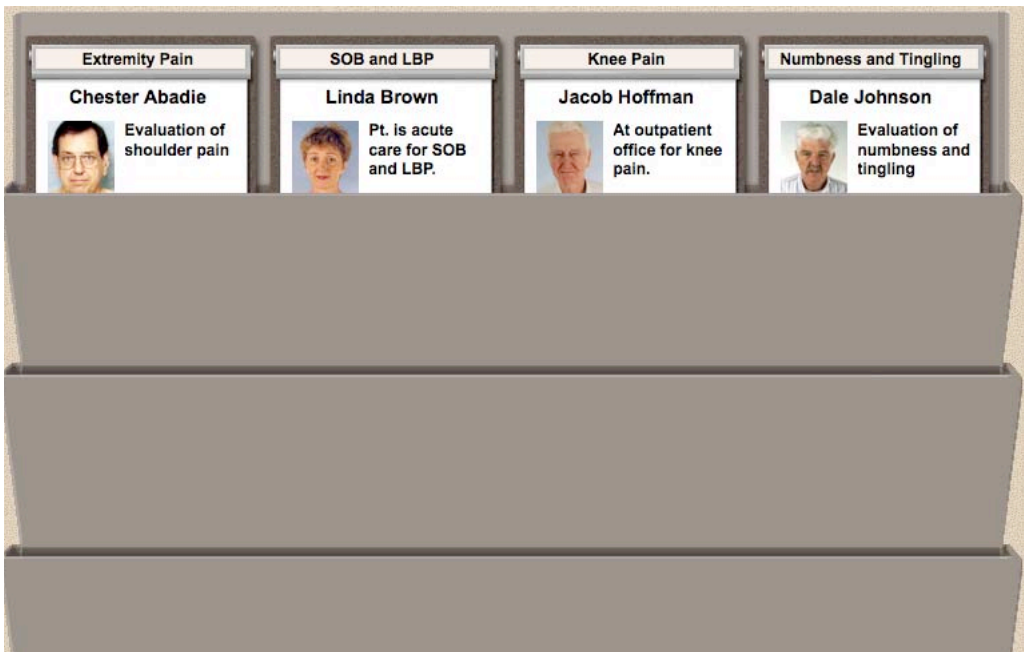


Figure 1. Case files in a Waiting Room

As you enter a VirtualPT Clinician case, keep in mind, instructors and case authors can design cases and criteria as they wish. The following instructions take into account all case options available to the instructor. Your instructor may have chosen some or all of those options for this case.

WORKING THROUGH THE CASE


The Patient's Presenting Situation


This window introduces you to the patient and the patient's stated reason for seeking help from a physical therapist [See Figure 2]. Read the information carefully, then click one of the three buttons under "What would you like to do next?" Your choices are: the Interview button for asking the patient questions; the Exam button for conducting a physical exam; or the Dx Tests button for ordering diagnostic tests. You can access these sections in any order you like.


Your patient today will be Chester Abadie.

A fifty-eight year old retired banker who presents with complaints of right shoulder pain.

What would you like to do next?

 Interview
Ask Questions

 Exam
Physical Exam

 Dx Tests
Order Dx Tests


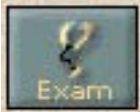


Figure 2. Presenting Situation

COMMON BUTTONS

Before you start your clinical investigation, review the buttons common to all screens within a VirtualPT Clinician case as well as the exam buttons shown on the right of this page.



These buttons (Interview, Exam, Diagnostic Tests, and Problem/Hypothesis List) appear at the top of most screens and allow you to access the major portions of the VirtualPT case. Click one of those buttons to go to the corresponding section of the case.



The Management (Rx) button allows you to enter a management plan for the patient. You should have completed the patient investigation and be ready to enter a diagnosis, a prognosis, goals, and interventions for the patient when you click the Management (Rx) button.



On the Notes button, click the View section to see your notes or to manually type in notes (Click Save). The Add section of the button allows you to Add selected text to your notes. To add on-screen text to your notes, highlight the text and then click the Add portion of the Notes button.

Caution: Some browsers don't support the one-step ADD function for your notes. If your browser has problems completing this task, select the text you want, copy it to the computer's clipboard, open the Notes window, and past the text into the window.



