

INFO2222 Week 10 Tutorial

Structure of W10 Lab

1. Work on usability project

- A quick session of card sorting if you haven't completed at least 2 in last week's lab to decide on your website's information architecture.
- Based on the result of your user investigation - card sorting, create a sitemap to have a clear visualization of your website's information architecture
- Based on sitemap, create wireframes and wireflow i.e. prototype so that you can test the usability of your design e.g. how effective is your button placement and so on.
- Carrying out usability testing on your low fidelity prototype (or high fidelity if you can create one quick enough)

2. Go through technical skills to be more familiar with the tools you will be using.

1 Usability Project

You will be expected to demonstrate your website usability in week 12-13 lab.

- Next week we will be doing usability testing on your high fidelity prototype (prototype should be closer to final product)
- If you ran out of time to finish your usability testing on low fidelity prototype in this lab time. Feel free to complete user investigation outside lab time if you can find a relevant target audience as your participant.

2 Card sorting

If you haven't done card sorting in the previous lab, this is the last lab you can do card sorting and your tutor will run a quick card sorting session. You are expected to have iterated at least twice of the activity dot points below by the end of this session.

Useful cardsorting tool <https://www.optimalworkshop.com>

Come up with a list of frequently asked questions about your website (feel free to use points that were relevant from the previous lab sheet). Like what we did in the previous lab then **iterate through the points below at least twice**.

1. How would your group organize the information on a single web page? Take a photo of your results and scramble the cards. (Open Card Sorting)
2. Exchange your group's labels (only labels and not the cards) with another group. Do not ask the original group what the label means if you do not understand it. Sort the cards and try to match the cards with the labels. Take a photo of your results. (Closed Card Sorting) - at least 2 groups
3. Compare the photos for Question 1 and Question 2. Are they the same?
4. Return to the group who created your labels and compare your findings. Consider relabelling or rewording your questions.
5. Go back to 1

Additional Resources: Card sorting

1) Process of doing card sorting:

<https://blog.prototypr.io/card-sort-in-5-simple-steps-6312f1705f68>

2) This link has a nice case study at the end:

<https://www.smashingmagazine.com/2014/10/improving-information-architecture-card-sorting-beginners-g>

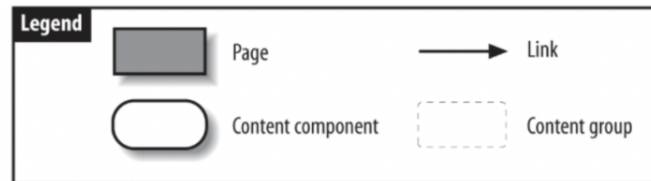
3) How many participants should I test on?

