# UX-design and graphic image editing Chapter 4

20 University points

Registration!

#### Overview

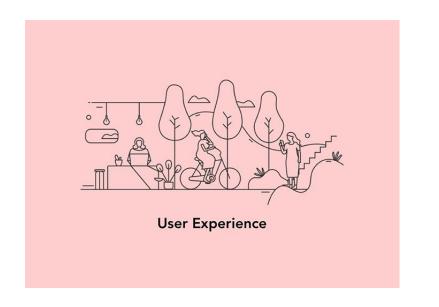
- 1) Introduction and the foundation of UX design
- 2) Design Research
- 3) Information architecture to build a digital product Lab
- 4) Wireframing
- 5) User testing and pixel perfect design
- 6) Photoshop and sketch Lab
- 7) Image editing for the web
- 8) Accessibility
- 9) Graphic resources for web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

Thankyou so much for showing me your information architectures last week. I was incredibly impressed with your maps, and the high level of designing with the user in mind that I think other UX designers would be extremely impressed by.

We have out information architectures now with larger functions connecting the views together. This acts as a map of the larger idea of a website and should be included in your design report.

The next chapter is developing this map into specific views as wireframes. This chapter also looks at CHOOSING which views need to be designed fully to best show the website's wider functionality. Then we look at how to take these functions and translate them into interface elements.

## The course update



- Read through examination task

# Chapter 4 Wireframing

In chapter four, we look at the next stage of designing a digital service; which is wireframing.

What is wireframing?

A visual guide for user interfaces of a digital product, focussing on what the website DOES rather than how it will look like. This is then translated into a visual solution. The guide can be of varying levels of complexity and quality. Wireframes are used in the stage of the UX design process when ideas need to go from that of abstract ideas to visual design solutions. Wireframes are a great way to experiment, in that they can be produced quickly, thrown away if wrong and drawn quickly again. It is commonplace to do initial wireframes on pen and paper or on a whiteboard, to encourage the designer to draw loosely with a lot of creativity.

They show the page layout for each view needed (whether that be a complete IA or a smaller user journey like you will be creating). Wireframes show the content of each page, including elements and navigational systems and how these come together to form a complete page and it's contents.

The wireframe should LACK stylistic design detail, such as typography, colours and graphics, because it is unnecessary at this stage to include such details. By keeping the wireframe stage simple, your brain can focus on the best solution of components working together, rather than be distracted by visual details.

#### Wireframing

4.1 What is wireframing4.2 Actions4.3 Elements of website interfaces

4.4 Architecture to wireframing4.5 Wireframing4.6 Exercises

4.1 Technology: what do we mean by prototype?



As we are discussing wireframes, it is interesting and useful to understand what these are going to develop into. There are different types of prototypes.

- 1) A developed prototype is something which is built with coding. This usually is to illustrate if something is buildable and then usable from a technical perspective. This kind of prototype is rough in terms of design, but strong in functionality and technical potential. A UI can be added on top of this coding, it is usually started by developers and complemented with design.
- 2) A rapid prototype (which is the kind of prototype that is your examination task). This is mostly done by UX designers and uses no code whatsoever. It is a visually designed prototype with a SELECT user journey. The journey shown in this kind of prototype has a lesser amount of views but with high detail on those views which best showcase the service's functioning potential. This will be the goal of the examination task, to focus on a specific user journey of your own website and illustrate those with a rapid prototype. Rather than draw up all the user interfaces in pixel perfect detail and clicking through those views (which takes A LOT of time). A purposefully chosen journey through a service is chosen, and the views needed to show that journey are developed to pixel perfect UIs.
- 3) Fully designed user interface. The fully designed user interface of a website or app, is the last stage of designing in the UX process (other than refinement and management). This normally comes AFTER the above two types of

prototypes. A full set of user interfaces isn't really a prototype but is a finished product which is delivered to the developers to code, which can take a few hours and often requires management. From the designs, developers can measure the placements of components, extract specific elements and put them into the coded version, in other words follow pixel for pixel the user interface design.

