UX-design and graphic image editing

Chapter 3

20 University points

Registration!

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Overview

1) Introduction and the foundation of UX design
2) Design Research
3) **Information architecture to build a digital product - Lab**
4) Wireframing
5) User testing and pixel perfect design
6) Photoshop and sketch - Lab
7) Image editing for the web
8) Accessibility
9) Graphic resources for web applications
10) Repetition
11) Test

The previous chapter covered how to put together the design research of a UX design project. This chapter looks at the next stage; building something from that research. In the world of UX design, the goal of that is usually a full set of user interfaces which are then developable to become a functioning service.

This chapter focusses on what I see as the natural next step from design research; designing the information architecture of the project which leads to the building of wireframes and eventually the complete set of interfaces.

Today is going to include LAB exercises which you are going to be graded on. The work you do during these LAB exercises must be included in the final examination task, so document the results!

Chapter 3

Information architecture to build a digital product

In chapter three, we are going to be using a slightly different format from the first two chapters, as today we will be having a Lab. In this lab we will spend time in creating an IA for the chosen website that you will work on as your final task. As I explain the stages of making information architecture, you can start to think about your chosen website which you started researching in the previous chapter. This is because it is much easier to learn when it is applied to an example. If we focus therefore this chapter and lab session on building an information architecture or 'IA' for short.

First of all we will look at the theories of how to get to a complete Information Architecture, then we will try to apply your project to these theories during the Lab which you can complete as part of your examination task.

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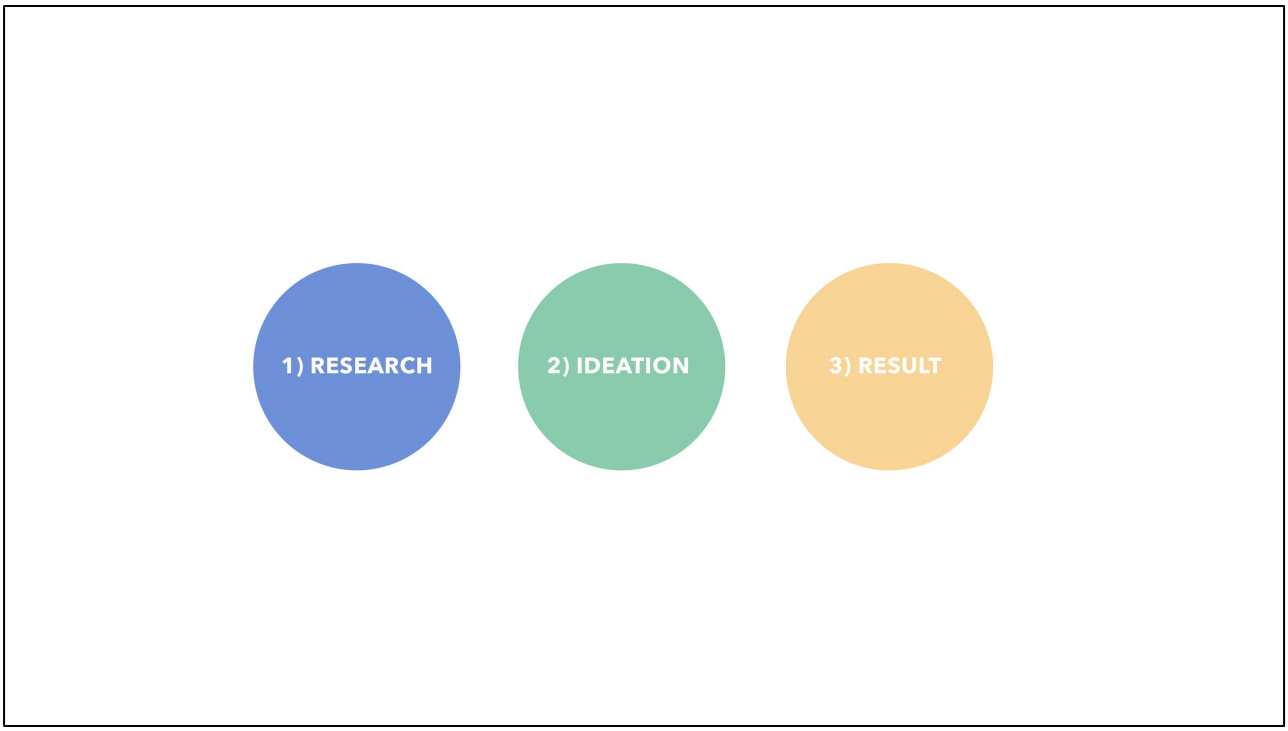
Building a digital product

