



# Storyboard Design



**By the end of this lecture you will be able to :**

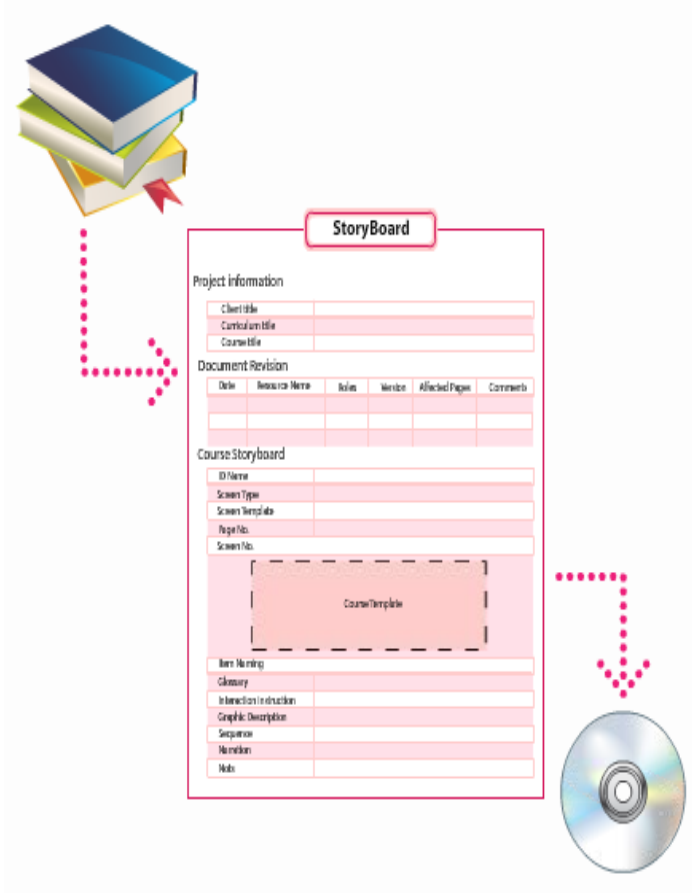
- Define what is a Storyboard.
- Why Storyboards are important.
- Illustrate the Storyboards elements.
- Differentiate between the Storyboard concepts.
- Explain the Storyboard process.
- Write storyboard.





# What is Storyboard?

- ❑ Storyboards are a means to graphical represent layout, organization, content, and linkages of information within a multimedia context to create a conceptual idea of information location, meaning, and appearance.
- ❑ The storyboard is a document that adds the next level of details to the treatment.



The diagram illustrates the flow of information from a stack of books to a storyboard form, which is then linked to a CD-ROM. A stack of three books (blue, green, yellow) is shown at the top left. A red arrow points from the books to a pink-bordered form titled "Storyboard". The form contains several sections: "Project Information" with fields for Client title, Curriculum title, and Course title; "Document Revision" with a table for tracking changes; "Course Storyboard" with fields for ID Name, Screen Type, Screen Version, Page No., and Screen No.; and a central dashed box labeled "Course Template". Below this are fields for Item Naming, Glossary, Introduction/Introduction, Graphic Description, Sequence, Metadata, and Web. A red arrow points from the "Storyboard" form to a CD-ROM icon at the bottom right.



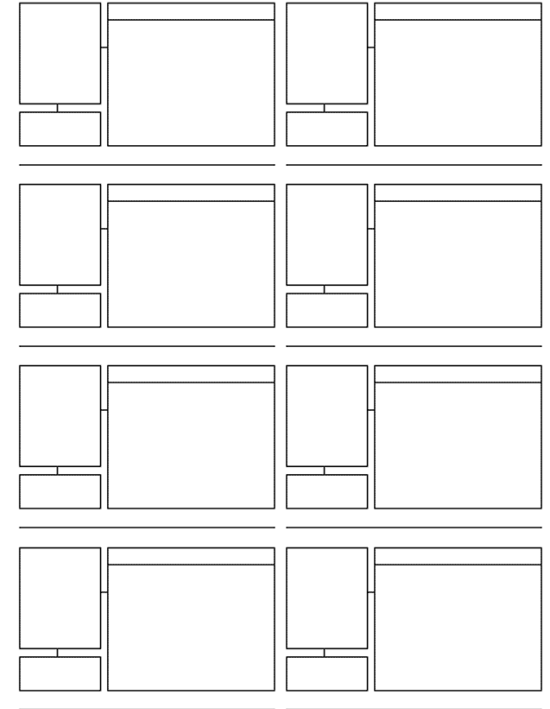


# What is Storyboard?

- ❑ The script or storyboard is simply a **screen-by-screen description** of what students will see, hear, and do when running the program.