### 4.1 Wireframes: Low fidelity



High fidelity and low fidelity, what does this mean?

Depending on what clarity a UX designer has of the specific content of a website, this will determine the level of detail that will be possible on the wireframes. If you do not know all the content, you still need to make progress with the design and so, low fidelity wireframes create a way to visualise this. They are made up of shapes to represent pictures, text, buttons and elements used in an interface design. It is a bit like seeing a blurry version of a future end design.

From information architecture, you can decipher which elements are to be included on each view and how these different flows will link together. You have seen the service from a larger perspective and can now start breaking down that larger service into specific elements on each page.

These types of wireframes are extremely useful to help the UX team itself visualise a digital service as well as others within the team (such as business partners who know little about UX design or developing). These wireframes are a lot more easily understood than complicated spreadsheets or word lists of pages.

As you start to draw out wireframes, think in terms of key elements, so a certain rectangle shape in a specific tone of grey represents a button which looks the same on all views etc.

Pic sources:

 $\underline{https://hashnode.com/post/do-you-even-user-interface-design-cislonroh0cemgb53jkx50x80}$ 

#### 4.1 Wireframes: High fidelity



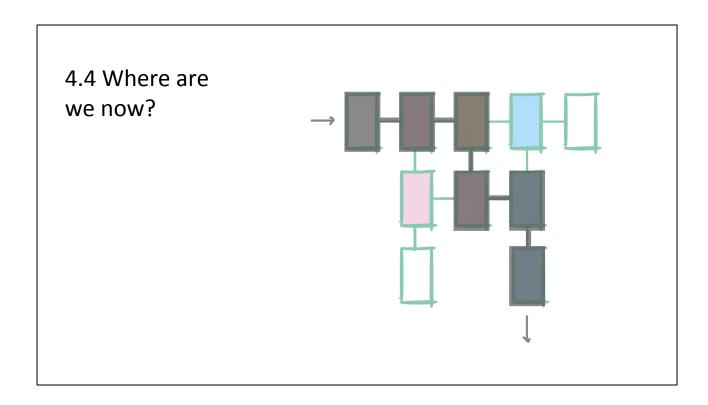
As you can imagine from the name, high fidelity wireframing is similar to that of low fidelity, but on a more detailed level. This may have started out with shapes as content holders, but now there is text, images and actual content (restricted to no colour however).

Just the same with the previous wireframe however, there is still no added design detail. Such as typography, colours and graphics, so that the designer can think in terms of functionality separate to visual design questions which come at a stage of pixel perfect user interface design. There may be more of sense of the complete look at this point however, such as foreground a background as well as how components move on top of one another (like pop ups among other things).

The different with high fidelity to low fidelity wireframing is that they often are used to edit directly to become the final UI design. You may copy a HF wireframe and then edit the elements directly to start building up the finished UI design.

When working with wireframes at different levels of completion, I often copy the same views and paste, then work on those views underneath the previous set of views, so that you can always refer back to your original thought. It is a fun way to see progression of your UI design.

Pic source: <a href="https://steadfastcreative.com/low-fidelity-vs-high-fidelity-wireframes/">https://steadfastcreative.com/low-fidelity-vs-high-fidelity-wireframes/</a>



In the previous chapter you reached the creation of the information architecture for your website. This means that you know approximately what happens on each page and how each page fits together. Rather than develop all of these pages equally, which will of course take longer time, we are going to develop a SPECIFIC user journey which BEST SELLS the potential of the website. We need to choose the most EFFECTIVE user journey out of your larger website which will best show the functions of that website. It will most likely combine a few different functions into one user journey.