The Learning button allows you to make note of any learning issues you would like to further study or investigate after completing a VirtualPT case. Categories include Anatomy, Behavioral and Social Science, Biochemistry, Clinical Medicine, Microbiology, Pharmacology, and Physiology. Type your entries into the appropriate text box.



The SOAP button allows you to enter notes for Subjective Data, Objective Data, Assessment Data, and Plan. Type the text in the appropriate box and click SAVE.



When the Learning Resources button is displayed, Web-based information sources are available to assist you as you work through the patient case. Click Learning Resources, then click the link text to open a new browser window displaying the information.

Physical Exam Buttons



- Vital Signs
- Flashlight/ View
- Ophthalmoscope/ Palpate
- ROM/ Strength
- Accessory Motion/ Stethoscope
- Strength/ Sphygmomanometer
- Hammer/ Stopwatch
- Pin/ Cotton
- Tuning Fork/ Thermometer
- SELECT BODYVIEW:**
- Head
- Chest
- Abdomen
- Body (full)
- Functional Mobility
- Mental Status
- Tests & Measures

PROBLEMS & HYPOTHESES

Entering Problems and Hypotheses

You may be asked to supply a list of patient problems with associated hypotheses before you are allowed to proceed in your investigation.

If you are not ready to supply a list of Problems and Hypotheses

You will be advised to go to the Interview section (using the Interview button). In the Interview section, you may ask the patient questions ONLY from the Present Illness category prior to entering a list. This is the only section of the case you will be able to access prior to entering at least one problem with an associated hypothesis.

If you believe you can provide an initial list of Problems and Hypotheses:

1. Enter the reported patient problems in the text box marked "Concise statement of the patient's major problem."
2. Enter each problem in the window provided and click ADD PROBLEM to place the problem in your list [see Figure 3]. You may prioritize your problems by selecting the item and using the UP and DOWN arrows to move the item in the list. Select a problem and click DELETE if you want to remove an item from your list.

Next, you must associate at least one hypothesis with each patient problem in your Problem List. Follow these steps:

1. Enter a hypothesis in the text box provided.
2. Select a problem or multiple problems from your Problem List.
3. Click ADD Hypothesis. To delete a hypothesis from your list, select the Hypothesis and click Delete.

Click DONE when you are finished entering your list of patient problems with associated hypotheses. The Problem/Hypothesis List screen may appear after each section of the VirtualPT case. You may also access this screen from any section of the case by clicking the Problem/Hypothesis List button.

Note: If you delete a problem that has unique hypotheses associated with it, those hypotheses will also be deleted. However, if you delete a problem that has associated hypotheses that are also associated with other problems, those hypotheses will remain in your list.

Figure 3. Entering Problems

The screenshot shows the 'Hypotheses Being Investigated' screen. At the top, there's a 'SCANNING' indicator. Below it, a text box contains the patient's major problem statement. Underneath, there's an input field for a new problem, currently containing 'frozen shoulder', with 'add problem' and 'add hypothesis' buttons. A list of existing problems and hypotheses is shown below, with checkboxes for selection and up/down arrows for reordering. A 'delete' button is also present.

INTERVIEW & EXAM SECTIONS

Interview Section

Questions in the Interview section are divided into 20 different categories listed on the left side of your screen. Depending on your instructor's choice, you may not be able to access questions in categories other than the HPI Summary or the Present Illness until after you've entered or reviewed your Problem/Hypothesis List.

To pose a question, select the interview category. A list of questions within that category appears. Select your question and the hypothesis you are investigating (see note). Click ASK to see the patient's response to your inquiry. Repeat this process for each interview question you would like to pose. When you are done with the Interview section, click the button corresponding to the portion of the case you would next like to access.

