# UX-design and graphic image editing Chapter 5

20 University points

#### Overview

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

#### Registration!

# Chapter 5 User Testing and Pixel perfect design

Chapter five will look at validating UX design decisions through user testing. How to conduct user tests according to the different stages of the UX process and how to therefore intertwine the findings into improving the UX design process.

The second section of this chapter will delve deeper into user interface design, or 'pixel perfect' design. This area will cover how to start thinking about developing your wireframes into complete user interface designs.

You can start developing your hand drawn wireframes after todays lesson, after you have gained feedback from your classmates. This may be just sketching by hand at this stage, but in lesson 6 we will look at photoshop and so, you will be able to digitise the design of your interfaces.

#### **User Testing**

5.1 Why user tests?
5.2 User testing
5.3 Types of user tests
5.4 How to do a user test
5.5 User Interface design
5.6 Designing user interfaces
5.7 Trends
5.8 Exercises

# 5.1 Why do user tests?

#### What is user testing?

We have already looked at user testing at a quick glance, it is, the act of documenting and measuring real users interaction with an interface. It involves validating design decisions, confirming if the assumptions that have been made to be true or false throughout the UX design process. Quite simply, it is a way to improve your UX design solutions rapidly by asking the people who matter; the people that are going to use it.

The findings from user tests can be DIRECTLY translated into design changes that will give measurable improvements to your wireframes or UI designs. User tests can be used as a way of improving an existing site, or in the creation of a totally new site, and work equally well in both circumstances. The main important rule to follow in user testing sounds simple, but is often overlooked. To test REAL representatives of the user group that will use the product in the future. There is little value in testing something yourself or with your colleagues, as they have different needs and preferences to those of the consumer group that your app or website needs to attract. The consumer group is often defined explicitly in the design research and can be deciphered from previous steps in the UX process.

Conducting user tests is a clear way to save money in the future for clients and for your own UX process. By validating design decisions before anything is programmed saves huge amounts of money as well as pain and explanations to an angry client. Therefore user testing is being incorporated more and more into modern day UX

design practices.

#### 5.2 User testing



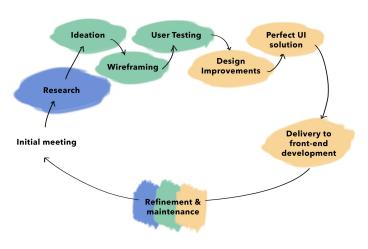
UX designers are intrusted with the larger task of building an overall enjoyable experience for users, it is incredibly difficult (if not impossible) to do this perfectly on the first try. There is a limit to people's ability to determine how others will experience something. So user testing is a way to reveal all the mistakes that have been made from a team's perspective (which is inevitable) before sending them on and making the design final in any way. Flaws are a natural and often unavoidable part of the design process, usability testing is a way of quality controlling those mistakes before they become REAL mistakes.

The powerful thing with user testing is that they don't need to be too extensive to gain A LOT of useful feedback. If you test your digital product on a few separate occasions during a UX process, they maybe need only 4-8 testers each time to create a clear pattern of usability feedback and therefore make huge design improvements.

The most challenging part of user tests is to watch and document precisely how people are interacting with the interfaces. So firstly, being quiet and watching will teach you a lot about how that user is feeling as they interact with an interface. If someone is quiet and you can't read how they are thinking, you must be proactive and ask a non leading question 'how does that feel'? Some people find it hard to ask such an open and honest question, but you will be surprised how much insight you can gain from this approach.

Pic source: https://www.youtube.com/watch?v=UkxQ2tgAWr0

#### 5.2 User testing in the process



Where in the process do you do user testing?

It is crucial to have done a round of user testing before delivering a ux design to developers so that big mistakes are voided before the huge cost of developing something incorrect. As a minimum, however it is optimal to do multiple user tests during the UX process.

User tests generally can take place right from the blue phase (research phase) throughout the green phase (creative phase) and even in the yellow phase (production phase). However the way the user test looks is different according to these stages. Now i will run through how user tests can take different forms according to what stage of the UX process you are on.

# 

Initial user tests - doing interviews to understand the user in the beginning the UX process.

We have talked a little about this in the design research chapter, the earliest type of user test there is, is that of a general user interview. This is often to develop an understanding of the user on a more human level from just a description on paper.