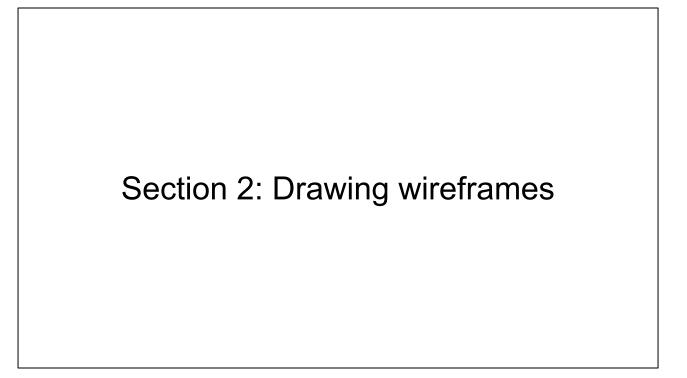
Choosing the specific user journey -

It is impossible on certain budgets (and possibly unnecessary) to design all the views of a service to pixel perfection. It may be too early on in the project to invest that much money. So UX designers have concentrated the UX process and end product into something extremely time effective. That is a rapid prototype.

This type of prototype is built up on a set of user interfaces which illustrate a specific journey through a larger service. This journey should have an impact on the people you are showing, it is like a product in of itself, which demonstrates the POTENTIAL of a digital product attractively. Therefore if you have a product in mind which has five specific functions, one or two are chosen to be focussed upon and designed to a more complete set of user interfaces. This is very powerful in terms of selling a user EXPERIENCE that others can believe in, and is a very convincing way to show clients the potential of your idea. They may have little knowledge in developing or design and

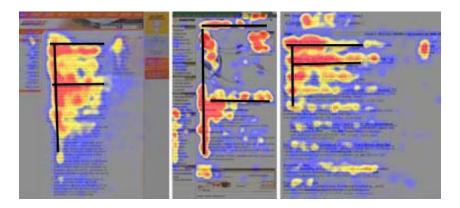
so, packaging these skills into a demonstrative prototype, personalised to an idea they have had, builds trust between the UX team and the client. It often inspires them to see how the discussions and ideas they have had with the UX team are translatable into a finished digital product for the first time. It quite simply, will allow them to 'buy' into the UX design, and invest more into good UX and good development. The rapid prototype is the most efficient way to impress clients the potential of UX design solutions.

During the lesson today we will spend some time selecting your user journey in order to make your rapid prototype. The chapter's final exercise is then you to draw up wireframes to that user journey. You should complete this stage independently after I have explained the steps in the presentation, the result will be the basis for finished user interfaces of your website.



Once the specific user journey has been chosen to best show a larger digital service (your information architectures). You will have a plan of the different views which illustrate that new service. The next section will look at how to start drawing the wireframes of those views. We will cover rules to consider in their production.

#### 4.1 The F word



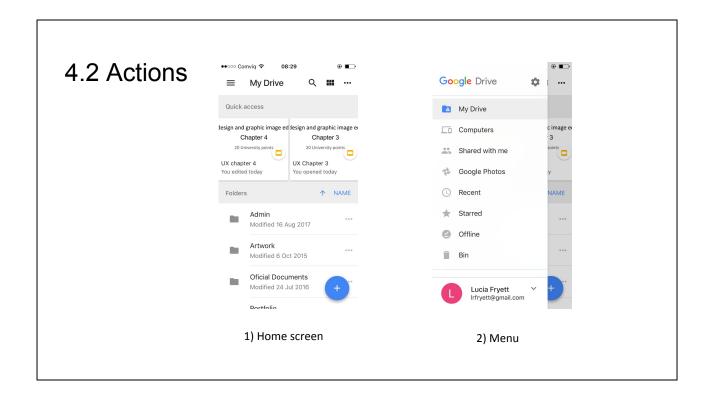
When thinking about which actions are the most important on each view, there is a science to what the human eye takes in first, a general order which you can follow in thinking about setting out wireframes.