3.1 The process
3.2 Creativity
3.3 Mass idea generation
3.4 Grouping and prioritising
3.5 Functions
3.6 Information architecture

3.7 Exercises

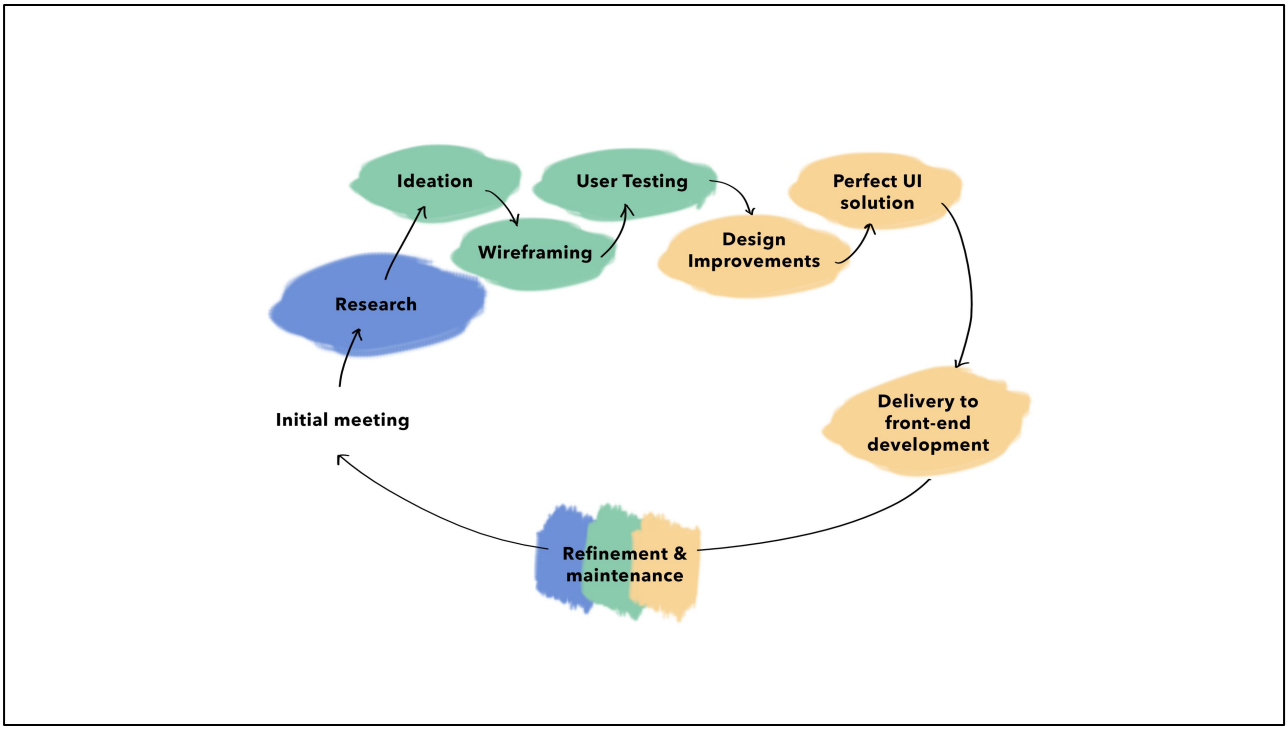


Where are we in the UX design process?

So far, we have been compiling research in order to build a digital product. As you can see, we have completed the steps in stage 1, the research stage of the process. This means that we have a wide range of information from factual research to human research. The foundation that the research has built is perfect for the next step of ideation. It acts as roots to keep ideas grounded as well as feed them inspiration to expand further than they would if they were based on nothing. In this sense stage 1 has been all about drawing IN insights, information and studies. The next step is that of sending OUT ideas, thoughts and energy as part of coming to a solution.