Examples of questions could include:

Why would you use an app like this? What are you trying to achieve through this website? When in your routine would you use this website?

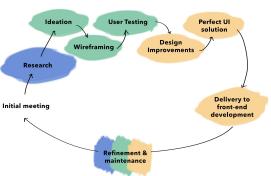
It is less measurable than other user tests, but it is incredibly useful in forming a better picture of the real user of the digital product you are making. It is a really invaluable stage in the UX process if it can be afforded.

#### Pic source:

https://www.usability.gov/how-to-and-tools/methods/individual-interviews.html

#### 5.3 User testing #2





The second type of user test that can be used is that of the mid-process user test: which is on non-completed designs. When the digital product has reached a certain level of completion (say that of WIREFRAMING). However it is far from being finished and so the user must be understanding that this rough version is that of an idea and work in progress.

A user test may look at the heuristic and cognitive ease of wireframes formations.

Examples of questions might surround the test of wireframes and may look like:

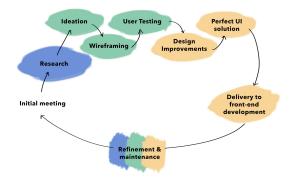
- How long does it take the user to find the correct action on each view?
- Does the user have all the information to make a decision on view (5) and view (8)? Those which have the most drastic commitment?
- Can we reduce the amount of steps for the user to achieve function 1 in the app as it stands today?

It is not a necessity for you to include a user test in this course, but if you were to include a user test with your wireframes such as user testing #2 it would make your design solution A LOT stronger than you could imagine alone.

#### Pic source:

https://www.interaction-design.org/literature/article/5-skills-necessary-to-get-the-mostout-of-your-user-testing-sessions

#### 5.3 User testing #3





Final user tests before being developed, user tests #3.

These user tests usually look at the penultimate user interface design of an app or website before it is sent on to the developers. It is the last chance for the UX design team to make amendments before the decisions are coded into certainty.

They test the specific effectiveness of a nearly complete UI design and digital service. They are often more precisely measured than the previous two user type of user tests. They can even be measure by computers and sensors, the way that the user's eye reads an interface and if it is the order that the designer intended.

The design changes taken away from such user tests may be that of pixels to the left, right, up and down. It could be such small changes that they don't need to affect the composition of the user interface in of itself, but it will improve the experience of the service in small and steady proportions.

#### Pic source:

https://www.uxpro.be/see-one-person-ux-team-performs-continuous-user-testing/

#### 5.4 Compiling a user test

The components needed for a successful user test are that of:

- Prepared measurable parameters (such as questions, or measurements)
  which can be compared between different users to compile specific design
  feedback.
- An appropriate prototype / design to test these parameters against.
- Prepare the room and setting to be correct with all materials necessary...
- A useful way to input the data that is quick and responsive to the answers of users in real time. Google forms is a simple and effective way to input data and measure the different user's responses on the same questions.
- A conclusion to the user tests / presentation to the findings which can be translated to design changes.

#### 5.4 Concluding the user test

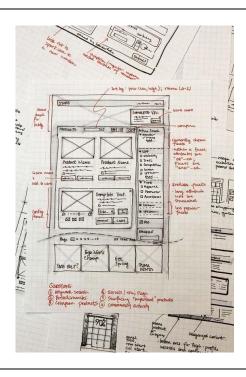
Translating the findings into succinct design decisions is a key part of user tests and is VITAL in making the user test affect the UX design effectively. The knowledge of how users use the design you provide and where they have problems is beneficial only if you draw conclusions and refine your product accordingly. Within a team this is therefore necessary to compile and PRESENT to the team.

Being able to READ and take in the results of a user test is one thing, to translate that information is that of another skill. That skill is to SELECT the most important take aways and prioritise them, therefore presenting the most valuable conclusions from the user test. This includes making design findings TRANSLATABLE to those who aren't as used to design language, let alone the design process of refinement.

How would you try and convince a businessman to invest in design changes from user test results? They may thin their design is finished, they see it complete in front of them, how would you explain that this isn't in fact complete and actually in need of MORE investment?

If you are able to convince that client to invest more at a stage of seeming completion, you have understood the value of user testing.





It is a little tricky to do user tests when we aren't working with a client. As I have stated it is important when working with client projects to use representatives of your user group when doing user tests. However we can do the next best thing and learn how to work constructively as team members. This is by getting into pairs and asking what you classmate things about your wireframes. The goal here is to gain feedback on your design solutions in order to make an optimal solution.