This is through priority placement, so that the most important actions are showable through where the eye sees first. Then this is supported further by visual cues such as stand out colour, form and typography to make these actions stand out the most.

So a powerful way to ensure that your prioritised actions on each view are seen in the intended order you can follow these cognitive rules which all our brains do. That is to take in visual information in an F shape. The pictures above show the eye tracking of humans on different pages. That is to start in the left corner, move right and then downwards in the same motion. A little like reading in the western world. This means that the information taken in most is that in the top left corner.

It is often key to think about the hierarchy first and then add balance to the overall composition of the screen views.

Pic source: https://www.plytix.com/blog/how-to-optimize-product-pages-for-seo-users



The sign of high level UX is user interfaces designed based on ACTIONS. What does this mean?

The reason people are using an app or website is to ACHIEVE something. This could range from gaining information on a subject, to enjoying an online experience OR be very functional such as paying bills. Either way a digital product should be able to be broken down into specific actions on each view as part of a larger function.

Have you ever used a website or a digital service which leaves you feeling lost, unsure of your next step?

There is no need to have a website which is beautiful, if it doesn't make it easy for the user to achieve something, it will not be successful in the long run.

So how do UX designer include actionable steps into UX design? This is through visual cues and inputs into the app or website combined with the right amount of information being displayed.

#### Example:

On the google drive app, the mobile option of google drive from desktop. What is the value that google drive gives to the user? That is of uploading files online, on different devices and being able to ACCESS these files from the cloud without having the physical files on a device. So how is this translated into actions on its interfaces?

#### Home Screen:

- A very clear 'Add' button to upload files, which is laid on top of your already

- saved files (so as to allow you an overview of what is already saved). This
  means that the add is the clear action here, but also allows for secondary
  actions.
- The top bar is also full of four different actions which are less important than the add but still need to be accessed easily. That is a larger menu, a search function, and two sorting options to display your files differently. Therefore you can access more action easily, but the most important actions on the home screen are ADDING new files, and searching / ACCESSING your existing files.

#### Menu:

- The larger menu, coming off the home screen make the user's profile an important action. This is something which has become very important with websites and apps with usernames, that the user can always have oversight of which profile they are acting under. On the google products, this symbol is shown in the same way with a coloured circle and your name. Therefore the user can know if this is correct and change it easily.
- The menu also includes a setting button which is an important action.
- The menu then includes a hamburger pile of extended functions, giving the user freedom of choice.

#### 

Let us look at some other factors to think about when designing wireframes based on ACTIONS.

When the user has taken an action, there should be clear and immediate FEEDBACK shown to the user, so that they know the website or app has received and registered that information. Think of it like a conversation, would you enjoy talking to someone, who never smiles, nods or reacts? Of course it is much more helpful to get feedback that the person is listening and reacting to what you are saying. This is how you should think with UX design.

The example shown here is that of instant feedback (before committing to clicking on something). That is, the icon gets highlighted by a grey box and further information comes up as you hover your mouse over it. This shows that the website is giving you encouraging feedback at all times, as well as extending more explanations to the user to make it easier to follow.

Not only should the User interface give interactive FEEDBACK to the user, it should also help CONVINCE the user to invest their next step. What does this mean? Users do not want to invest unnecessary time or clicks in ANY service, this means that they want to be able to estimate that the following action will not take too long, and will have only the bare necessary steps, the bare minimum, Therefore, that UX should be able to predict all the information needed in an easy to follow way, that comforts the user to know "this will be as little steps as possible". Such as the extended information on the screen now, without clicking on it, the user is being told where the button is

navigated to, so that they don't need to click on it, see if it's right, they already know before clicking.



#### 4.3 Compositions wireframes



Being lead through the UX design.

Another important thing to think about when designing wireframes is to make sure that the user is lead through the service effectively.

