

Lee Engeswick  
IDT530  
Final Design Documentation

**Pre-Planning document**

**Overview**

The CBI will enable the learner to identify the correct computing platform per customer's requirements.

Is CBI the right choice?

CBI has been identified as the most effective delivery system for the lesson. The use of appropriate graphics, sound and interactivity will create a memorable and motivating experience for the learner. CBI will allow users to learn subject matter at their own pace and will enable to learner to review at their leisure.

Is the content stable?

Yes, the content is stable based on the computing platforms offered by the store and the typical needs of the customers. While the specifics of individual computers will change frequently, the broad spectrum of information in this CBI will remain constant for a long time and will give the learner a base knowledge of the subject matter.

How much time and money is available?

This particular CBI has the appropriate depth (15-20 minutes in length) and sophistication to allow for efficient development time within a 40 hr work week with in a low cost to the client (it's free!!)

Does this project require CBI/CBT's unique strengths, characteristics, and capabilities?

The CBI must be easy to navigate, small enough in size to be delivered online for typical users, and must engage and motivate the learner. The CBI will utilize graphics and interactivity to reduce cognitive load and maximize absorption of subject matter.

Do my learners possess the necessary computing skills?

The learner is a technical representative of the client therefore has the appropriate computing skills. It is assumed that the learner has a basic knowledge of computer use. i.e. knowledge of how to operate a mouse and keyboard in order to navigate the CBI.

Do my learners have access to computers?

The learners will have access to in store computers for training. The learner may also access the CBI from a internet enabled home computer, though this is NOT a requirement.

How do my learners feel about computers?

The typical learner is in their mid 20's, a college student and a digital native. The learner has grown up with computers and is employed for at an electronics supply store. The learner is knowledgeable of computer if not enthusiastic.

## **Learning Mode**

An Exploratory learning environment (ELE) has been chosen for this instruction. An ELE will provide a more engaging experience and there by will help motivate the learner. This will also incorporate practice/testing and feedback.

## **Age and Gender**

The typical age of the leaner is mid-20's, male and female. The CBI will be created to appeal to the age of employee at the store (18 – 80+). The CBI will be non gender specific.

## **Cognitive Style**

Typical learners will largely be field independent. Since this is an ELE, the CBI will connect more deeply with learners who can discover and isolate important information from the “open” environment of the CBI. Field dependent learners may have difficulty with this mode of learning.

## **Learning Style**

The ELE style of the CBI will appeal more to active learners who enjoy discovery and exploration. The CBI will be created in such a way as to help engage and motivate passive learners.

## **Accessibility**

### **Auditory considerations**

Audio narration will largely be used for navigation of CBI (ie, “when you are ready, click continue to proceed.”). The information for the lesson will be presented as text, although learners with hearing impairment my require assistance navigating at the beginning of the CBI. Visual cues maybe required, although this should be limited in order to keep the exploration feel of the CBI.

### **Visual considerations**

The information in the lessons, facts and data will be presented in text. Since navigation will be ELE, it may be difficult for learners with limited vision to navigate this CBI. Learners with visual impairment may require a text reader, or other special considerations maybe used.

### **Physical considerations**

The CBI is presented as ELE which encourages exploration. Though large hotspots and buttons will be used, it may be difficult for learners with sever physical disabilities to navigate the CBI.

### **Operating considerations**

This CBI will be developed using Presenter 9 and delivered via web. It should be able to be viewed from MAC or PC using current versions of popular web browsers such as Internet Explorer, Firefox, and Safari.

### **Delivery considerations**

The CBI will be delivered on company workstations but may also be accessed via web. It is recommended the CBI be developed for web use to enable proper graphics optimization, file size and performance of CBI.

### Graphics

Optimized graphics will be produced by our talented graphics department to reduce the file sized thereby reducing download time. Photos will be saved as a JPG; graphics as GIF and will be saved as RGB for web.

### Sound

Sound will be limited and only for navigation prompts and will be packaged as Presenter 9 standard for web delivery.