In moving on to stage 2, we come into a phase of production, where we start to transform and apply the information. It may not be production of ‘pretty’ ideas at this stage, in fact it shouldn’t be. A User Experience designer should try to be without prestige at this point, and not value any ideas over the other. See the decision process as part of the end of stage 2, crossing on into stage 3 and should even be chosen by users rather than yourself (in an optimal world).

Stage 2 is that of ‘getting your hands dirty’, creating lots of rough embryo ideas, and giving them time to grow and expand. This also means nurturing many ideas at once, so as to being open to different solutions before deciding on one. Try to bare this in mind whilst coming up with ideas for your website.

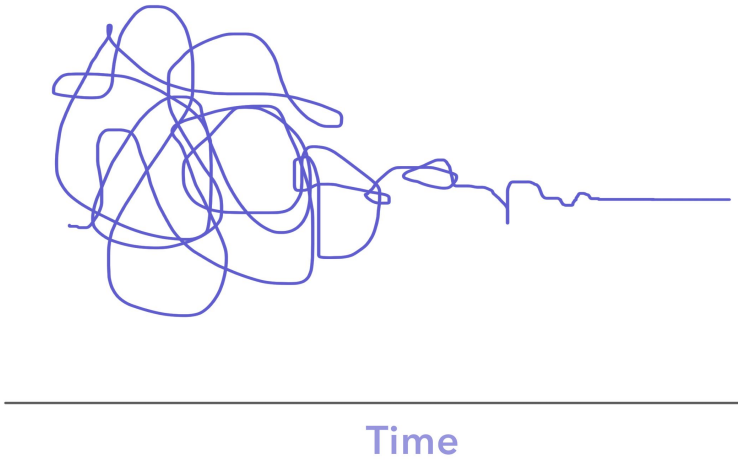


In terms of the larger UX design process. We are in the beginning of the ideation stage.

There is really no ‘right way’ to create, in fact the best way is the one which works for you personally.

However the general process to think about, is that from the research stage, comes ideation. This ideation is wide and messy, and then slimmed down through refinement to then produce an information architecture and wireframes (rough models). The next step is testing these ideas on users, and evaluating the findings and applying this to changes whilst the format is still rough. Then we move into the result stage where we add art direction and detailed pixel perfect design to create the finished user interfaces (whilst again testing usability of the final solutions in order to refine). This is where we think again about usability, testing the cognitive adaptedness of the solution with human behaviour.

3.2 Creativity



Here is a simple visualisation of this phenomenon, the UX design process. Or, the creative process which can be applied to many things.

It shows the way the mind is trying to make a solution to a problem. Starting with a mass of ideas that are quite abstract, you look outward as your mind tries to expand its view of a problem. As you project outward the mind hits a wall, a block, and turns back on itself in another direction looking for solutions in a completely new area. With every wall you hit, you move along the timeline and become more and more clear of your solution through deduction. The solution moves from an abstract feeling to that of a solid, visual solution, rough at first in the forms of wireframes, eventually reaching a highly developed solution in the form of user interfaces.

During the research phase you may have had some ideas coming up, now is when you should start letting those ideas manifest. This can be in whatever way you feel comfortable.

It could be drawing ideas onto printed out screen diagrams as ideas of interface designs.
Or you may feel more comfortable writing out your ideas.
You may want to start looking at existing designs which spark visual inspiration and gather these images.
You may need music to get your mind onto a creative level.

This is an extremely personal choice and process, so do whatever you need to feel

inspired.

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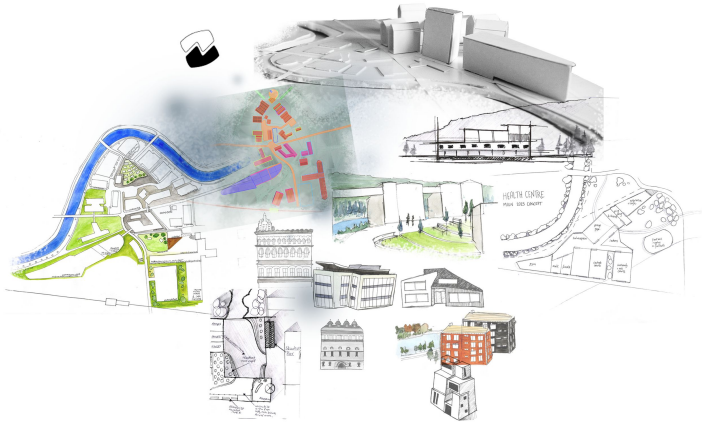
3.2 Documenting creativity



Just like the research phase, it is important to document your creativity.