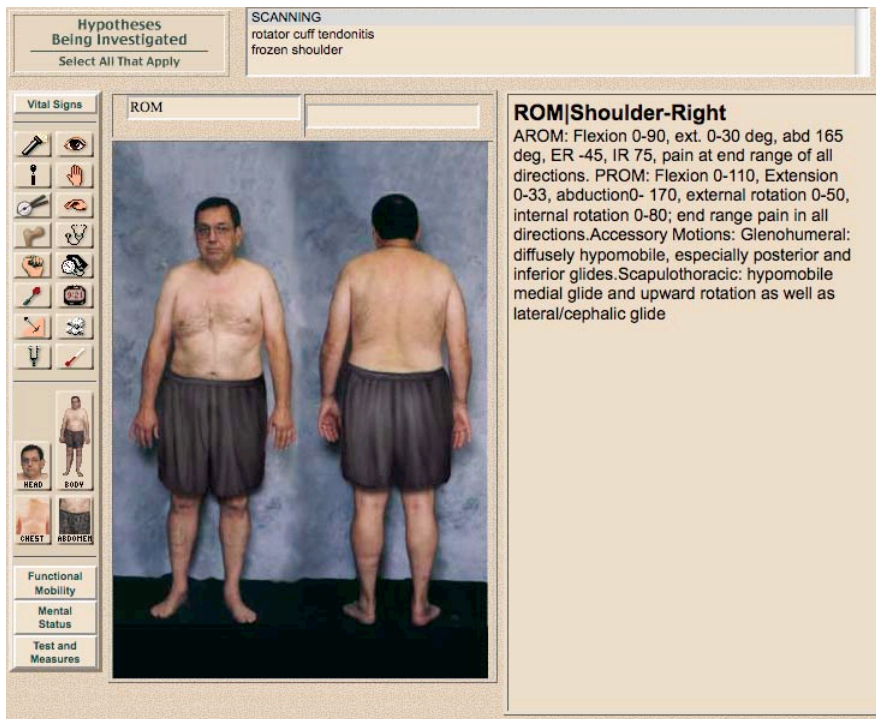
Exam Section

Most physical exams are defined by the body part being examined and the exam tool you use. [See Figure 4.]

- 1) Select the hypothesis you are investigating for each exam item, or select SCANNING if you aren't investigating a particular hypothesis.
- 2) Click an exam tool from the buttons on the left side of your screen. The left window just above the patient picture displays the name of the exam tool you have chosen.
- 3) Click the body view that shows the body part you would like to examine. Click the specific body part in the patient picture. The right window just above the patient picture displays the body part your cursor is positioned to select.
- 4) Review the results that appear in the window to the right of the patient picture. Some results may be text only, some may be graphics, and still others may be heart or breath sounds for you to listen to. Such sounds are best heard through headphones.
- 5) Specialized exams can be found beneath the body view buttons. Click Functional Mobility, Mental Status, or Tests & Measures to access these exams.

Repeat the process described above for each exam you would like to conduct. When you are finished conducting exams, click the button corresponding to the section of the case you would like to access next.

Figure 4. Exam screen



Associating Hypotheses

You may be asked to select a hypothesis to associate with each item you select from the interview, exam, and diagnostic tests sections BEFORE you will be able to add that item to your investigation. If you are not investigating a particular hypothesis, select SCANNING from the hypothesis list at the top of the screen. To select multiple hypotheses to associate with your investigation selection, press the command (CTRL) key while clicking on the hypotheses you would like to associate.

Efficiency Warning

You will see a warning when you are within 3 of the total number of questions, exams, or diagnostic tests deemed acceptable to complete this case efficiently. You will be warned again when you are within 1 of that number. You may continue requesting items in that category beyond the limits, but if you do so, your clinical reasoning score will be affected.

DX TESTS

On the Diagnostic Tests screen you may order tests to further your clinical investigation of a patient case. You have three methods of ordering diagnostic tests. Each is described and pictured below. You will also be able to see the results of the tests you order. You may also be asked to justify your diagnostic test requests.

Ordering with the Common Diagnostic Test buttons

1. Look for the diagnostic test you want to order in the list of 10 common tests [see Figure 5, upper] displayed on your screen.
2. (optional) To get information (a test description, normal values, and what Abnormal Indicates) on a Common Test before you order it, click Test Info and then click the name of the test.
3. To select a test in the Common Tests list, first select the hypothesis you are investigating, then click the button corresponding to your chosen test. The selected test will appear in the field labeled Proposed Orders. If you want to order all tests in your Proposed Orders list, click Submit.



Figure 5a. Common Lab Tests

Search

If the diagnostic test you want to order isn't in the Common Tests list and you don't know which category it would be listed under, use the search function [see Figure 5, lower].