Once the designer completes the script, it becomes the **guidebook** for all other team members:

**artists, audio/video producers, and programmers.**



# What is Storyboard?

- ❑ The storyboard is a **complete, accurate,** and highly **detailed text-based** version of a digital learning resource or learning object.



- ❑ It fully **documents** ,and **communicates the design** of a learning object to **those responsible** for development.



# What is Storyboard?

- ❑ The storyboard is a **blueprint** created by a team that consists of **subject matter experts (SMEs)**, **instructional designers** and **writers/storyboarders**.





# Important Questions

❑ **Instructional Designer and storyboarders should be able to answer the following questions:**

1. What **technology** will be used for this project (Flash, Authorware, Flex, Java etc)?
2. What does the **technology** do well and what are the **limitations**?
3. What are the **parameters** and **constraints** that impact what we can do (the ideal VS reality)?





# Important Questions

❑ **Instructional Designer and storyboarders should be able to answer the following questions:**

4. What are **the component parts of learning objects**?
5. How do these component **parts function**?
6. What are the relationships between these **component parts**?
7. How should these **component parts** be **designed** and **documented** in the **storyboard** so that they can be built to function in the required manner?
8. How do we make **good educational** use of the technology in a cost effective manner?



# Why use Storyboard?

## □ There are many reasons for using SB:

- Visually displaying an overview of information.
- Generating a plan of action.
- Demonstrating functionality of elements.
- Showing navigational schemes and finding linkage possibilities.
- Checking completeness.
- Can be evaluated by others.



# Why use Storyboard?

## □ There are many reasons for using SB:

- Building **consensus** among groups of developers.
- Identifying **common points of focus**.
- Helps graphical **sizing** and organization.
- Helps one to think about **appropriate activities**.
- And simply, telling you how the course will appear in **final form**.





# Why use Storyboard?

- ❑ There are many reasons for using SB:

## Most importantly:

- ❑ Storyboards provide a simple means of **understanding** the **relation** of one element to the **overall** scheme, and how various knowledge elements can become **interconnected**.





# Storyboards Elements

- ❑ All SB should have certain elements in common. these include:

## Common Elements :

- |                        |                                       |
|------------------------|---------------------------------------|
| ▪ Project Information  | ▪ Notes                               |
| ▪ Date                 | ▪ Rough drawing                       |
| ▪ Version name         | ▪ Audio or Video sequence or Script   |
| ▪ lesson               | ▪ Interaction instructions            |
| ▪ Topic                | ▪ Screen text                         |
| ▪ Glossary items       | ▪ Navigation and Information linkages |
| ▪ Graphics Description |                                       |



## Project Information

All the information that related to the sponsor of the project that include:

- Client's Name
- Curriculum title
- Course title





# Storyboards Elements

## Version Number / Date:

- ❑ Identify the **version** / date of the storyboard.
- ❑ If changes are made to a screen, the version and/or date will allow everyone to know **if they are working from the most recent version.**
- ❑ **Example:**
  - EELU\_PHY\_CH04\_V 01.doc
  - EELU\_PHY\_CH04\_V 02.doc
  - EELU\_PHY\_CH04\_V 03.doc





# Storyboards Elements

**Version Number / Date:**

## DOCUMENT REVISION

Date	Resource Name	Role	Version	Affected Pages	Comment
	Dr. Sobhy Atalla	Professor	01	ALL	First Draft
28-10-2007	Mostafa Mahmoud	Instructional Designer	02		Separate to Events
20-11-2007	Mostafa Mahmoud	Instructional Designer	03	All	