On the screen now is an old part of a concept project for a university campus, it may not make much sense! But it includes sketches, computer renderings, floor plans and pictures of a physical model. It shows the work that has gone into the creative process. Mine may look entirely different to yours, there is no correct way it should look, just like no two brains are exactly the same.

So when you realise that you've produced something through your creativity, be sure to document it. Anything that helps show your process to others, explaining how you got to the end result.

- This may be taking pictures of the mass of post it notes before you take them down, and ensuring you can READ the text.
- Or it might be sketches that you have scanned in and attached to the project report, to show the range of possible solutions to each interface.
- It may be a written document, describing ideas with words
- It may be rough digital solutions where you have played with forms, colour and compositions.

Remember that it doesn't have to be particularly pretty at this point, it should represent your process. These visualisations are there to show the crucial thought BEHIND it. Not so much the visual result.

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3.3 Idea generation

The funny thing with ideas is that, they aren't all good or all bad. No one is better or worse of coming up with ideas because everyone will get some great ideas AS WELL AS bad ones! Therefore there is only one way to approach idea generation that is certain to generate good ideas. That approach is volume! If you come up with a mass of ideas, there will surely be some extremely good ones mixed in with some not so great ones. It is usual that the first ideas you have maybe are the rubbish ones, and the more ingenious one comes later on, it’s like sifting through all the different thoughts in your mind connected to a problem to strike gold, but it takes patience and time. Do not worry if you never have a ‘eureka’ moment whilst generating ideas. This can happen sometimes of course, but it isn’t so common, it is actually often ideas which seem less impressive that are the ones with real potential to grow and when combined with others, make an innovative and impressive solution. OR you could be struck down by an idea in the middle of night, in which case write it down!

However here, we are going to practice how to do mass idea generation in short bursts. The easiest way to do this is to divide and therefore conquer!

This is done by focussing on a limited part of the UX project and then generating as many ideas surrounding that section. To repeat; no idea is a bad idea at this stage! Your mind will begin with some bad ideas, write them down, get them out and make space for the next one!

3.3 Mass Idea Generation

1) Divide into questions
2) Focus completely on one question for 15 minutes
3) Only do this for a limited time! Write one idea at a time.
4) Take a break
5) Come back and start grouping your ideas.

So let us look at a process where you do mass idea generation in short bursts. This something which UX designers use whilst working, in order to get lots of ideas quickly rather than wait around for them to appear (which you rarely have time for with clients).

1) Define a question that you want many ideas for.
2) Focus completely on this question for 15 minutes where all you focus on is writing down your answers to the question one after another. (have no filter for your answers, try to shut off the voice that wants to evaluate the answers and move on to the next idea).
3) Only do this for a limited time as your brain has limits!
4) Take a break
5) Repeat

The result of this should be a pile of ideas, a messy heap. This process should be repeated a few times, until you feel like there are no ideas left (today!). Then you continue on to evaluating and organising the ideas.

Values

Lab exercise 1: Post it notes!

It is much easier to learn by doing! Therefore we are going to do two rounds of mass idea generation. We are going to get idea generating for your chosen website, which you can use as a crucial step in your examination task. Lets generate ideas on what VALUES the website will give to the user.

We are going to spend 15 minutes doing ideation on what these values could be.
Write one value per post-it so that we can evaluate and reorder them later.
Try to write the value down in clear, generic and simple terms. Don't try to be too specific at this point.

Some examples include:

- Gives peace of mind through logging your journey and keeps you updated
- Makes it easier for people to connect and talk

The result of this will be plenty of ideas surrounding the values that your website offers.

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Paus! Next: Idea generation

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Problems

Lab exercise 2: Post it notes!

The second exercise is for problems that your website is trying to solve.

We are going to spend 15 minutes doing ideation on what these problems could be.
Write one problem per post-it so that we can evaluate and reorder them later.
Try to write the problem down in clear, generic and simple terms. Don't try to be too specific at this point.