Begin by explaining the background of the company as well as the user background. Explain which functions you have chosen to work with. Run through how the user clicks through the wireframes.

Then let the tester give feedback on what feels best for them.

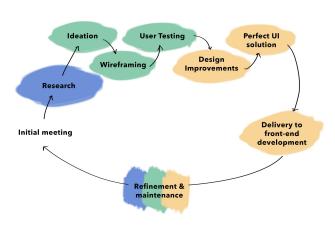
Write down these findings and even sketch new ideas if you feel like you want to. By the end of this exercise you should have some clear wireframes to start translating into UIs.

#### Pic source:

https://i.pinimg.com/564x/93/ad/be/93adbe2ca366f713c2878a8448693366.jpg



#### 5.5: Pixel perfect design



User interface design or UI design is a components of the UX design process, that of designing pixel perfect interface designs for website, apps and other digital products. UX stands for user experience design and is what we have been studying throughout this course. Those who focus fully on the design of interfaces and perform little of the wider design process often have the title of UI designers or interaction designers. The structure of these roles depend on the size of the project and the type of client as well as the team's personal preferences. UX design can be seen as a more technical and analytical field, UI design is more closely linked to the field of graphic design.

A User interface without the UX foundational work will be a design which fails. It is like painting on top of cracks, the cracks will grow and the deeper lying problems will eventually reveal themselves. Therefore the need to UX and UI are equally important when creating digital products, just as much as the coding. As a UX designer, one often takes on the role of both UX and UI designer, focussing on the analytical and user centric foundational work AND designing the resulting interface as a deliverable of the project to the developers.

### 5.5 Typography rules

Light 112sp

Regular 56sp

Display 4

Body 1

Regular 45sp

Regular 14sp (Device), Regular 13sp (Desktop)

Pisplay 1 Regular 34sp

Headline Regular 24sp

Title Medium 20sp

Subheading Regular 16sp (Device), Regular 15sp (Desktop)

Body 2 Medium 14sp (Device), Medium 13sp (Desktop)

Caption Regular 12sp

Button MEDIUM (ALL CAPS) 14sp

Typography is quite simply the art of organising type and arranging it in visually appealing ways.

There are so many typography rules, so if there is something you and wondering when doing user interfaces, it helps to youtube the specific question. Your knowledge will expand around the subject the more you go looking for rules and answers.

However, the fundamental typography areas include:

**Fonts:** Choosing a font is more of a process than it may seem. When designing, you need to make sure that your type is connecting your audience to the right message. Typefaces symbolise different things to us, they have a direct psychological effect. Choosing a font should be based around the company's existing visual identity as well as a user's expectation of that app or website. Google fonts is a great source for downloading new fonts, and they allow for the use of their fonts in apps and websites for free. Limit your fonts to two, with varying degrees of thickness and size on each. Rather than many different fonts on the same interface. By setting up a typography guide like the one in the presentation is a good way to keep consistent typography throughout the interface, as you can see this is only one typeface.

**Legibility:** This is both within typeface and a good rule of thumb for the whole process of designing interfaces, which is to be able to distinguish easily different letters, words, and sections of an interface. To have visual clarity and simplicity.

Pic source: https://material.io/guidelines/style/typography.html

#### 5.5 Layout rules



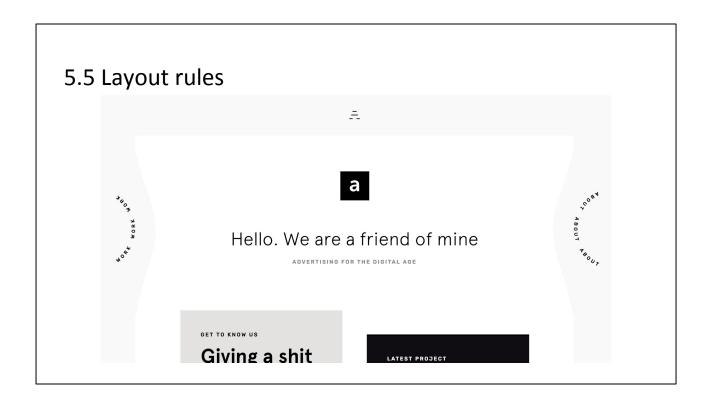
Effective layouts is key in creating good User interface designs. Layouts direct the user through a UI design, through simple aesthetic decisions. Here we are looking at a website to support the selling of tickets for a conference. The main functions are to SELL tickets and to INFORM potential customers of the details of the conference. The site is a long scrolling page with more developed information to convince people to purchase a ticket. But the first landing view you see as a user is the image here.