# Storyboards Elements

## Screen Type

### Primary screen type:

- Menu Screen
- Submenu Screen
- Help Screen
- Summary Screen
- Search Screen
- Glossary Screen
- Introduction Screen
- Quiz Screen





# Storyboards Elements

## Screen Type

### Content Presentation Screen (Template)

- Text with image
- Text with flash
- Text with simulation
- Text with video
- Image only
- Flash only
- Simulation only
- Video only
- 30% text – 70% media
- 50% text – 50% media
- 70% text – 30% media
- 100% media





# Storyboards Elements

## Screen Name

- Identify the **parent lesson**/topic.
- Specify the current screen name. This must be a **unique screen identifier** because potentially there could be many screens called “screen 5” in one learning object.
- Use a **logical naming convention** so that everyone will know that is screen 5 in Lesson 3.





# Storyboards Elements

## Screen Name

### ☐ Example:

#### ○ Ch01L02T04S01

- Ch → Chapter
- L → Lesson
- T → Task
- S → Screen

### ☐ Note:

- you will notice that this name **will not be repeated** again through the course.
- We didn't use in this example **any separator** between name as ( . ; - ; \_ ) or any spaces between each one.





# Storyboards Elements

## Page Number

- Identify **the number of storyboard pages** required to describe this separate LO screen (e.g. Page 1 of 7).
- Discover any missing pages in the file faster **by using the page number**.





# Storyboards Elements

## Screen Text

- Course Name
- Chapter Name
- Screen Name
- Content

### □ Note:

- Font and color information should be included on an exception basis only as the project Style Guide should contain style descriptions for the different text types.
- It is highly recommended to use a **file naming convention** that will **help relate media files** to their parent screen. The naming convention could indicate the type of media object and its sequence in the screen.





# Storyboards Elements

## Items Naming

❑ You should give **name unique to every item** in the screen that will be used latter by the development team **to avoid the integration errors** that face any course in the integration phase.

### ❑ Example

- Ch01L02T03I01                      I → Image
- Ch01L02T03F02                      F → Flash
- Ch01L02T03V03                      V → Video

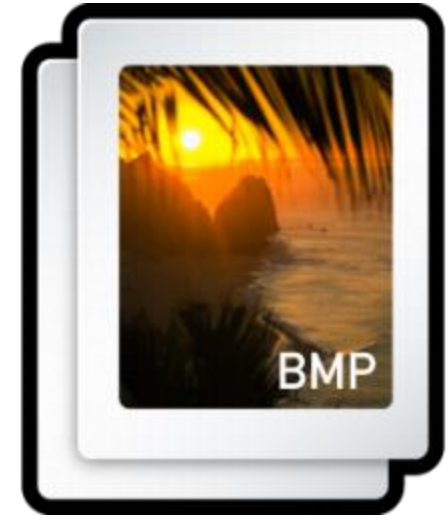
○ This method in naming that will **prevent the repeated names** of items.



# Storyboards Elements

## Graphics

- Requires detailed **sketches or other reference material** that may be helpful for the illustrator.
- Make sure that you write the **correct name** of the graphics.
- Be aware of **copyright issues**. If an existing image should be used “as is” approvals and copyright clearances must be obtained that may involve financial implications and time delays.



# Storyboards Elements

## Video

- Requires a complete video storyboard.
- Video storyboards are normally developed by a person that is a **specialist** in this function.
- The **SME/writer** should work in collaboration with this **specialist** and would provide the outline, guidelines, and content for the video.
- If an existing video should be used “as is” approvals and copyright clearances must be obtained that may involve financial implications and time delays.



# Storyboard for Videos

- ❑ Special requirements for **video** segments and **animations**.

Due to their specific nature and unique development requirements some media elements such as video segments and animations may require a **totally different kind of storyboard**.