<https://www.nngroup.com/articles/card-sorting-how-many-users-to-test/>

3 Sitemap

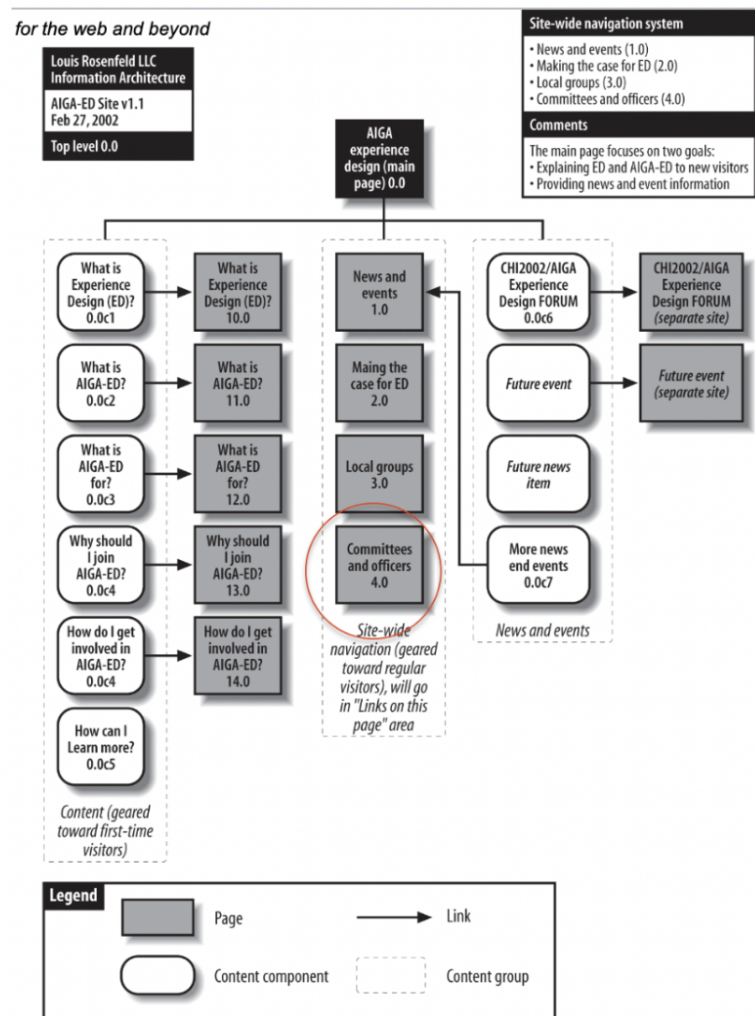
Creating Sitemaps

- Develop a simple condensed vocabulary of objects to help team member understand the architecture
- By retaining a limited vocabulary helps avoid overloading the diagram



Example of Detailed Sitemap

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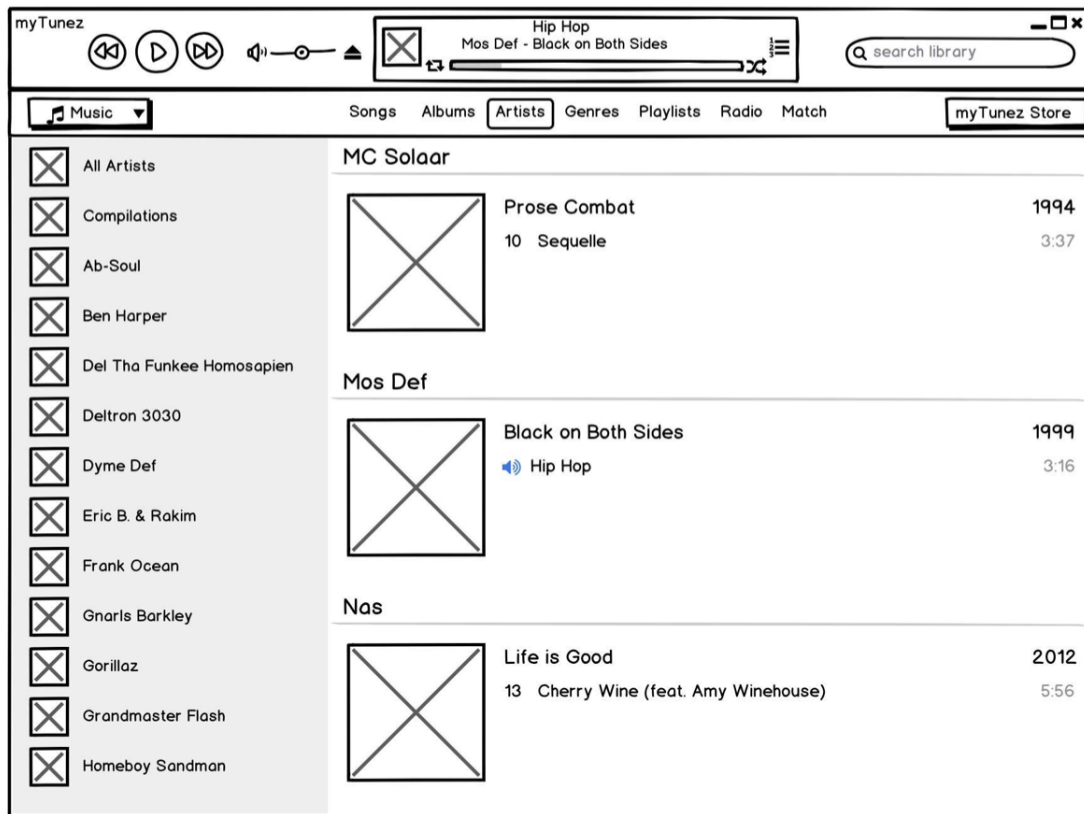


Task:

- Using the result from your card sorting session, create a sitemap i.e. navigation map for your website.

4 Wireframe

- Depict how an individual page or template should look
- Describe the content and information architecture to be included on the relatively confined two-dimensional spaces.
- Balsamiq wireframes: <https://balsamiq.com/learn/articles/wireflows/>



There are different levels of details:

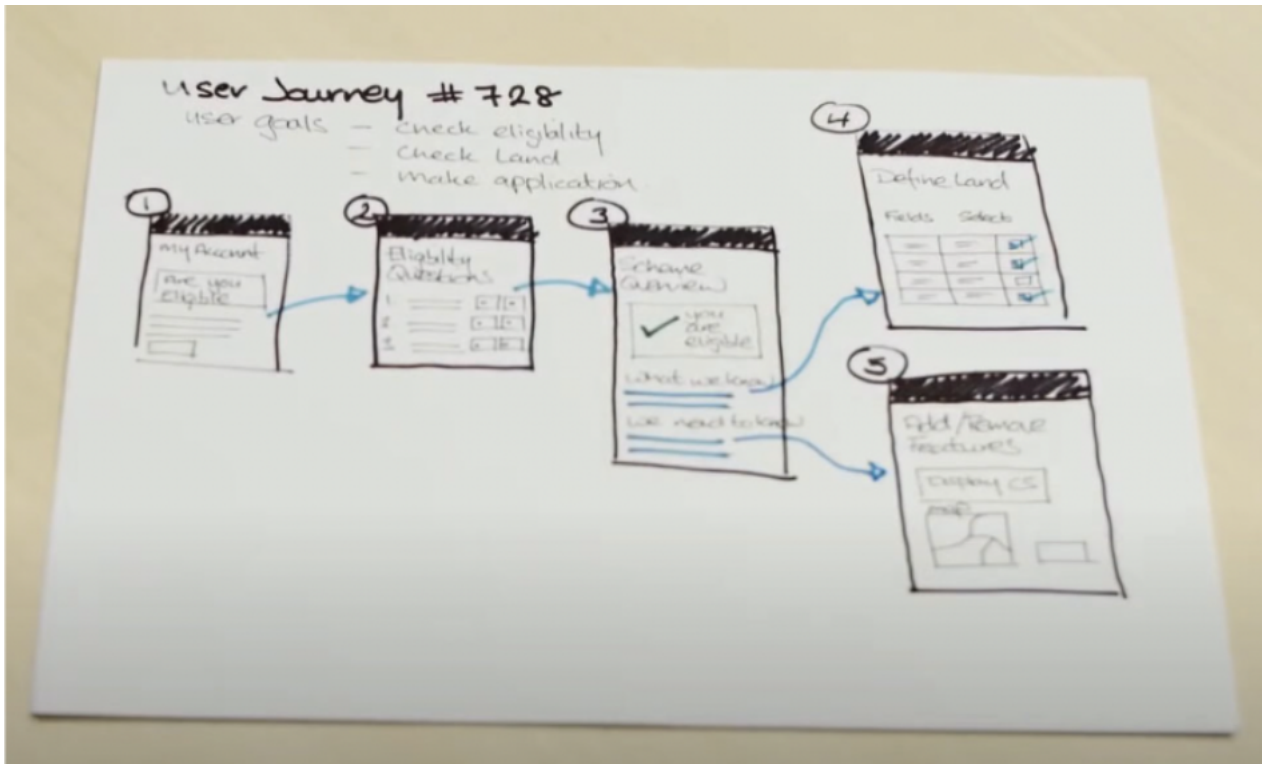
- Low Fidelity - Usually sketch on paper
- High Fidelity - Similar to the final product. Consider <http://figma.com>. Please use your uni email to sign up on figma. (Figma will expire in 2 weeks if you use external email). suggestion: Save deliverable as pdf

Wireframe Tips

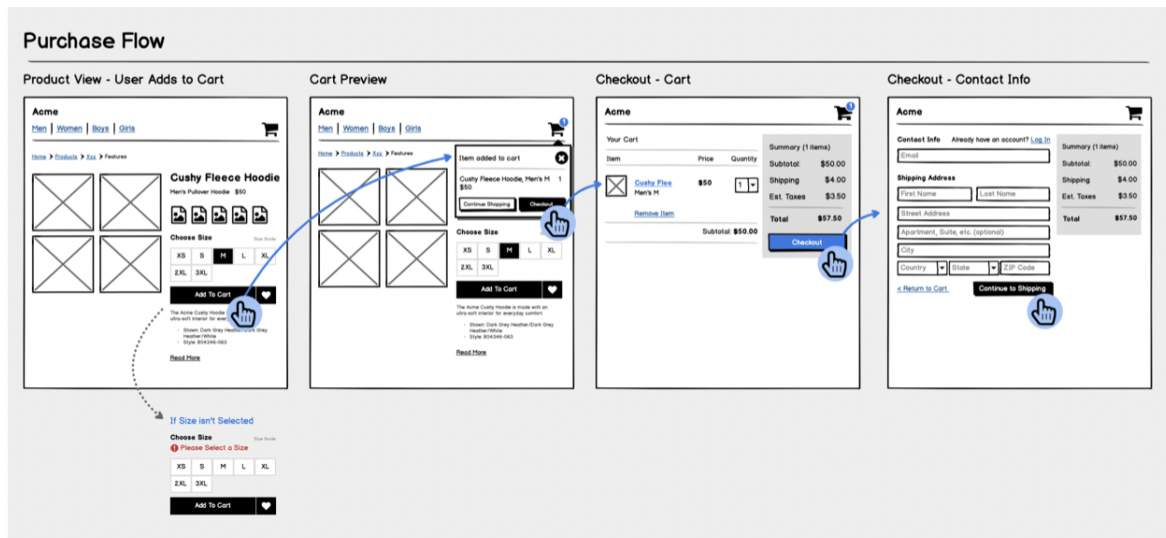
- Add Callouts/Annotations where necessary. They are an effective way to provide details about the functionality of page elements.
- Tie your collection of wireframes together with page numbers, page titles, project titles, and last revision dates
- Consistency is key, especially when presenting multiple wireframes
- Establish procedures for developing, sharing, and maintaining common templates and stencils to ensure consistent appearance, and for confirming that these discrete documents do indeed fit together functionally when working in teams.