### Video

If video is required for CBI, it shall be saved as a flash format and optimized for web delivery.

### Fonts

Times will be used for body text, Arial will be used for Titles or Headers. All text size will be consistence throughout CBI, 14pt for body and approx, 25pt for headers and 60pt for titles.

### Color

Graphics and color pallet of CBI will be a web safe RBG for web delivery.

## **Interface design**

### Metaphor

Since the lesson is presented for a electronics store, the CBI will use an electronics store theme and imagery.

## **Screen design principles**

### Light and Screen Design

The lighting effects will depend on the light source of the background image. If no light source can be identified, the default light source will be from the upper right corner of the screen.

### Backgrounds and borders

The backgrounds of the CBI depend “where” they are in the store. The introduction and objective is located in front of the store at which point the learner will “Enter” the store to begin the lesson.

### A place for everything...

The CBI will have a basic menu in the lower right side of the screen. This will allow the user to return to home, go back to the “backroom” for more research or exit the CBI.

### Consistency

Menu system will remain in the same spot of the screen throughout the lesson; as well as fonts, icons and additional graphics. This is crucial to limit cognitive load of learners during the lesson.

### Text and readability

Times or another Serif font will be used legibility of body text. A sans-serif font, most likely Arial or Helvetica will be used for headers. Colors and effects will be kept to a minimum for legibility reasons. All text size will be consistence throughout CBI, 14pt for body and approx, 25pt for headers and 60pt for titles. These sizes my change but MUST be kept consistent throughout document.

### Usability

The menus will be simplistic and easy to navigate. There will be few items on each screen that the learner will be able to interact with thus minimizing the risk of the learning becoming lost or distracted.

## **Planning document**

### **Goals and Objectives**

The learner will be able to identify the appropriate computing platform per customer's requirements.

1. The learner will be able to “explore” the store.
2. The learner may search the “backroom” for information at anytime. This is the lesson portion of the CBI.
  - a. The learner will explore the specifics of the PC platform.
  - b. The learner will explore the specifics of the MAC platform.
  - c. The learner will explore the specifics of the LINUX platform.
  - d. The learner will review the glossary for terms.
3. The learner may “hit the floor” to help a customer at anytime. This is the examination portion of the CBI. The learner is only required to help ONE of the customers to complete the CBI.
  - a. The learner will assist Cayce, whose correct platform is MAC
  - b. The learner will assist Bill, whose correct platform is PC
  - c. The learner will assist Chuck, whose correct platform is LINUX

## Treatment

### Background notes

This CBI will be developed as a simulation in order to give the learner a memorable and meaningful experience. A simulation style experience will allow the learner to explore the environment and discover the required background information on each computing platform (MAC, PC, and Linux). Once armed with this knowledge, the learner will proceed down one of the aisles to assist a customer. The learner will not know which customer they will be helping or which computing platform they are looking for.

### Description of project

The setting of the training will be in an Electronics Store (think Best Buy, or Circuit City before they closed).

The CBI opens in front of the electronics store. The introduction describes that the learner will be able to explore the environment; they may enter the “backroom” for lessons on each of the computer platforms the store carries or they may hit the showroom floor and choose an aisle to help a customer. The introduction will note that the learner will not know which customer they are helping when they choose an aisle.

The learner will then click on the entrance doors to enter the store. Once inside of the store, the learner will see the inside of the store, and will be able to either go to the “backroom” for the lesson or the showroom for testing.

The learner clicks to go to the backroom for the lessons on the computing platforms.

The backroom is a workshop. The various computers and a “Users Manual” are on the workbench to be examined. When the learner clicks on the PC and is brought to a close up screen of the PC with description of the PC a list of specs. The learner can then back out of examining the PC and examine the other two platforms or the “Users Manual”.