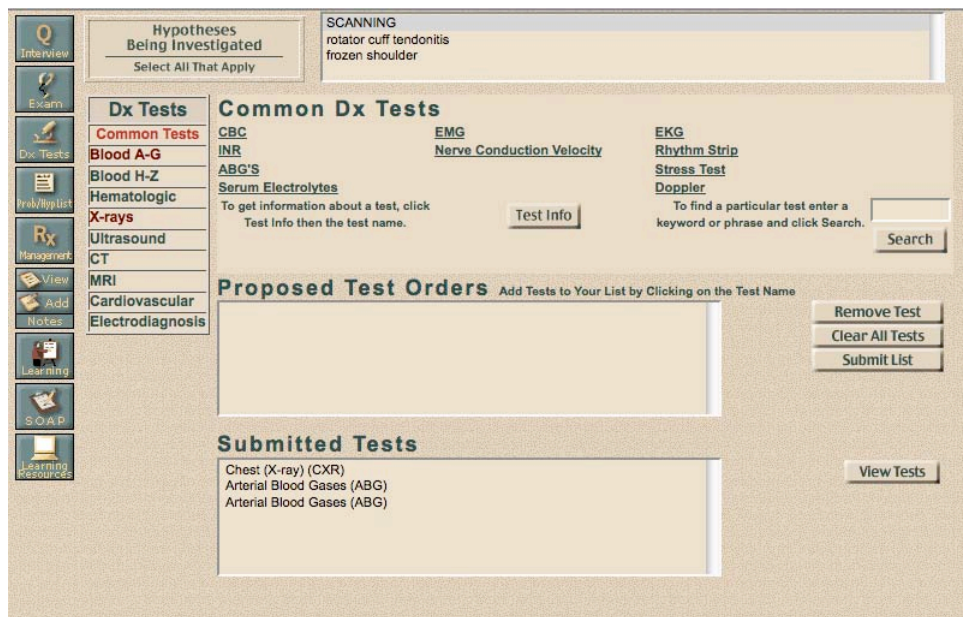
1. Enter a key word or phrase in the space provided and click SEARCH (or Return/Enter).
2. Select the hypothesis you are investigating, then select your selected test in the window showing your search results.
3. Click TEST INFO (for a test description, normal values, and what Abnormal Indicates), or click ORDER to order the test immediately. The test name will appear in your Test List and results will be available for review.

Figure 5. Proposed Dx Test Orders

Categories & Lists

If you know what category your diagnostic test is likely to be listed under, use the Categories option to find your test [see Figure 6].

1. Select the category most likely to contain your test.
2. Find the specific test in the list that appears to the right of the category list. (optional) Click TEST INFO to see a test description, normal values, and what Abnormal Indicates.
3. To place the selected diagnostic test in your Proposed Orders list, select the test. When you are satisfied with your list, you can click Submit to order the diagnostic tests and review results.



DX TESTS

Justifying Diagnostic Test Orders

After ordering a diagnostic test, you may be asked to justify your request before you can see the test results. Type in your justification and then click Enter. You will then be allowed to access the results.

Reviewing Diagnostic Test Results

When you are satisfied with your diagnostic test list, click Submit. In the Test List window that appears, select a lab and then click View Results. Some results will consist only of text that you should review carefully. Other test results may include graphics that you should also review carefully. You may choose to make notes on what you see. Make note of anything you think is important. While reviewing your test results, click TEST INFO to see the normal values/responses for that test.

Figure 6. Dx Test List

The screenshot displays a medical software interface. On the left is a vertical navigation menu with icons for Interview, Exam, Dx Tests, Prob/Hyp List, Management, View, Add, Notes, Learning, SOAP, and Learning Resources. The main content area is divided into several sections. At the top, a box titled 'Hypotheses Being Investigated' contains the text 'SCANNING rotator cuff tendonitis frozen shoulder' and a 'Select All That Apply' button. Below this is the 'Test List' section, which lists 'Chest (X-ray) (CXR)', 'Arterial Blood Gases (ABG)', 'Arterial Blood Gases (ABG)', and 'EKG (ECG, electrocardiogram)'. The 'EKG' item is highlighted in blue. To the right of the test list is a 'View Results' button. Below the test list, the 'EKG (ECG, electrocardiogram)' section is active, showing two tabs: 'Abadies EKG' and 'Normal EKG'. The 'Normal EKG' tab is selected, displaying a 12-lead ECG tracing on a pink grid. The leads are arranged in four rows: leads I, II, III, aVR, aVL, aVF in the first row; leads V1, V2, V3, V4, V5, V6 in the second row; leads I, II, III, aVR, aVL, aVF in the third row; and leads V1, V2, V3, V4, V5, V6 in the fourth row. Below the ECG tracing, the text reads 'A NORMAL EKG IS PROVIDED FOR COMPARISON.'