You can then use wireframes to make wireflow. Balsamiq wireflows: <https://balsamiq.com/learn/articles/wireflows/>

Below are examples:



Source: <https://youtu.be/LskLyDOSfAc>



Source: <https://balsamiq.com/learn/articles/wireflows/>

To help you take into account accessibility of your design, read <https://www.w3.org/WAI/test-evaluate/preliminary/>

Task:

- Build a wireframe prototype for your website. Sketch your idea of how the web page will look like individually then compare and discuss with your group partner to create a sketch design that you both agree on for your assignment project.
- According to your sitemap create a wireflow using the wireframes you have created.

5 Usability Testing

You are going to conduct a usability test to identify if users have difficulty using your prototype. There are two roles, facilitator and participant. The facilitator should encourage the participant to think aloud as the participant performs the task.

1. Prepare a list of tasks that showcases the core feature of your system
2. Present your list of tasks and prototype to another person outside your group. This person will have to use the prototype to complete the tasks you have listed, make sure they think aloud as they go through tasks. Try not to help them too quickly, some users take some time to figure things out.
3. Think aloud is when they say out loud what goes on in their mind as they attempt to complete tasks during usability testing, it can be non-intuitive at first and please remind the participant as they go through tasks.
 - Example for login task: I see this page, I think this is the home page, I see the tabs at the top so I will click login tab. . .
 - Example for adding friend: I want to add friends, there is this input bar so I assume I will have to type their username or name in it, then I press enter, oh? It doesn't seem to work. . . . I am not sure what is happening, is there some other way I am meant to submit this? jafter seeing the participant struggle and not figuring it out for 3 minutes, facilitator helps out, "oh yes its blank because there is no user with that username, we will add a clarifying text later"¿ understood I might have typed the username wrong.
4. Record the time taken to complete the task and difficulties faced by this person. Share your observation with your participant and ask if your observation is accurate.
5. Reflect on the outcome
 - consider modifying your design if necessary
 - Consider how you might be able to improve on how you facilitate usability testing
 - How to better observe
 - How can you word tasks better
 - And so on
 - go back to 1 if you wish to do usability testing again.

6 Technical Skills

Accessibility

Link to WCAG <https://www.w3.org/WAI/test-evaluate/preliminary/>

Useful tool to check the accessibility of your website:

<https://developers.google.com/web/tools/lighthouse>

How to make the input field required in HTML form

Here is an example of how to make an input field required in a HTML form.

```
<label for="username">Username:</label>
<input type="text" id="username" name="username" required>
<input type="submit">
</form>
```

Technical skills material taken from W3schools.

Task:

- Carefully consider which input fields in your project you will have to set as required and modify your project as necessary.
- Make sure the instruction you wish to give users can be perceived visually and verbally. Consider the example below.

First Name *

X This field is required

How to set tab index

You would use the tabindex attribute to set the order of which element will be accessed next when you press tab on a web page. This is particularly helpful for those who rely on keyboards to navigate through websites.

https://developer.mozilla.org/en-US/docs/Web/HTML/Global_attributes/tabindex

How to label or set alternative text for HTML objects

If you haven't watched it, watch this video of how a blind person uses a computer to have a better idea of why labels or alternative texts can be helpful when accounting for accessibility <https://www.youtube.com/watch?v=UzffnbBex6c>

There are cases when alt texts are helpful but there are also cases when alt texts end up making the website more non-accessibility friendly e.g. when we put alt texts for objects the user doesn't really need to pay particular attention to.

This article is helpful in helping you figure out what you should consider when specifying html objects' alt attribute:

<https://bighack.org/how-to-write-better-alt-text-descriptions-for-accessibility/>