Some examples could be:

- The user can't find a route to run on
- It is boring to buy clothes in shops

The result of this will be plenty of ideas surrounding the problems that your website could solve.

Discuss in groups:

Discuss the following questions in groups for 20 minutes.

- Did you find it easy or hard to produce mass ideas, why?
- What would HELP you create ideas more easily?
- Do you think you were able to be open minded about your own ideas, or did you judge them?

Take it in turns to show others in your group the ideas you have produced, running through these ideas. Feel free to ADD ideas to your list if you get inspired by someone else's ideas or come up with some new idea. Quietly add it to your list if someone is presenting theirs.

3.4 Grouping ideas

If we look at the previous lab work we did, we now have a mass of ideas surrounding the VALUES and the FUNCTIONS of the website you are designing.

We need to start making sense of this mass of disorganised potential!

Therefore, when you find yourself with a pile of ideas, start organising them by dividing them up into common themes. As you go through the ideas with new eyes after a break, place them into groups of common themes. Maybe you have some ideas surrounding the functions of your website that focus on improving health for example, or ideas in the genre of socialising or that of shopping etc. Start piling up your ideas into their groups.

Once you have done this, lay the ideas out somewhere where you can see them all in their entirety. You will see straight away the most common theme that has arisen from your creativity. Are these the areas that you expected?

For the first time you can see the wide scope of the future product that is emerging. It may be exactly the way that you had imagined, or it could be totally different, neither is correct, this is your brain's way of producing truly inspired ideas; open to no judgement.

Lab exercise 3: Grouping

Seeing as we have our ideas for the website we are developing in front of us. We are going to spend 30 minutes grouping your ideas. To reiterate this will be a crucial step in the development of your website that is part of the examination task.

As explained in the previous slide, as you go through your written ideas and start organising them into common themes. At this point keep the values separate from the problems.

The result should be two sets of ideas (one for values and one for problems) that are divided up into themes.

Take pictures of these results as you will want to keep note of the themes that have arisen as well as the ideas that fall into each theme. Include these pictures in your design report.

Volunteer?

Is there someone / some people who would like to show their ideas and groups to the rest of the class?

- Is there any idea which someone really liked, why?
- Does anyone have any new ideas to add to the existing ones?

Questions:

Have the themes overlapped between values and problems?

Do you see any overlap between the values and themes? Can you start to imagine how they would answer one another?

Paus! Next: Selecting ideas

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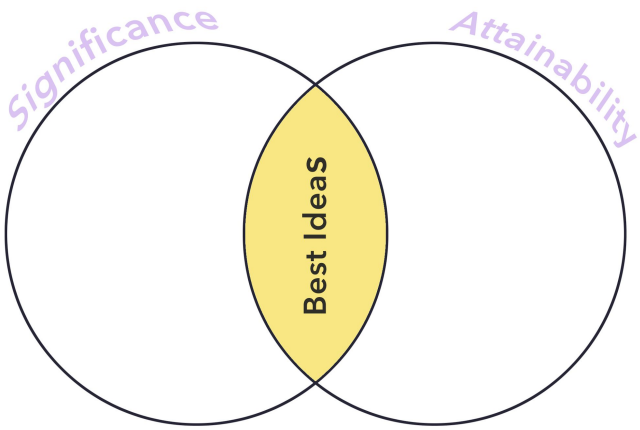
3.4 Selecting the right ideas



The next stage of turning ideas into a product is that of prioritising the ideas which will then decide what our product will do.

On the diagram you can see the sweet spot of ideas are those that are highest in significance and attainability. What does this mean?

This decision depends on two factors:

1) Which are the most significant ideas from the user's perspective
2) Measured against the most attainable ideas, in terms of technological restraints, financial and time budgets among other things.

There is always a limit to the amount of ideas that can be developed. There is always a limit to resources, whether that be time or money or your creative energy. A UX project cannot be unlimited in size and scope. If it is, it means that it isn't being strategically planned. When you find yourselves with these wide set of ideas, it is important to slim them down into a specific chosen direction. If a scope is wide, your mind can shut off from having TOO much to think about and consider. Therefore it is strategically best to choose the ideas which bring about MOST SIGNIFICANT effect first. This means that even within the smallest projects, the UX team can make the most impressive and significant results and change, both for the user as well as the business it represents.