DIAGNOSIS AND PROGNOSIS

Diagnosis and Manage the Patient Problems

Click the Rx (Management) button when you are ready to diagnose and manage the patient problems. You will follow a linear path to develop the appropriate management plan for your patient.

Figure 7. Diagnosis entry

Step 1. Prioritize the Problem List

You will be given a final opportunity to review your problem list and prioritize the problems in your list. To prioritize your problem list, select an item in the list and click either the UP or DOWN button to move that item in the list. Click Continue when you are satisfied with the priority order of your Problem List.

Step 2. Diagnosis Please note, once you enter your final diagnosis, you will no longer be able to access the patient history, exam, or diagnostic tests sections. If you are not ready to enter your final diagnosis, click Cancel to return to the patient investigation sections of the case.

1. Enter your diagnosis in the text box at the top of the screen.
2. Justify your diagnosis in the second text box by typing in findings from your investigation that support this diagnosis.
3. Select your level of confidence in your diagnosis.

Click Cancel to cancel your entries and close the Diagnosis screen. Click Enter Final Diagnosis to save and enter your final diagnosis.

Step 3. Review Problem List

After your final diagnosis is entered, you will have the opportunity to review your problem list and compare it to the problem list expected by your instructor. Review the instructor list carefully. As you proceed to Management, all of your management plan selections should be based on the Instructor's problem list alone.

Step 4. Mode of Treatment

Select the mode of treatment that you think is appropriate for this patient. Your choices are: Treat Patient, Treat Patient and Refer, or Refer Prior to Treatment. If you choose to 'refer' a patient, you must select the type of specialist to whom you would refer the patient. Click Continue when you are satisfied with your mode of treatment.

Step 5. Prognosis

Depending on your instructor's choices, you will enter your prognosis for this patient in one of two ways; either by typing your prognosis in a text box in narrative form, or by answering two multiple-choice questions.

1. From the instructor's problem list that appears at the top of the window, select the problem(s) for which you are entering a prognosis.
- 2a. If your prognosis is being typed in as text, enter your prognosis in the text field provided. (You are not required to enter a prognosis for each Problem in the instructor's list.)
- 2b. If your prognosis is being entered by answering multiple-choice questions, select whether the patient is a candidate for physical therapy and select an expected recovery option. (You are not required to enter a prognosis for each Problem in the instructor's list.)
3. Click Continue when you are satisfied with your selections.

Figure 8. Problem List review

Figure 9. Prognosis

GOALS & MANAGEMENT

Step 5. Goals

On the Goals screen, you will be required to type in goals for each patient problem identified by the instructor.

1. Select a patient problem in the Instructor's Problem List.
2. Type in your goals for the selected problem and click Save.
3. Repeat this process for each problem in the Instructor Problem List.
4. Click Continue when you've entered goals for each problem in the Instructor Problem List.

Goals
You are required to write goals for each patient problem. Please select problem(s) and type your goals. Click Save after each entry. When you are finished writing all your goals, click Continue.

Instructors Problem List

- pain with reaching overhead
- pain with dressing
- pain with typing
- afraid to lift with right arm

Patient Goals

Save Continue

Figure 10. Entering Goals

Step 6. Patient Management

In this section, you will develop a management plan designed to meet your identified goals for the patient.

1. Select one of the Management categories that appear (Interventions, Collaboration, Education, Counseling). Select the patient problem you are managing. (If you select the Interventions category, you may need to select from several sub-categories that will appear).
2. Repeat this process until you have selected all the management choices you think are necessary for this patient. You are not required to select management for each problem in the Instructor Problem List. When your management plan is complete, click Evaluate.

Patient Management

Dx/Tests Notes Learning S.O.A.P. Evaluate

Instructor Problem List
Select All That Apply

- pain with reaching overhead
- pain with dressing
- pain with typing
- afraid to lift with right arm

Interventions...