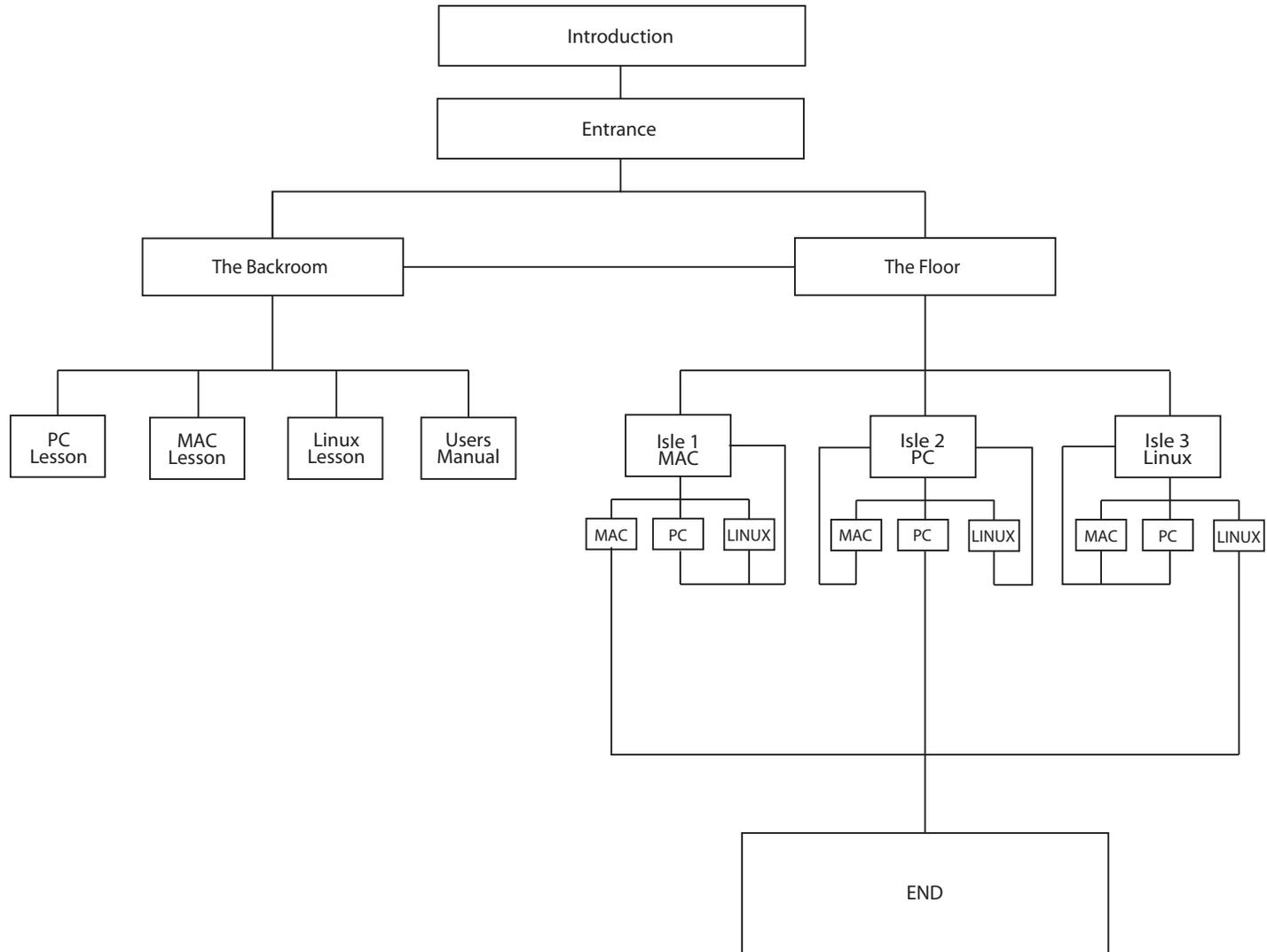
When the learner examines the “Users Manual” the book opens as though the learner is reading it. The “Users Manual” is a glossary of terms such as an explanation of what HDD or CDROM means, the learner can use for reference if they need more background knowledge. Once the learner feels they are prepared to test their knowledge, they will be able to leave the “backroom” and hit the floor.

The “floor” consists of 3 aisles. The learner may choose one of the three aisles to go down and help a customer. The learner will not know which customer is in which aisle.