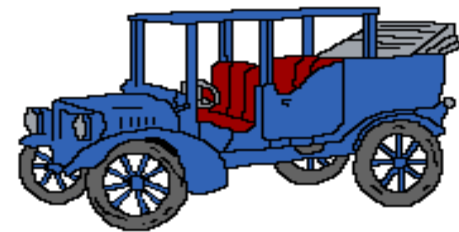




# Storyboards Elements

## Animations

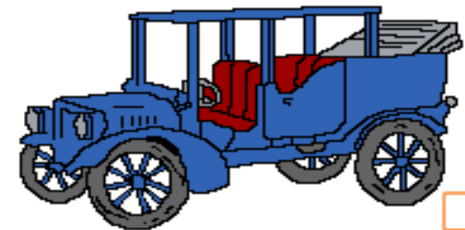
- Requires a complete animation storyboard.
- Specify if **2D** or **3D** animations are required. Generally **3D animation is more expensive to create than 2D but not always.**
- An animation storyboard requires the starting frame of the scene, key frames **showing** any changes to objects (**size, shape, color, location, path**, etc), and the final frame.



# Storyboards Elements

## Animations

- ❑ The animation storyboard does not have to be a **work of art**, and could consist of **simple hand drawn** (scanned images inserted into the document) or electronic sketches.
- ❑ **Stick figures** are acceptable in the storyboard, as long as the **animator knows what the characters should look like**.
- ❑ It is difficult to **prescribe** how many key frames are required, but the rule of thumb is to create at least one key frame for each major change in state/position.



# Storyboards Elements

## Audio

- Requires a script for the audio soundtrack or identify which parts of the text must be read.
- Identify the location of **synchronization** between text and audio by using different color for the starting word in recorded audio.





# Storyboards Elements

## Notes, glossary and graphic description

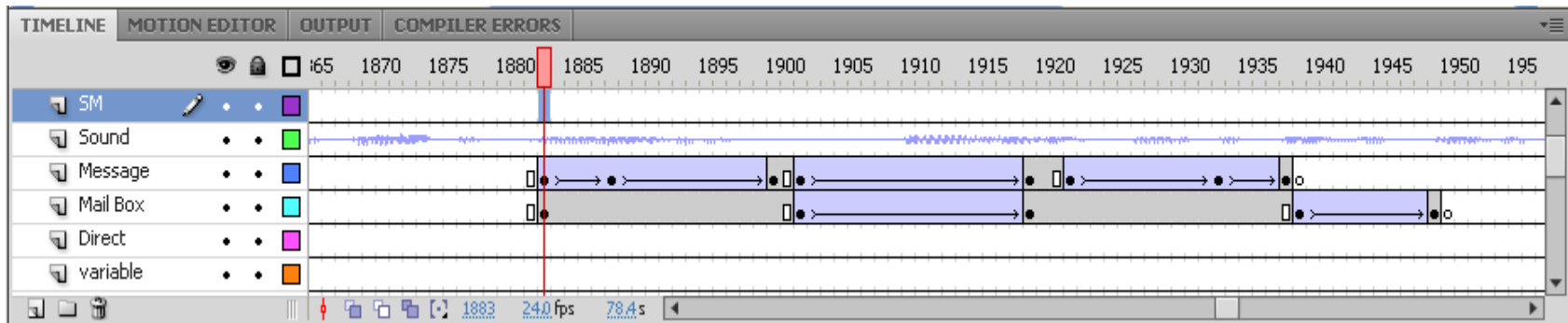
- ❑ **Notes** where the development team and instructional designer can write notes that will help them in the development phase.
- ❑ **Glossary** used to write on it the difficult words or expression with small description to be used by the developer to make it in flash.
- ❑ **Graphic description** written by the instructional designer to give detailed instructions to the development team





# Layout and Presentation Details

- ❑ **Screen location:** specify exactly **where** the **element** should be displayed on the screen .