It is at this point in the UX process, when you prioritise which ideas will be taken forward and further developed. These decisions can be updated to the project's

design brief or translated to the client, to keep them updated on the direction change of the project.

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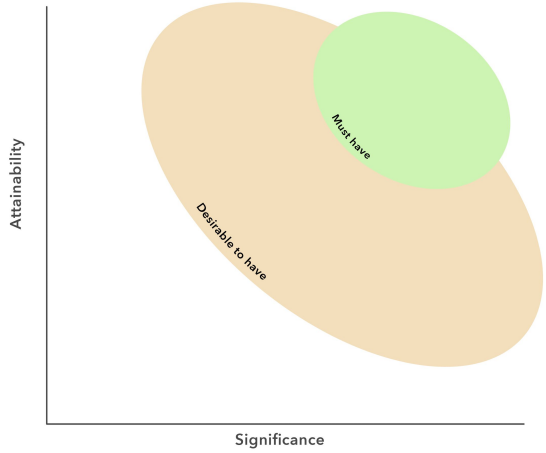
Lab exercise 4: Prioritising



Now we are going to do the fourth lab exercise for today which will take 30 minutes.

This will be a huge step in designing your website and decide the future direction of its development. It is the natural progression from the previous three labs and organises those ideas into an actionable plan.

Choose either the values or the problems list to begin with and do the following exercise:

- Draw on some A3 paper the two axes with the title of attainability and significance. (or on a whiteboard).
- Take one of your list of ideas (which has now been documented in its list of themes) and place them on the graph, according to their attainability and their significance.
- As you add more to the chart, feel free to adjust the ones that look wrong, it is helpful to compare them to each other to know where they should be placed.
- When all of your ideas are added, take a picture!
- Then draw the two rings that are up on the board now; that of the ‘must have’ ring and the ‘desirable to have’ ring.
- You will see from these rings which problems or values should be included in your website.

Repeat the process again for the other ideas you have (for value or problems)

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Volunteer to share:

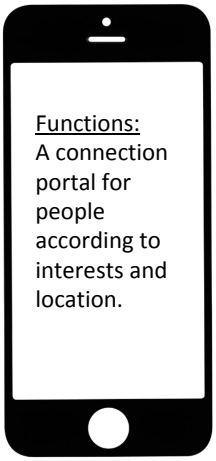
It is so useful to be able to share our ideas. It means that you are professional, and able to not take things personally as well as grow from feedback.

Is there someone / some people who can share with us which ideas came out on top? Therefore the VALUES their website will offer and the PROBLEMS their website will solve?

3.5 Problem solved + value to user = website's FUNCTION

Problem:
Users doesn't know anyone to go and watch anime movies with.

Value: (potentially matching)
People FEEL CONNECTED over their love of specialist interest things.



Problem solved + value to user = website's FUNCTION

Now we need to turn these values and problems into FUNCTIONS. These will be translated into your information architecture. It is the last step before you can begin creating the information architecture. It is a simple stage of basically repackaging your values and problems into specific functions.

The example on the board now is such an example. The functions will come from only the MUST have points of your values and problems.

A function may come from a problem or a value or both!

3.5 Problem solved + value to user = website's FUNCTION

Problem solved + value to user = website's FUNCTION

Out of the CHOSEN values and problems from the previous exercises, we want to make a list of FUNCTIONS that your website will do. You should aim at three or four functions at this stage.

Spend 15 minutes doing this individually.

Paus! Next: Info Architecture

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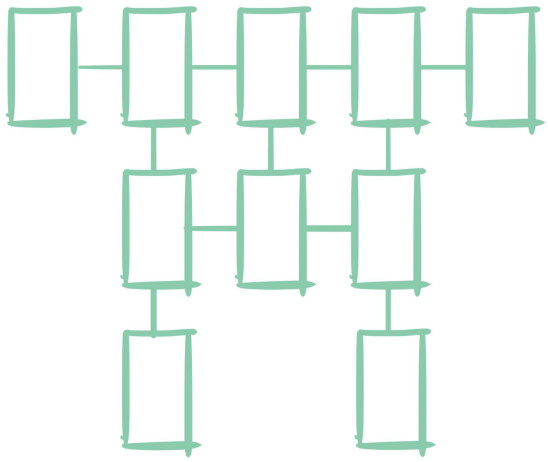
3.6 Information Architecture



So how do these functions translate into a website, and more specifically an information architecture?