The learner chooses aisle #1, and meets “Cayce” who is looking for a new computer. Cayce describes what she is looking for. The learner must then decide what Cayce is looking for a PC. This answer is incorrect, Cayce responds stating that it is now quite what she had in mind and reminds the learner what she is looking for. The learner then decides on the MAC. This is exactly what Cayce is looking for and she is very pleased with the level of service she has received.

The learner now has the option to go down one of the other aisles or end the training session. The learner decides to end the training and is congratulated by management for successful completion of the training.

# Whitepaper



Branch Point: Main Menu	Scene Title: Choosing the right computer	Date: 3/29/09
----------------------------	--	---------------

**File Name/Location:**  
Final/Text/Main Menu

Welcome to Super Electronics!  
Today we will learn how to identify the identify the computer platform that matches a customers needs. This lesson will consist of two parts, the back room where you can research platforming specs and look up terms and the floor which you will test your knowledge. You may go to either the back room or the floor at your free will.  
Please enter the store when you are ready to begin

**File Name/Location:**  
Final/Audio/Main Menu

Programming Notes:

Variables Used/Referenced:

Interactivity:

The learner may enter the store my clicking on the entrance.  
The learner may also use the menu to exit or go home at any time.

Scene Sketch:

Branch Point: A	Scene Title: The Backroom	Date: 3/29/09
--------------------	---------------------------	---------------

**File Name/Location:**  
Final/Text/A

Please select a platform to learn more or see the manual for more information.

**File Name/Location:**  
Final/Audio/A

Programming Notes:

Variables Used/Referenced:

Interactivity:  
The learner may select one of the platforms to learn more, the “manual” is a glossary of terms.  
The learner may also use the menu to go home or exit at anytime.

Scene Sketch:

Branch Point: A.1	Scene Title: PC	Date: 3/30/09
----------------------	-----------------	---------------

**Description:**

PC's are typically the standard for business and home computing. They are affordable, no-nonsense and upgradeable. This system is for the consumer who wants an affordable computer "that just work", it's is also for the budding tinkerer, who wants to know the how and way's computers work.

**Specs:**

3 GB Ram  
500 GB HDD  
2.8 GHz  
16X DVD+/-RW Drive

**Price**

\$600

**File Name/Location:**

Final/Text/A.1

NO NARRATION

**File Name/Location:**

Final/Audio/A.1

**Programming Notes:**

**Variables Used/Referenced:**

**Interactivity:**

Use the menu to go home, back, or exit the lesson.

**Scene Sketch:**

Branch Point: A.2	Scene Title: MAC	Date: 3/30/09
----------------------	------------------	---------------

**Description:**

Sleek, stylish and trendy.

Mac's are a bit more expensive but get more bang either buck. The typical user wants style, class in an user friendly package. Mac's appeal to designers, artists and education.

**Specs**

Two 2.26GHz Processor

4 GB Ram

640 GB HDD

16X DVD+/-RW Drive

**Price**

\$2,499.00

**File Name/Location:**

Final/Text/A.2

NO NARRATION

**File Name/Location:**

Final/Audio/A.2

**Programming Notes:**

**Variables Used/Referenced:**

**Interactivity:**

Use the menu to go home, back or exit the lesson.

**Scene Sketch:**

Branch Point: A.3	Scene Title: LINUX	Date: 3/30/09
----------------------	--------------------	---------------

**Description:**

Linux is an Open Source OS. Most people who use Linux systems are digital natives and are very adept in technology. This system attracts tinkerers and hobbyists.

**Specs**

Two 2.26GHz Processor  
4 GB Ram  
640 GB HDD  
16X DVD+/-RW Drive

**Price**

\$600

**File Name/Location:**

Final/Text/A.3

NO NARRATION

**File Name/Location:**

Final/Audio/A.3

**Programming Notes:**

**Variables Used/Referenced:**

**Interactivity:**

Use the menu to go home, back or exit the lesson.