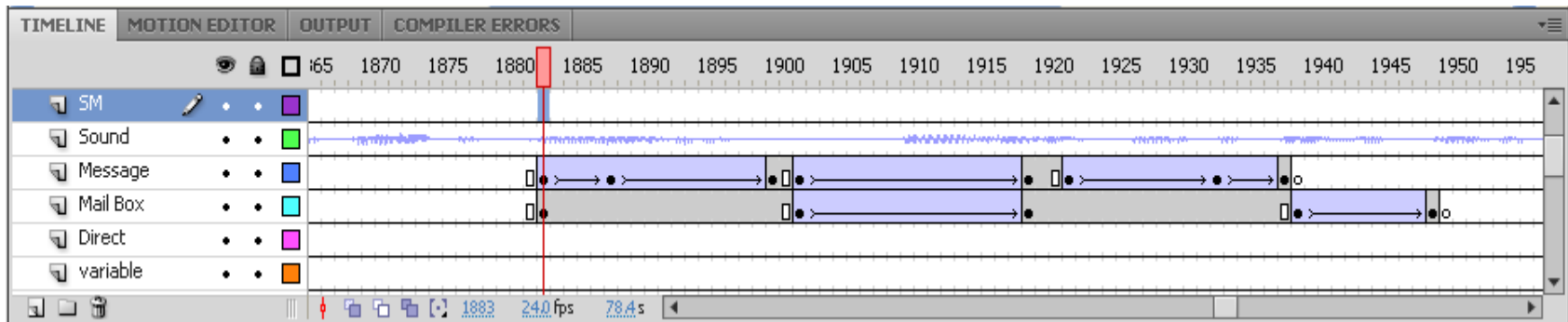
- ❑ **Sequence:** specify the **order** in which **element** should be displayed.





# Layout and Presentation Details

- ❑ **Delay:** indicate if the media element is on the screen **when it opens** or if it comes up later. If it comes up later is it a time based event or synchronized with another element?

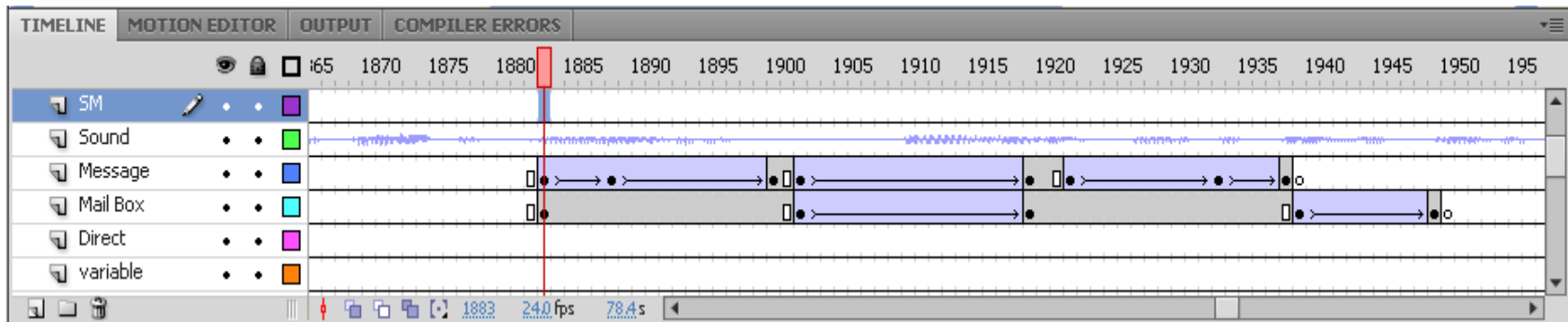


- ❑ **Synchronization with other media elements,** e.g. specify that the **text bullets** must be displayed in synch with the audio track.



# Layout and Presentation Details

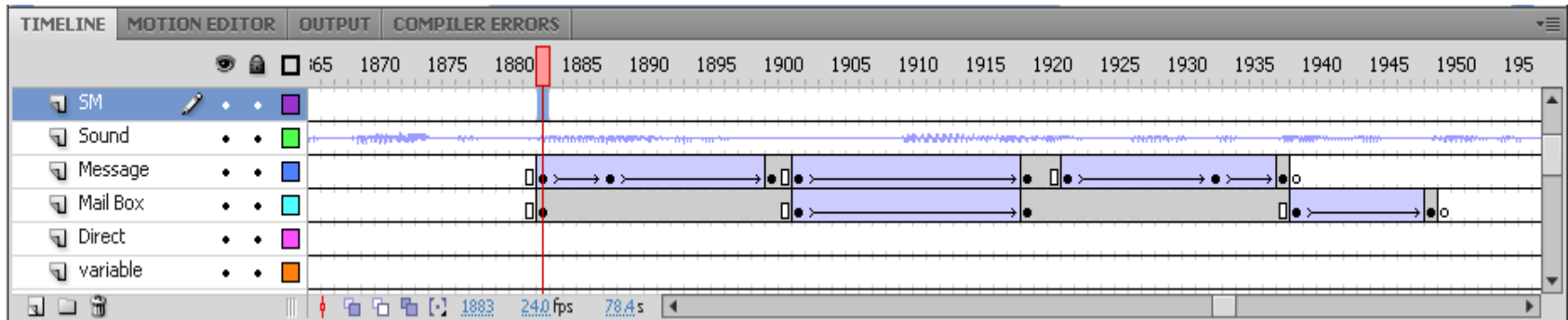
- ❑ **Transitions between screen elements** (e.g. specify that the graphic should fade in over two seconds, or text item two should move in from the left and replace text item one).