Firstly; what is an information architecture?

It is the FLOW of the journey a user takes through a website or app. It determines how information across a website of application are displayed and how functions are accessed.

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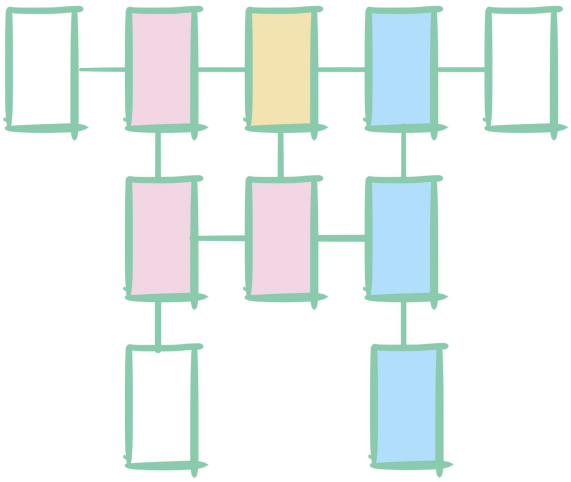
3.6 Information Architecture



This is the principle that build up an information architecture:

Function one is that of the pink

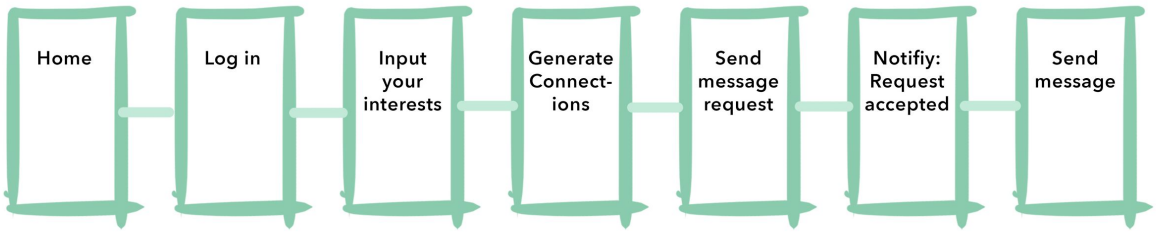
Function two is that of the yellow

Function one is that of the blue

The rest of the pages are that of supportive functions and information.

The IA is the process of mapping out how the functions of an application or website connect with each other. It also breaks down where each stage of a function ‘lives’. You can see that three or four functions fills out a set of interfaces quite quickly. Therefore the fact that have chosen the very BEST functions for our websites, we have the ability to make a powerful product without getting too large.

3.6 Information Architecture: Example



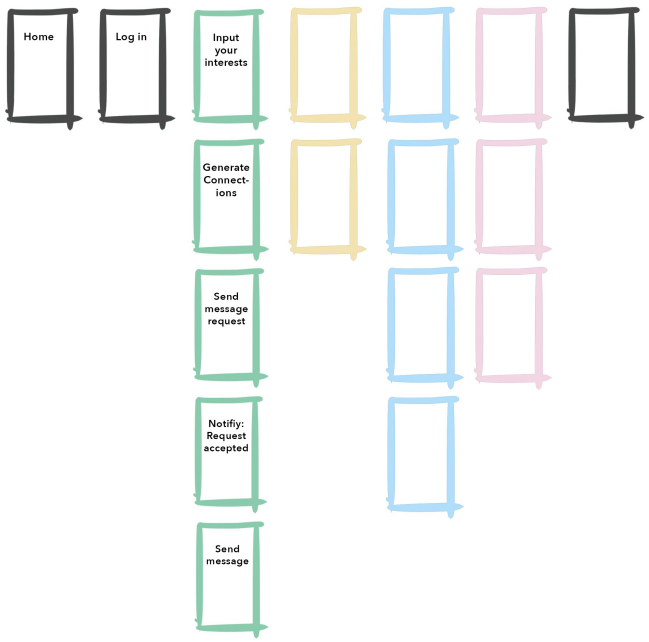
Let's run through how we take out FUNCTIONS and turn them into an IA.