**Scene Sketch:**

Branch Point: A.4	Scene Title: Users Manual	Date: 3/30/09
----------------------	---------------------------	---------------

Terms:

**GB: Gigabyte** is an SI-multiple of the unit byte for digital information storage. Since the giga-prefix means  $10^9$ , *gigabyte* means 1,000,000,000 bytes ( $1000^3$ ,  $10^9$ ). However, this term is also often used meaning

**RAM: Random access memory** is a form of computer data storage which is located inside your computer. RAM has to do with processing NOT storage. The more RAM you have, the more information your computer can process.

**DVD: Digital Video Disc** is an optical disc storage media format. Its main uses are video and data storage.

**RW: Read/Write.** This designates that the DVD has the ability to Read and Write to Blank DVD media.

**OS: operating system** is an interface between hardware and user; it is responsible for the management and coordination of activities and the sharing of the limited resources of the computer.

**File Name/Location:**

Final/Text/A.4

Cite: Wikipedia

Programming Notes:

Variables Used/Referenced:

Interactivity:

Use the menu to go home, back, or exit the lesson.

NO NARRATION

**File Name/Location:**

Final/Audio/A.4

Scene Sketch:

Branch Point: B	Scene Title: The Floor	Date: 3/29/09
--------------------	------------------------	---------------

**File Name/Location:**  
Final/Text/

Programming Notes:

Variables Used/Referenced:

Interactivity:  
Choosing an isle will take you to one of the 3 types of customers who are looking for a particular computer. PC, MAC or Linux.  
  
Use the menu to go home or exit the lesson.

Ok! Now it's time to put your skills to work!

1. Please stroll down one of the isles to help a customer.

**File Name/Location:**  
Final/Audio/

Scene Sketch:

Branch Point: B.1	Scene Title: Cayce : Decision MAC	Date: 3/31/09
----------------------	-----------------------------------	---------------

Hi, I'm Cayce  
I am a graphic designer. I am looking for a computer for my graphic design business. I don't know a lot about computers but I am looking for something stylish and user friendly. Form and function as they say.

**File Name/Location:**

Final/Text/B.1

NO NARRATION

**File Name/Location:**

Final/Audio/B.1

Programming Notes:

Variables Used/Referenced:

**The correct answer is: MAC**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

Choose one of the computing platforms, Mac, PC, Linux

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.1.1	Scene Title: Cayce : Decision MAC	Date: 3/31/09
------------------------	-----------------------------------	---------------

This is it! This is exactly what I am looking for!  
Thank you soo much for your help!!

**File Name/Location:**  
Final/Text/B.1.1

NO NARRATION

**File Name/Location:**  
Final/Audio/B.1.1

Programming Notes:

Variables Used/Referenced:  
**This is the correct answer**

Interactivity:  
**Use Quizmaker for this section.**  
Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.1.2	Scene Title: Cayce : Decision PC	Date: 3/31/09
------------------------	----------------------------------	---------------

Uh no. This isn't exactly what I have in mind. This is not as stylish as I am looking for. I have plenty of money to invest in a classy, user friendly computer.

**File Name/Location:**

Final/Text/B.1.2

NO NARRATION

**File Name/Location:**

Final/Audio/B.1.2

Programming Notes:

Variables Used/Referenced:

**This is the correct answer**

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.1.3	Scene Title: Cayce : Decision Linux	Date: 3/31/09
------------------------	-------------------------------------	---------------

Umm.. what is it??  
I have no idea of how to operate this thing.  
Do you have anything that is user friendly?

**File Name/Location:**

Final/Text/B.1.3

NO NARRATION

**File Name/Location:**

Final/Audio/B.1.3

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.2	Scene Title: Bill (PC)	Date: 3/30/09
----------------------	------------------------	---------------

Hey, Bills the name, stock tradings' the game.  
I am looking for a home computer for the family.  
We don't need any fancy bells and whistles, just  
something the kids can play some games, the wife  
can balance the check book and I can check my  
work email. We're not looking to spend a lot.