- ❑ **Duration of media elements** (e.g. a video segment plays for 30 seconds, or an animation sequence plays once and then loops)

# Layout and Presentation Details

- ❑ **When and how media elements should play:** (e.g. the audio should start playing when the screen loads; but the video should load and pause and wait for the play button to be clicked)



## Buttons

- ❑ **Standard navigation** buttons to be present according to the screen type (e.g. back, next)
- ❑ **Interaction-specific** buttons required for this screen only (e.g. Hint, and Continue)
- ❑ **Media controls** (e.g. play, pause, rewind, etc)



**Note:** Button styles should be included and described in the **project Style Guide**. They should be described in detail with regards to appearance (style guide) and function (functional design document).

# Storyboard forms / templates

- ❑ Each project team is required to agree upon a **storyboard format and templates** that will meet the specific **needs of that project**.
  
- ❑ The format agreed upon by the team should meet the needs of:
  - ✓ Project coordinators
  - ✓ Instructional designers
  - ✓ Content writers
  - ✓ SME reviewers
  - ✓ Media developers
  - ✓ Programmers.





## Sample simplified SB template:

<p>Unit Title: (...) Page: # of # for this storyboard</p> <p>Lesson Title: (...)</p> <p>Frame #: (From the flowchart)</p> <p>Date: (Very important to keep version history)</p>	<p>File Name: (Name that this file will be stored under )</p> <p>Screen Description: (Brief description of the learning experience to take place on this page)</p>	<p>Text Outline: (Can be as detailed as required)</p>
<p>Work Space: (Rough sketch of the page)</p> <ul style="list-style-type: none"><li>-text with attributes and links</li><li>-graphics, multimedia, and color schemes (such elements may have a storyboard of their own as well)</li><li>-layout and chunking of information</li></ul>		
<p>Additional Notes: (Description of miscellaneous information or directions for other project members when appropriate)</p>		<p>Rationales for media usage</p>



# Storyboard Process

1. Decide on the program you'd like to use for storyboarding. There are many programs to choose from, such as PowerPoint and Word.



2. **Outline the main lessons** of the tutorial first, then add the steps necessary to accomplish each lesson.

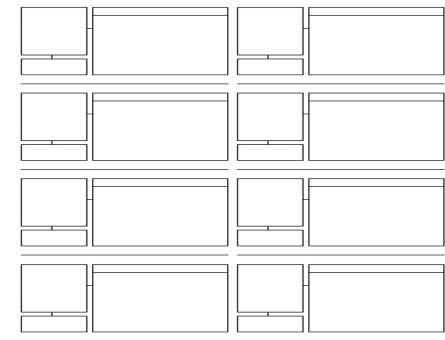


# Storyboard Process

3. Visualize **how each lesson** and its connected steps will be communicated, screen-by-screen in the tutorial.



4. **Write the storyboard** in a screen-by-screen format, including notes on required images, sound, or video per screen.





# Storyboard Process

5. Define the type of text you'll be using per screen, such as:

- Text that appears on **its own**
- Text in a **call-out box** that refers to something on a screen capture
- Text that commands the user to interact with the tutorial by typing into a field or clicking on a button.