I have defined a simple function here of 'connects people through their common interests'. This is a very wide function, for simplicity's sake, so do not be afraid if your journey is longer than mine.

From the USER'S PERSPECTIVE, the steps of using this application look like this:

1) The landing page, where the websites logo and news is shown.
2) The user LOGS IN to be able to use the website
3) The user CHOSES their interests out of a list
4) This generates PEOPLE to connect with
5) The user than picks one of them and SENDS a message request
6) User is NOTIFIED of being accepted
7) User WRITES and SENDS a message

3.6 Information Architecture: Example



If we take this simple example, it can then be added to the wider picture of the website's information architecture.

Each colour shows a different function which has its subsequent sub stages or user interfaces.

There could therefore be a menu page to connect all the top pages, as well as many more connections linking the interfaces towards the lower levels.

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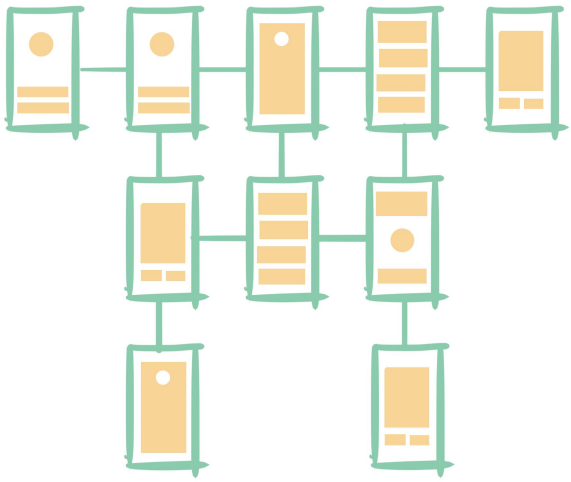
3.6 Information Architecture: to Wireframes



This basic method is how we develop wireframes and fully developed User Interfaces.

From the functions on each page, you are able to break down which BUTTONS need to be added, which CONTENT is needed, which INFORMATION is needed on each view. We will work with this in order to make wireframes in chapter 4.

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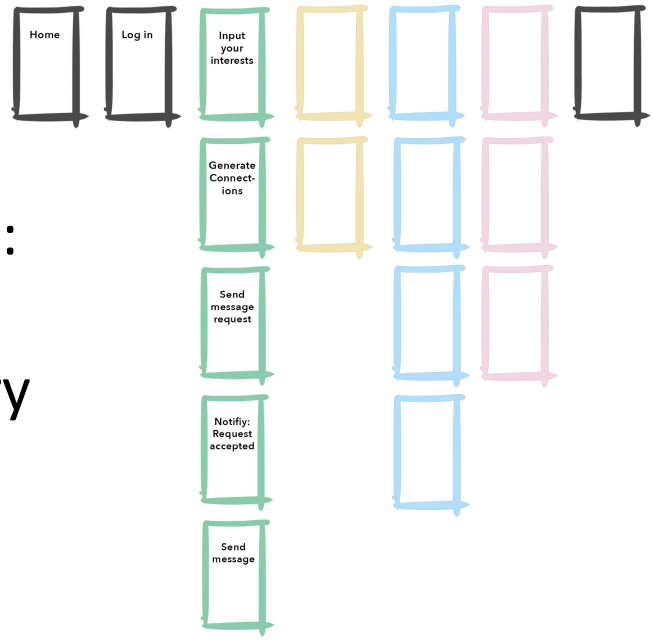
Chapter 3: Final Laboratory



Final Lab:

The functions that you have chosen can be translated into your website's information architecture.

Now you are going to draw up how these functions come together in an information architecture.

The top line of views should be the start of each function, going downward as the function is operated.
Remember to add in the general pages such as logging in, the home page, menus etc.
If there are any overlaps between functions, you can draw in a line between them.

This should take about two hours but can be finished at home, use trial and error, it won't be correct the first try. It is a like a puzzle that needs to be experimented upon. It will help you a lot if you have your information architecture ready by the next chapter, so that you can follow the next steps of the process. The information architecture is to be shown as part of your final examination task.

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