Have you ever felt like you are lost when on a website, with no way out of backwards or just a general feeling of little point of being on it anymore? Therefore the UX design has not lead you through the service well enough. There may be loads of really useful functions waiting for the user, but if they can't reach them or come into contact easily with them, they might as well not be there. Today there are so many website and apps to chose from, people have a very low tolerance for difficult to use options.

This is dealt with by actions but also just through visual queues and clear design such as hierarchy and content. This combined with actionable steps ensures the the user is lead effectively through a website and app.

Avanza for example, has this landing page. The design is centered and therefore and has a clear hierarchy; that of signing in as the next step. The red button draws the eye to input your personnummer. The green text also drags your eye to that login box which is defined by a grey background. Other than this simple direction, all the necessary information is presented so as to comfort the user; such as quality awards index and '7 years of happiest customers' and that its costs nothing. There is also return and exit options in the top right corner, so that the user know they can remove themselves if they want to, which makes them more likely to go forward with signing

in.

#### 4.3 Visual Inspiration for building wireframes

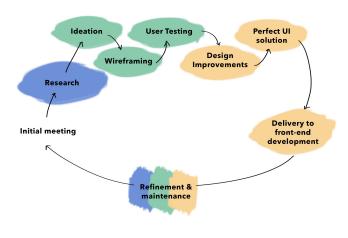
"Good artists copy. Great artists steal."
Pablo Picasso

Do not be afraid to take inspiration from others, this can really get your creative juices flowing! Simply because you start to take inspiration from what others have done which your imagination builds upon.

Should refer to the IA designs of your competitors in the market research to see branch standards. This is so that you can make an app which is familiar for users because they repeat design elements which will remind their cognitive memory of something they've used before. However, the new design that you are doing will of course be better!

UX is the balance between familiarity and ease with that of innovation. So, when looking at existing designs, you should use elements or patterns which users will RECOGNISE when using your design, so that it is easy to pick up and start using. NOT about simply copying the design in its entirety.

#### 4.4 Wireframing in UX design

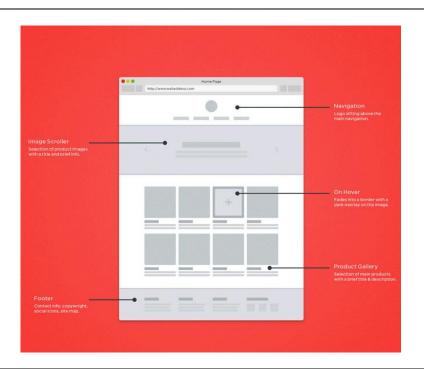


Where does wireframing fit into the UX design process?

We find ourselves at this point in the middle of the creative stage of the UX design process. You have spend a lot of energy on creating a wide range of ideas, which were then filtered to create specific functions list for a website. In the last chapter we came to sculpting out an information architecture, and so the design is well under way in taking form.

If we know now that an information architecture is the map of a whole system of pages in a website or app, then wireframing focusses on the individual pages of that map. The wireframe acts a skeletal system for those individual pages, and represents each component on a page, in simplified form. There is no detail in the specifics of each element, rather it plans out how all the components can fit together, like a puzzle.

### 4.5 Website Components



It would be helpful to do a quick run through of the components on websites, so that you know how put together the basics before adding your page's specific functions.

Run through of components on a a website.

- Navigation bar
- Footer
- Columns
- Buttons
- Content

Think about these basic elements when building your wireframes for your site. These can be broken down and changed, but keep them in mind when starting to draw up your wireframes.

It is important to make all the components in a digital product consistent, so represent these components with the same visual representation on all your different views in your wireframes. This is something which is built into the program sketch where you can make one version which applies to all the pages, this I will show you in the following chapters.