Text

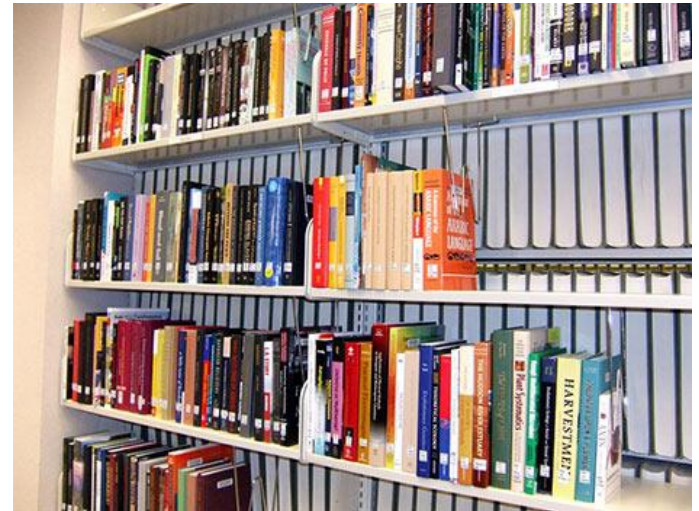
Click here

Type here



## Storyboard Process

5. Describe the video or images to be used per screen, such as "mountain range that fades to white," or "encyclopedias on library shelf."



6. Gather all required images, sounds, and video before creating the eLearning tutorial in the chosen program.

# Storyboards for e-Learning

- ❑ **Finally**, the course as a whole must be discussed and the plans recorded in a large document.
  
- ❑ **Once created, the storyboard contains:**
  - All subject content in written form
  - Descriptions of pictures, animations, videos, audio segments, and other media
  - Descriptions of interactions, feedback, exercises, games, tests, etc.
  - The order of all the pages, elements, objects
  - Special instructions regarding elements (such as emphasis on one thing)



# Storyboard is a signoff point

## Important note

- The storyboard is a major approval and signoff point.
- Media element development and programming should not start until the visual mock-up and storyboards have been thoroughly reviewed, approved and signed off.



# Storyboard is a signoff point

## Important note

- Once development has started there should be only minimal changes.
- If changes are required to the storyboard after signoff, these changes should be documented, approved and tracked by means of a formal “Change Request”.
- Be aware that small “ad hoc” changes made to one screen often create new unanticipated problems in other areas that may be difficult to fix.





## Storyboard is a signoff point

- ❑ A common problem experienced during development is that as changes are made to the actual LO, that the storyboard is not always updated to reflect the changes.





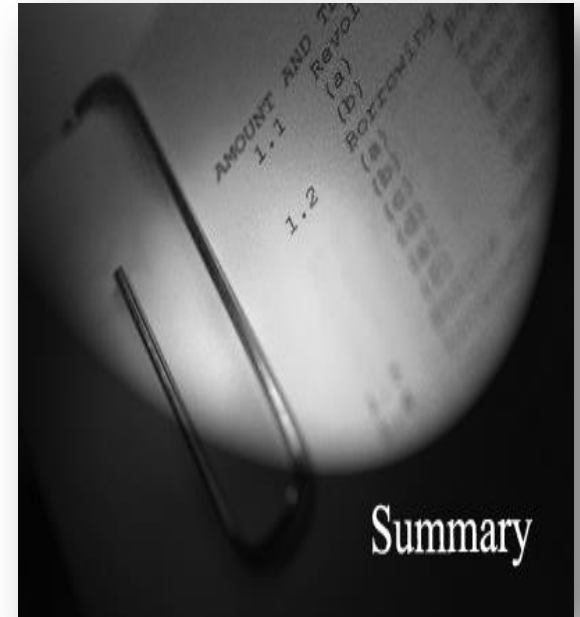
## Storyboard is a signoff point

- ❑ Any changes made to the LO should be documented by updating the storyboard.
- ❑ At the end of a project the **storyboard** is **archived** and becomes **part of the formal project documentation** for future reference and maintenance purposes.



# Summary

- ❑ The previous topic covered the details and fields of storyboard, how to design storyboard, and sample of storyboard.



## Activity

- Team participants: 3
- Each team design its own storyboard that contain all fields required.
- Each team write the storyboard of the entire course.