- Therapeutic Exercise
- Functional Training
- Manual Therapy
- Prescription application of equip
- Airway Clearance techniques
- Integumentary repair and protec
- Electrotherapeutic modalities
- Physical agents
- Mechanical modalities
- Alternative Medicine

Select

TE_Flexibility

- Muscle lengthening
- Range of motion
- Stretching

Select

Interventions Collaboration Education Counseling

Figure 11. Patient Management

Step 7. Management Confidence

When you click Evaluate on the Patient Management screen, the Management Confidence window appears. Answer the four questions posed to indicate your level of confidence in your management plan selections. Click Done when you've completed all questions.

Congratulations! You have completed the VirtualPT Clinician case. To see an assessment of your entries, follow the steps under Initial Self-Assessment.

INITIAL SELF-ASSESSMENT

Initial Self-Assessment

Following the Management Confidence screen, the program will perform an initial evaluation of your entries. Depending on your instructor's preferences, you may be able to review the initial assessment of your work. Click Review Results to access the Self-Assessment.

Diagnosis Self-Assessment - The diagnosis screen allows you to compare your diagnosis with the expected diagnosis listed by the instructor. You will be able to assess how you think your diagnosis compares to that of the instructor by selecting either Mostly, Somewhat, A Little, or Not at All. The instructor will be able to review your self-assessment as he/she evaluates your performance in the case study.

Problem/Hypothesis List Self-Assessment - This screen allows you to compare your list of problems and associated hypotheses with the standards set by the instructor. You will be able to assess how your list compares with the instructor by selecting either Mostly, Somewhat, A little, or Not at All. The instructor will be able to review your self-assessment as he/she evaluates your performance in the case study.

Investigations Assessment - The Critical Investigations screen allows you to see whether or not you selected the appropriate investigative items for this virtual patient encounter. A star will appear next to the name of each item that you selected that is correct. To see the information that you missed in your investigation, click the items with no star. The table at top of the screen allows you to see the number of required items as compared to the number of items you selected.

Prognosis Assessment - The prognosis screen will display either text entries for the patient prognosis, or responses to two multiple choice questions. If the multiple choice questions are used by your instructor, the correct answer will be pre-selected. A star next to the correct answer means you responded correctly. An X denotes your incorrect selections. If your prognosis is a text entry, no initial assessment will be made by the program. Your instructor will have the opportunity to assess your entry for the patient prognosis as he/she evaluates your performance in the case study.

Interventions Assessment - The Interventions screen allows you to review your selected interventions and see an assessment of whether your selections were appropriate for your virtual patient. If your interventions were correct, a star will appear next to the item name.

BROWSER AND TECHNICAL REQUIREMENTS

Browser Requirements

Cookies and Javascript must be enabled. Your browser must also have the latest version of the Apple QuickTime™ player plug-in installed. **Make sure you select a full install of QuickTime.**

The following Web browsers are compatible with this program.

- Microsoft® Internet Explorer version 6.0 or higher
- Safari® 3.1 or greater
- Firefox® version 1.5 or higher

Screen Size and Monitor Resolution

VirtualPT Clinician requires a minimum monitor resolution of 1024 x 768 pixels. If your monitor is not set for 1024 x 768 pixels or higher resolution, portions of your screen may be cut off and a warning message may appear when you try to log in to the case.

Your monitor must also be set display at least 16 bit color (thousands of colors). If your monitor is not set to display 16 bit or higher color, images and movies may appear distorted, pixilated, or washed out on your screen.

Sound

Your computer must have a sound card installed. Heart and breath sounds will sound best when heard through headphones.

Re-enabling QuickTime to play MP3s on Windows

If QuickTime™ is not enabled to play MP3s on your Windows® machine, the following directions will help you restore the settings to properly play sounds in the case studies.

1. Locate the Start Menu icon in the menu bar across the bottom of your screen.
2. Click the Control Panel to open it.
3. Locate the QuickTime control panel and click to open it.
4. At the top of the QuickTime window, select the Browser tab.
5. Click the MIME Settings button at the bottom of the window.
6. Scroll to locate the item 'MP3' in the list. Click to expand that item, displaying two selections: MP3 Audio and MP3 Playlist. Both should have a checkmark beside them, meaning they are activated. If both 'MP3' items don't have a checkmark associated with them, click the checkbox. Once the checkmark appears preceding each item, they are enabled.
7. QuickTime has now been re-enabled to play MP3s. Click OK to close the window.