#### Pic source:

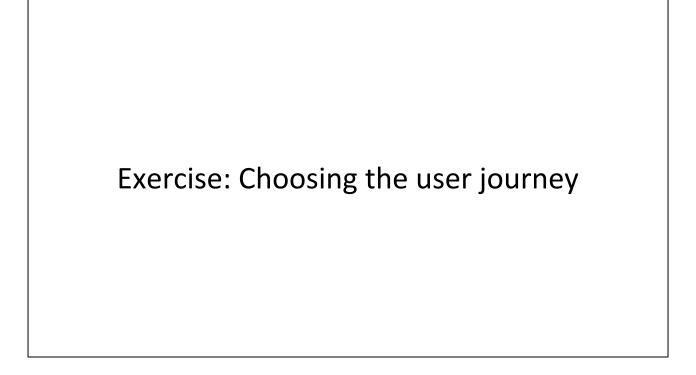
http://www.axiswebart.com/blog/14-top-essential-elements-for-successful-business-website/

#### 4.5 Referencing





Do not spend time trying to reinvent the wheel when drawing up your wireframes, the basic theory of UX design is ease of use. This is therefore very simple, use what people are familiar with to base your UI designs and compositions upon. And then improve it. They know how to use the existing things. Therefore they will know how to use YOUR design.



We are going to spend 30 minutes here choosing the best user journey from your information architecture which best shows the functions of your website.

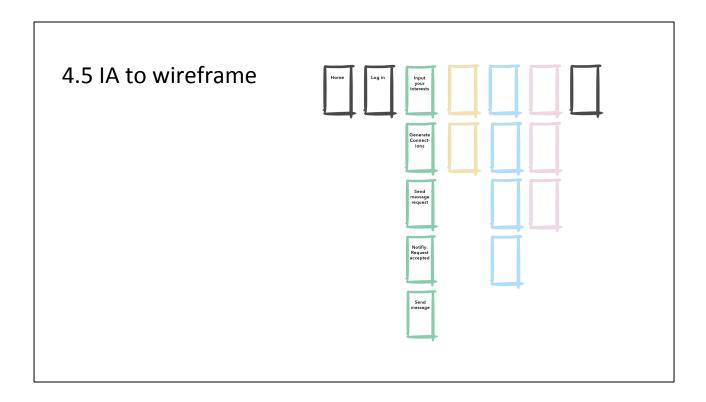
These are going to BEST show the larger service you are making in the least amount of views.

Things to consider: What functions would investors be most impressed by?

Which functions are the most interesting?

Can you combine multiple functions into one user journey?

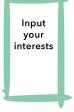
Think about the VALUE that you are presenting with this user journey.



From the previous exercise, we now have a specific user journey planned out from the information architecture that we have created.

The next stage is for you to break down each view of the user journey and start drawing the wireframes for it.

#### 4.5 Wireframe example:



- Select interests
- Enter button
- Menu
- My profile
- Back (cancel)

So if we take an individual page out of the information architecture, where each page has a 'bigger purpose' such as this example, to input your interests. This head function can be broken down into interface components, which should be written down in a more developed version of the same view.

A page from my information architecture example might look like this: I took the page 'input your interests' out of an app which connects people through their common interests. Then I need to break down from a generic step into the precise components needed for this step to be achievable.

This then, in simple terms could be made up of:

- A way to enter your specific interests
- A button to enter these choices (which would then take you to the next view).
- A way to exit the process or go back
- A larger menu button (for context and navigation)
- A way to see own profile at any point

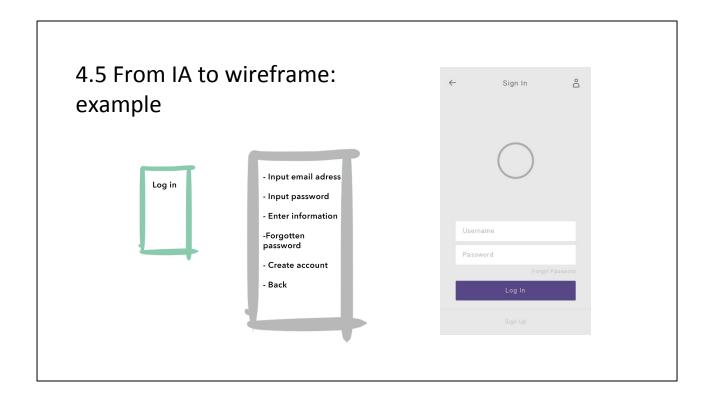
# 4.5 Wireframe example: - Input email adress - Input password - Enter information - Forgotten password - Create account - Back

Let us look at another example like this.