**File Name/Location:**

Final/Text/B.2

NO NARRATION

**File Name/Location:**

Final/Audio/B.2

Programming Notes:

Variables Used/Referenced:

The correct answer is **PC**

Track the number of incorrect answers. If more  
than five. Learner needs to go back to for review

Interactivity:

Choose one of the computing platforms,  
Mac, PC, Linux

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.2.1	Scene Title: Bill : Decision MAC	Date: 3/31/09
------------------------	----------------------------------	---------------

Whoa! This computer is very expensive and is more than we need. We are looking for something inexpensive and no nonsense.

**File Name/Location:**

Final/Text/B.2.1

NO NARRATION

**File Name/Location:**

Final/Audio/B.2.1

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.2.2	Scene Title: Bill : Decision PC	Date: 3/31/09
------------------------	---------------------------------	---------------

Excellent! That's exactly what we are looking for!  
Thank you for your help!

**File Name/Location:**

Final/Text/B.2.2

NO NARRATION

**File Name/Location:**

Final/Audio/B.2.2

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.2.3	Scene Title: Bill : Decision Linux	Date: 3/31/09
------------------------	------------------------------------	---------------

I think this is a little advanced for my family.  
We don't want to have to learn new a new OS.  
I want to stick the type of computers that we use  
at work. Something to surf the web, and  
play games, and do some work with.

**File Name/Location:**

Final/Text/B.2.3

NO NARRATION

**File Name/Location:**

Final/Audio/B.2.3

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more  
than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.3	Scene Title: Chuck	Date: 3/30/09
----------------------	--------------------	---------------

Hi! I'm Chuck  
I'm a computer technician at a large corporation.  
I spend all day fixing computers of the technically  
challenged, so I am not afraid to crack the lid and  
get my hands dirty. In fact, I want something that  
I can upgrade and modify as I see fit.

**File Name/Location:**

Final/Text/B.3

NO NARRATION

**File Name/Location:**

Final/Audio/B.3

Programming Notes:

Variables Used/Referenced:

The correct answer is **LINUX**  
Track the number of incorrect answers. If more  
than five. Learner needs to go back to for review

Interactivity:

Choose one of the computing platforms,  
Mac, PC, Linux

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.3.1	Scene Title: Chuck : Decision MAC	Date: 3/31/09
------------------------	-----------------------------------	---------------

HAHA!...no.  
This is loaded with proprietary software! I want to open the case, look inside, and mess around with it! I am no stranger to technology.

**File Name/Location:**

Final/Text/B.3.1

NO NARRATION

**File Name/Location:**

Final/Audio/B.3.1

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.3.2	Scene Title: Bill : Decision PC	Date: 3/31/09
------------------------	---------------------------------	---------------

Uh, not quite what I had in mind. I am no stranger to technology. I am pretty much planning on taking my computer apart as soon as I get home to optimize the hardware and reinstall the OS.

**File Name/Location:**

Final/Text/B.3.2

NO NARRATION

**File Name/Location:**

Final/Audio/B.3.2

Programming Notes:

Variables Used/Referenced:

**This is an incorrect answer.**

Track the number of incorrect answers. If more than five. Learner needs to go back to for review

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: B.3.3	Scene Title: Chuck : Decision Linux	Date: 3/31/09
------------------------	-------------------------------------	---------------

HECK YEAH! This is exactly what I am looking for!! I can't wait to take it home and dismantel it!!

**File Name/Location:**

Final/Text/B.3.3

NO NARRATION

**File Name/Location:**

Final/Audio/B.3.3

Programming Notes:

Variables Used/Referenced:

**This is the correct answer**

Interactivity:

**Use Quizmaker for this section.**

Use the menu to go home, back or exit the lesson.

Scene Sketch:

Branch Point: END	Scene Title: Congratulations!	Date: 3/31/09
----------------------	-------------------------------	---------------

**File Name/Location:**  
Final/Text/END

You have successfully completed the training modual. Management is very excited to have you on the team!!

**File Name/Location:**  
Final/Audio/END

Programming Notes:

Variables Used/Referenced:

Interactivity:

Exit, play again,

Scene Sketch: