

Information Systems and Interaction

Website Design

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Information Systems and Interaction – Website Design

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Task 1: Evaluation of an existing site

Part A: Design and Usability Guidelines

Sources:

<https://www.nngroup.com/articles/113-design-guidelines-homepage-usability/>

<http://webstandards.hhs.gov/guidelines/>

Communicating the site's purpose

1. On the homepage, emphasize what your site does that's valuable to the user's point of view, as well as how you differ from key competitors.
 - The tag line is a good place to this, if the message can be delivered in only a few words.
 - A simple tag line that states what is different about you, would give users who are unfamiliar with the website, an instant sense of what the site can offer them.
2. Emphasize the highest priority tasks so that users have a clear starting point on the homepage.
 - Give these tasks a prominent location and don't give them a lot of visual competition because if you emphasize everything, nothing will get focus.
 - Keep the number of core tasks to a minimum (i.e. 1 to 4) and the area around them clear.

Communicating information about your company

3. Group corporate information in one distinct area.
 - This grouping gives people who want this information a clear and memorable place to go.
 - It also helps users who are not interested in that sort of information by separating it from the rest of the homepage content.

Content Writing

4. Use customer-focused language.
 - Label sections and categories according to the value they hold for the customer, not according to what they do for the company.
 - Think of how the customer would view the information. Ask customers what they look for when they need information. Use the words that normal customers would usually use.

Links

5. Allow link colours to show visited and unvisited states.
 - Reserve blue for unvisited links and use a clearly discernible and less saturated colour for visited links.
 - Avoid using grey for visited links as this often signifies that something is unavailable. Similarly, black is unhelpful if the main text colour is black. This will make it harder to find visited links if they are within a body of text.

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6. Use link labels and concepts that are meaningful, understandable and easily differentiated by users rather than designers.
 - Use link labels that clearly differentiate one link from another.

Navigation

7. Use breadcrumb navigation to give the user a visual cue to their location on the website.
 - Breadcrumbs help orientate users to where they are on a series of pages and where they are in the overall site hierarchy.
 - Breadcrumbs also assist visitors who come into the site on an inside page and need to access related hierarchical information.
8. Clearly differentiate navigation elements from one another, but group and place them in a consistent and easy to find place on each page.
 - Group and place navigational elements consistently throughout the website.
 - Use vertical lists to help users move from link to link with a single eye movement.

Search

9. Give users an input box on the homepage to enter search queries, instead of just giving a link to a search page.
 - Users now expect and look for an input box with a button next to it. If they don't see it, they often assume the site doesn't have a search feature.
10. Ensure that the results of user searches provide the precise information being sought and in a format that matches users' expectations.
 - Users want to be able to use the results of a search to continue solving their problem.

Graphics and Animation

11. Use graphics to show real content, not just to decorate your homepage.
 - Use photos of identifiable people who have a connection to the content as opposed to models or generic stock photos.
12. Avoid watermark graphics (background images with text on top of them).
 - They add clutter and often decrease visibility.
 - Often, watermark graphics are purely decorative and add no value.
13. Use video, animation and audio only when they help to convey a website's message.
 - Multimedia elements can add value to a website's content and help direct users to the most important information.
 - If used carelessly, they can also distract users and dramatically slow download speeds.

Graphic Design

14. Use a liquid layout so the homepage size adjusts to different screen resolutions.
15. Use an appropriate page layout to eliminate the need for users to scroll horizontally.
 - Horizontal scrolling is slow and tedious. It is much better if the entire width of the page can be seen on the screen.

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Part B: Evaluation against criteria

Website to be evaluated: <https://www.lynda.com/>

Communicating the site's purpose

1. On the homepage, emphasize what your site does that's valuable to the user's point of view, as well as how you differ from key competitors.
 - The tag line illustrates perfectly what the site offers. It clearly states what the purpose of the site is as far as the user is concerned, as well as stating that they offer tutorials for all different sorts of people from business to creative as well as necessary technological skills.

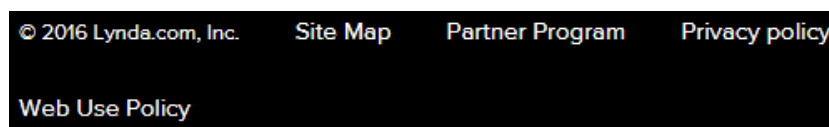


2. Emphasize the highest priority tasks so that users have a clear starting point on the homepage.
 - The three main sections regarding the courses that the website offers, are located underneath the tag line image. Each section has four of the most popular courses for each section as it is assumed that users are most likely to click on one of these.



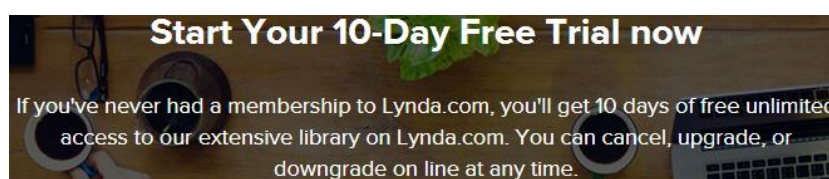
Communicating information about your company

3. Group corporate information in one distinct area.
 - The corporate information is located at the very bottom of the website as it is unlikely that a normal user would want to access this information.



Content Writing

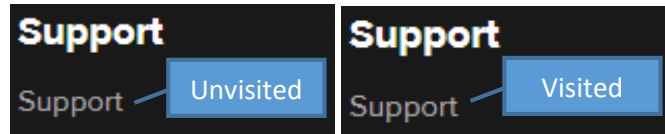
4. Use customer-focused language.
 - The language that is used is easily understandable by all users and it gets straight to the point so that if a user is only making a flying visit to the site, they don't have to spend ages sifting through loads of information to find what they are looking for.



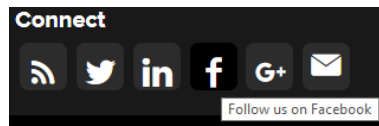
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Links

5. Allow link colours to show visited and unvisited states.
 - Unfortunately, this site does not provide this feature. The colours of a visited and an unvisited link are the same.



6. Use link labels and concepts that are meaningful, understandable and easily differentiated by users rather than designers.
 - Not all links have labels but on the links that do, the language used is very user friendly even if the initial intention of the link is not clear, the label associated with it, makes the intention clear.

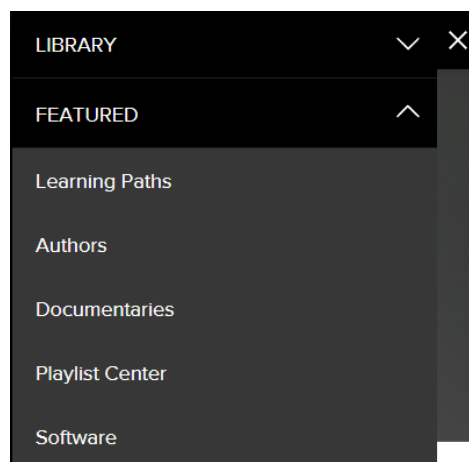


Navigation

7. Use breadcrumb navigation to give the user a visual cue to their location on the website.
 - The site uses a breadcrumb navigation scheme which can be interacted with so that a user can return to a broader section which is higher up in the schematic of the website.

[All subjects](#) » [Business](#) » [Productivity](#)

8. Clearly differentiate navigation elements from one another, but group and place them in a consistent and easy to find place on each page.
 - The main menu is located on the left of the page. It can be accessed using a button at the top left. This slides the menu across from the left into view.
 - Each menu item has a drop down menu that reveals more options. This means the user does not have to see all menu items at once.



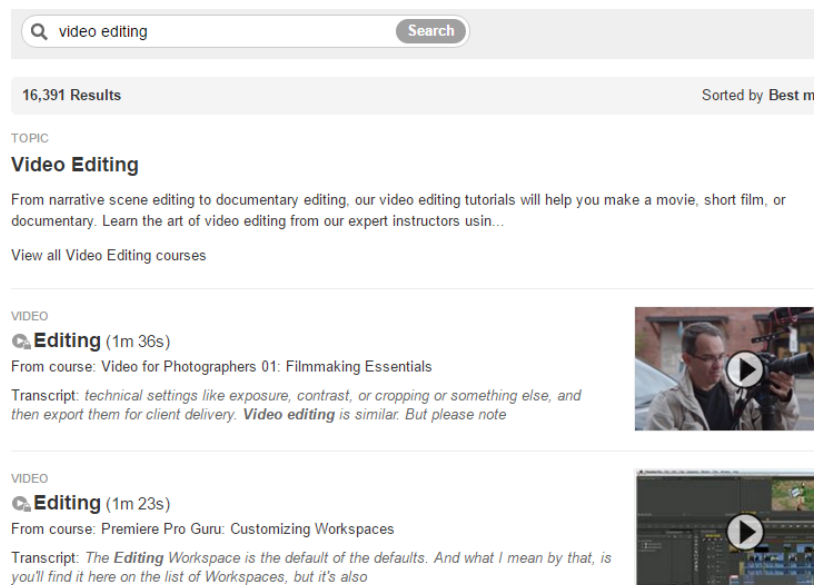
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Search

9. Give users an input box on the homepage to enter search queries, instead of just giving a link to a search page.
 - The search input box is not visible on the homepage. Instead, it can be accessed by clicking on a search icon at the top right of the page. This reveals the search box.



10. Ensure that the results of user searches provide the precise information being sought and in a format that matches users' expectations.
 - Results of a search display the type of item the result is referring to (e.g. video, course, topic, etc.)
 - Each search item also offers a small description about the item, if the title is not immediately clear.



Graphics and Animation

11. Use graphics to show real content, not just to decorate your homepage.
 - The images used on the homepage do not necessarily show real content. However, it is clear that the images that are used, do resemble the link in which the image is used.



Learn from **2282** courses including:

Audio + Music

CAD

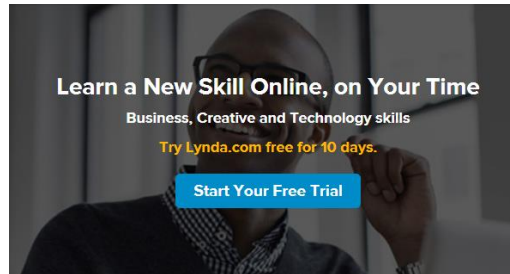
Design

Photography

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12. Avoid watermark graphics (background images with text on top of them).

- There are watermarks and background images behind links and at the top of the page. However, due to the choice of font colour, text is still easy to read, thus making this concept less of an issue.



13. Use video, animation and audio only when they help to convey a website's message.

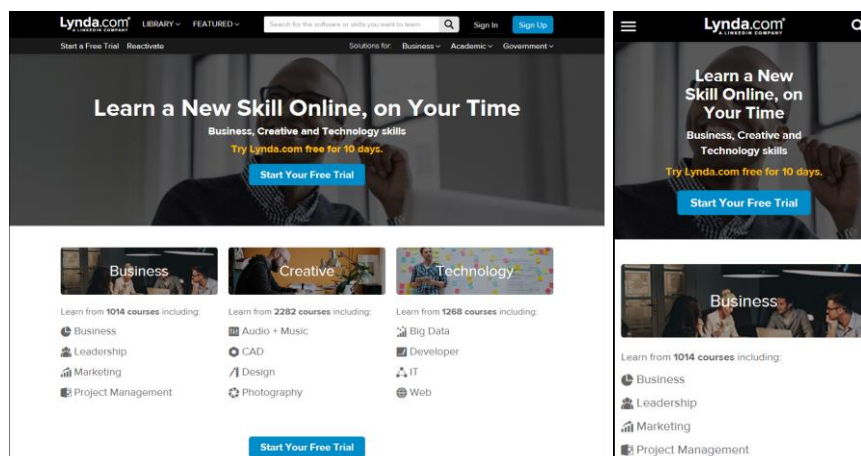
- There are very few images on the homepage so the distraction element is not prominent.
- On some of the links lower down the page, the choice of image does help the user work out the intention of that section.



Graphic Design

14. Use a liquid layout so the homepage size adjusts to different screen resolutions.

- The website does employ a liquid layout, thus making this website suitable for smaller screens and mobile devices.



15. Use an appropriate page layout to eliminate the need for users to scroll horizontally.

- Due to the use of a liquid layout meaning that elements of the screen move according to the width of the area given for that window, there is never a need for scrolling.

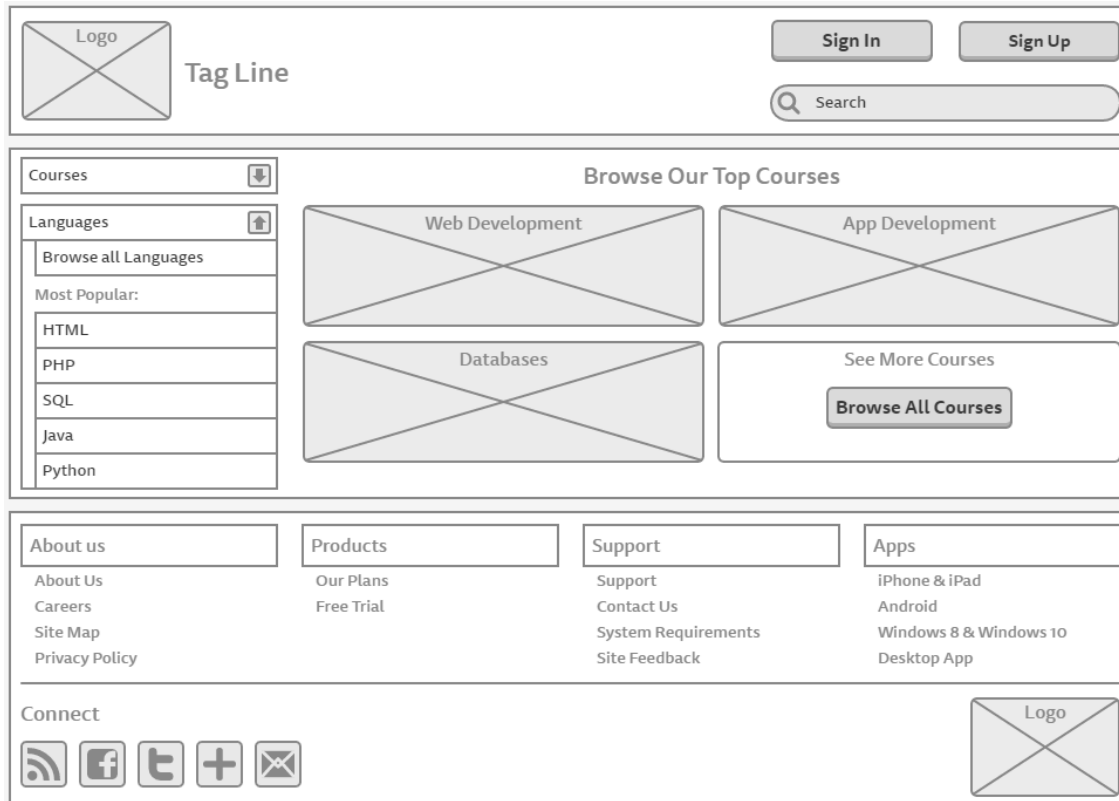
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Task 2: Interface Design

Part A: Webpage Designs

Homepage

2. Homepage (Desktop Version)



1. Homepage (Mobile Version)



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Video Tutorial Page

4. Video Tutorial Page (Desktop Version)

The desktop wireframe features a header with a logo placeholder, a tag line, and 'Sign In' and 'Sign Up' buttons. A search bar is positioned below the header. A breadcrumb trail shows 'Home > Course > Section'. The main content area includes a video player with a title 'Video Title - (Name of Author)', a large play button, and a progress bar. To the right of the video player is a sidebar titled 'Other Videos from this Course' containing two video thumbnails and a 'Rate this Video: ★★★★★' section with a 'Submit' button. The footer is divided into four columns: 'About us' (with links like About Us, Careers, Site Map, Privacy Policy), 'Products' (with links like Our Plans, Free Trial), 'Support' (with links like Support, Contact Us, System Requirements, Site Feedback), and 'Apps' (with links like iPhone & iPad, Android, Windows 8 & Windows 10, Desktop App). A 'Connect' section with social media icons and a logo placeholder is at the bottom right.

3. Video Tutorial Page (Mobile Version)

The mobile wireframe is a single-column layout. The header includes a menu icon, a logo placeholder, and a search icon. A 'Courses' dropdown menu is shown, followed by a 'Languages' section with a 'Browse all Languages' link and a list of languages: HTML, PHP, SQL, Java, and Python. Below this are 'Sign In' and 'Sign Up' buttons. The main content area features a video player with a title 'Video Title - (Name of Author)', a play button, and a progress bar. To the right of the video player is a sidebar titled 'Other Videos from this Course' containing two video thumbnails and a 'Rate this Video: ★★★★★' section with a 'Submit' button. The footer is divided into four columns: 'About us' (with links like About Us, Careers, Site Map, Privacy Policy), 'Products' (with links like Our Plans, Free Trial), 'Support' (with links like Support, Contact Us, System Reqs, Site Feedback), and 'Apps' (with links like iPhone & iPad, Android, Win 8 / 10, Desktop App). A 'Connect' section with social media icons and a logo placeholder is at the bottom right.

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Part B: Design vs Guidelines

Communicating the site's purpose

The tag line is located in the header of the webpage, next to the logo. This means that due to the top left being the first place on a website that people normally look, the tag line will most likely be seen by new users who are unfamiliar with the site.

The highest priority tasks are the only items that are on the main body of the webpage, apart from 'sign in' and 'sign up', which are located on the right of the header.

Communicating information about your company

On the desktop site, all corporate information is located at the bottom of the screen so that it is not immediately obvious to users who are not usually interested in that sort of information.

On the mobile site, all corporate information is located in the side menu that is normally hidden from view. This means that this information is not visible to the user unless they open the menu.

Content Writing

Due to the designs only being wireframes, there is very little information on the webpages. However, all information that is present, is in locations that the user would expect them to be in. For example, the title of a video appearing above the video; other videos, ratings and comment boxes are located to the right of the video (desktop) and below the video (mobile) so that the video is the first thing that the user sees.

Links

Although this has not been illustrated on the wireframes, when the state of a link changes from unvisited to visited, the colour of the text would turn blue to indicate that the link has been visited.

Navigation

Breadcrumb navigation has been used (see video tutorial page), so that if the user wants to 'go up a level' in terms of the navigation hierarchy, they can do with relative ease.

The menu system on the desktop site has been positioned on the left hand side as this is one of the most commonly used items on a homepage, therefore it makes sense to put it where it will be seen as quickly as possible. However, on the video page the menus are below the header. This is to make sure that the video area has as much space as possible.

On the mobile site, the menu is a hidden item that is accessed by pressing the menu icon on the top left of the page. This is so that the main information on the page is clearly visible so that the user does not have to scroll past a menu system in order to view information on the page.

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Search

On the desktop site, the search box is located on the top right of the page, underneath the sign in and sign up buttons. This is a common place for a search bar to be placed on a website so it made sense to place it there.

On the mobile site, the search bar can be accessed by pressing on the search icon located on the top right of the page. This action will reveal the menu bar underneath the header.

Graphics and Animation

Although no specific images have been illustrated on the wireframe designs, the diagram shows that there is very few images on the homepage and these images are used as links to their respective sections of the website.

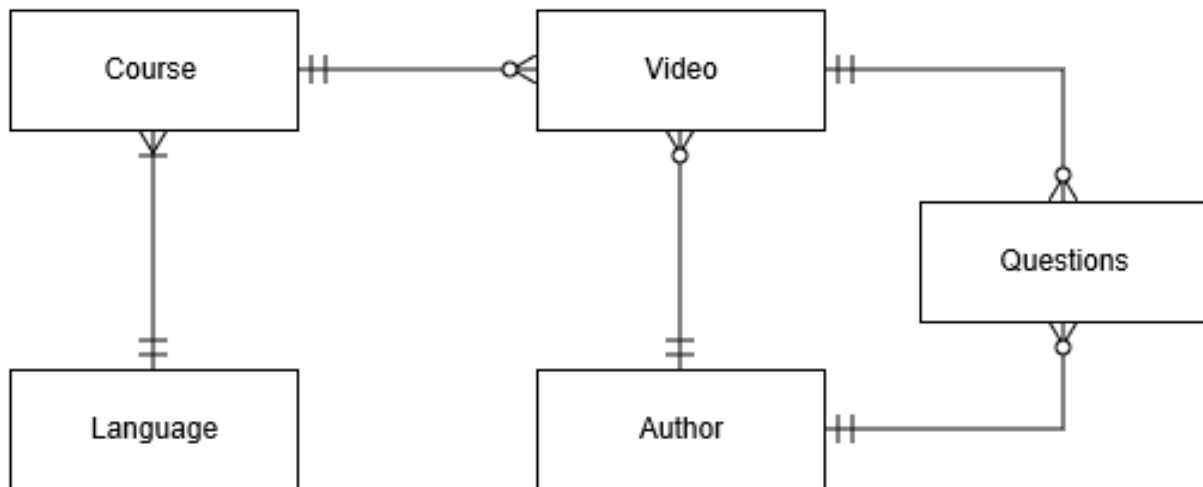
Graphic Design

Although not shown on the designs, the site will use a liquid layout which once the width has reached a certain value, the switch between desktop and mobile layout will take place. By doing this, there is no need for horizontal scrolling as the elements move fluidly with the screen width.

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Task 3: Database Design

Part A: Entity Relationship Diagram (ERD)



Part B: Relational Database Schema

Course (Course_ID, Course_Name, Lang_ID*)

Language (Lang_ID, Lang_Name)

Video (Vid_ID, Vid_Name, Rating, Course_ID*, Auth_ID*)

Question (Ques_ID, Question, Vid_ID*)

Author (Auth_ID, Forename, Surname, DOB, Profession, Institution, Description)

Key:
Entity (Bold)
<u>Primary Key</u> (Underline)
Foreign Key* (Asterisk)