Here is another view that I have taken out of the information architecture of an app which connects people through their mutual interests.

If we look at the 'log in' view from the larger information architecture. This view can be broken down into the following visual components:

- Input user email address / name
- Input their password
- Enter button
- Forgotten password option
- Create account option
- Back / exit option

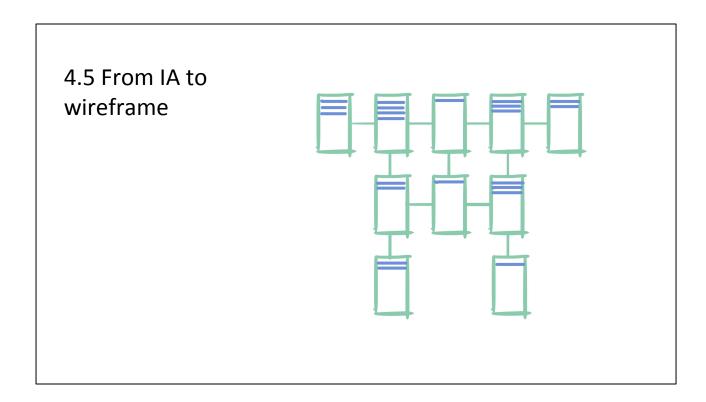


Here is the visual representation of that view.

The page has developed from a 'log in' page, to the sub functions to specific elements needed for those subfunctions.

- Input user name
- Input password
- Enter / log in
- Sign up
- Forgotten password
- Back / exit

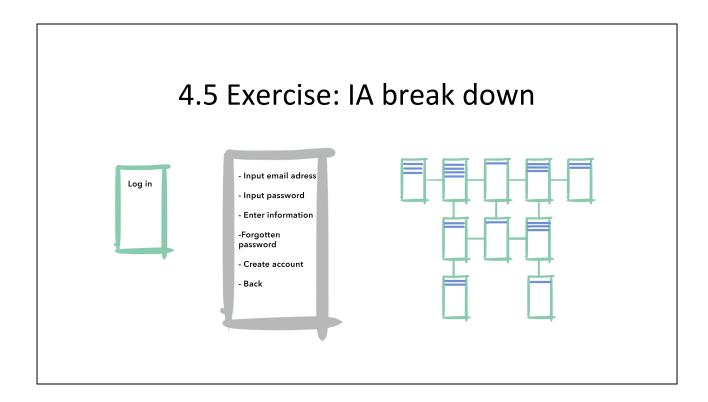
Colour and design detail has been restricted as you can see.



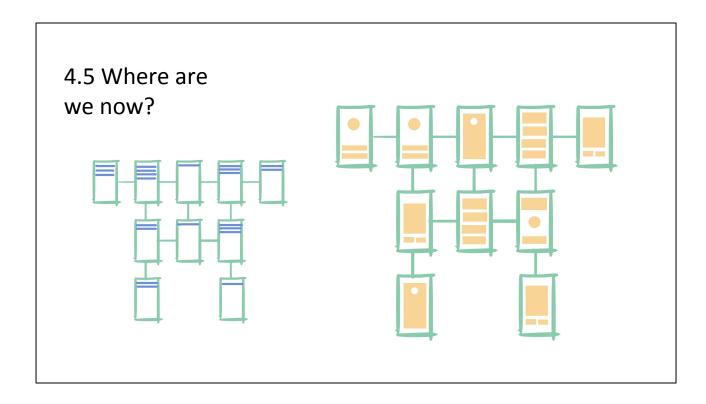
If you were to develop each view individually so that they each were broken down into visual components. The words would start to translate into a visual UI.

Therefore the information architecture starts to evolve from that of words on a map, to broken down visual designs on specific views.

If the blue lines on this diagram represent components for the ui (much like the previous two breakdowns I went through) it could then evolve into WIREFRAMES of each view.



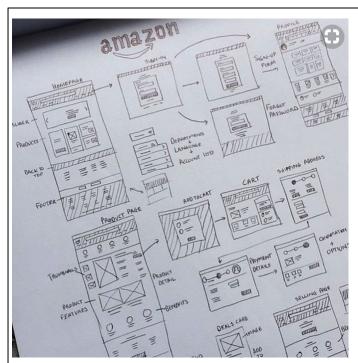
We are going to spend 30 minutes here, breaking down the views from our chosen user journey from the previous user journey. The goal is to break down each view's head function into its components with WORDS at this point.

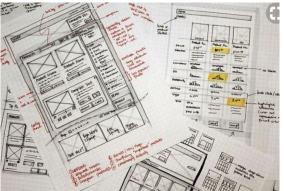


Now you should have views of your website design with written elements on each view.

The next step is to start sketching as to how these worded functions are translated into the visual elements which build up a user interface.

Again, the design of these elements should be in grayscale and be simplified shaped to represent the different visual elements. Do not worry about adding in the real logo, or real content yet. You can have thing rectangles just to show that there is text for example.





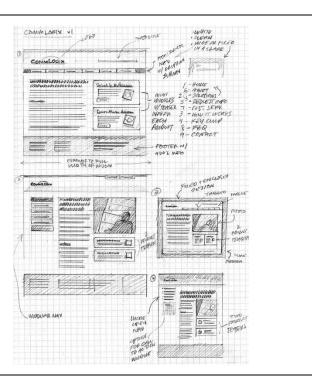
Here is an example of the type of wireframe that you are trying to achieve, this example is for an app and so has different proportions to what your website will look like.

As you can see, they have a clear information architecture for this wireframe, this means that know that all the pages needed to make a strong service are going to be included. They have understood the scope of the service and now are able to break it down into the specific elements on each of these views. As you can see the elements are consistent on each page, such as the header and footer etc.

The worded functions that you have written up on each of your views can be translated directly into visual designs.

Source pic: <a href="https://www.pinterest.se/pin/760897299515578573/">https://www.pinterest.se/pin/53550683044930682/</a>

#### 4.5 Wireframing



When thinking about wireframes, there are lots of examples of digitally drawn wireframes, especially on sites such as behance where people want to show off their best work. However sketching with a pen and paper is a better way to get out ideas, as there is a little block between your thoughts and the end result.

By sketching your results you can fail quickly and get out lots of options which then can be drawn up in a digital program easily. These sketches can be used to translate ideas to others in the team as well as clients.

#### Source pic:

https://i.pinimg.com/564x/44/b2/6a/44b26a70c14a963300f18b2cb3330ddf.jpg

# 4.6 Exercise: Wireframes with visual components

The exercise to do today is to take your views which have written descriptions and to start drawing them up into visual wireframes. This can be done on pen on paper at this stage. These paper and pen sketches are going to be developed into your User interfaces which will be covered in chapters 5 and 6. Use the course material to reference the steps of how to get to drawn wireframes.

It is great if you have multiple solutions in different wireframe sketches. If you have multiple ideas it means you are thinking creatively. The next lesson we will look at moving forward and combining multiple ideas into one. Bring your hand drawn wireframes to chapter 5's lesson so that we can test the results before going further.

Use a pen and paper to start drawing up your wireframes, do not worry if they go wrong, you can draw them quickly again. Aim to get each view drawn up on a page of paper each, so that you can start to get a view for each step of your prototype.