**The composition** of the site is simple and clear. There is a lot happening for BUT it works because there is a clear **Hierarchy** of the information. Your eye goes to the important information first, and the website succeeds in supplying that useful information clearly. All of these details will help convince a possible ticket purchase, as it makes it EASIER for them to gain the information that need to be satisfied in order to purchase.

If you think about the F shaped reading pattern, you are told first that this is a 'Digital Business conference', the next thing your eye goes to is downward to two actions 'learn more' and 'get ticket'. I am probably not convinced yet, but to the right now I see three quick useful facts, that of how many speakers there will be, how many seats are available and how many sessions will take place. I also now notice two support service to the left, without being invasive which makes me feel supported as a customer and that there are people standing for this conference. A date would have been one piece of information that could be included here, but this site does a good job of leading the user through the convincing information in order to take action: to buy a ticket. The layout is simple and bold and the colour scheme gives a feeling of

energy which goes will with the conference theme and to get businesses to take action and buy a ticket!

Pic source: <a href="http://trendytheme.net/demo2/wp/evenement/">http://trendytheme.net/demo2/wp/evenement/</a>



#### Form follows function

This is the simplest and most effective design rule there is and you may remember his from chapter one. Dieter Rams defined this as a rule as part of his ten principles of good design, even though designers have been using it before him. To design things in ways which demonstrate and support the functions of the product. In this case a portfolio website for an advertising agency.

How have the applied form which follows function?:

- A monotone and simplified aesthetic, which is extremely minimal and yet bold. This allows the shapes to stand out, as well as the content.
- The rounded off text to show there is a kind of twisting / opening function to access 'work' and 'about', which opens pages from the side inwards.
- Cut offs let the user know that there is something to scroll down to and therefore this simple design is very function focussed.

Pic source: <a href="https://afriendofmine.nl/">https://afriendofmine.nl/</a>

# S.5 Art direction & UI RUYA Browling & Digital Agency Meru = View world CLICK ON THE IMAGE OR THE MENU TO MAVIGATE R ORDER TO PROVIDE YOU THE BEST MARE EXPRAINED. THIS MESTALES EXPRESSION. THE SET MARE EXPRESSION. THE SET MARE EXPRESSION. THIS WEST MARE EXPRESSION. THE WEST MARE EXPRESSION. THIS WEST MARE EXPRESSION. THIS WEST MARE EXPRESSION. THE WEST MARE EXPRESSION. TH

Pixel perfect UI design can be an extremely artistic and expressive process, if the client and project allow it. Within digital agencies, the visual presence of a website is used as a creative channel for brands to best illustrate themselves to customers and clients. Such as the example on the board which has strong artistic directions, as well as UX interactivity built in.

Pic source: <a href="http://ruya.ae/">http://ruya.ae/</a>

#### 5.5 Responsivity

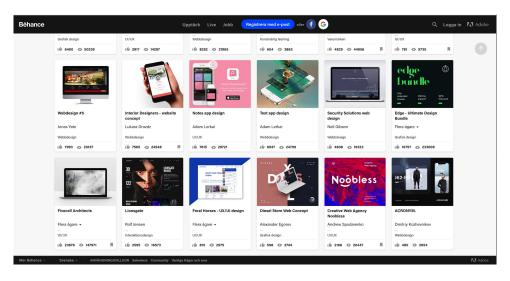


It is crucial to make user interfaces which are translatable to different devices, so they that can be opened on mobile, tablet, desktop of different sizes, and upkeep the same intended UX journey. Beforehand you would design on grid systems which all follow the same rules of movement and adaptation to different screens. Now it is a more organic process where the UI / UX designer sits down with the developer and work out together how the elements can best respond to different screen sizes.

Pictures will change size, proportions and crop setting. The text will change size as well as elements and blocks that it sits on. Most elements are able to be directly translatable between different devices such as the menu here between desktop and tablet, however, on a mobile there was not enough space for a menu along the top width of the screen and so it became a hamburger menu instead. The UIs are often therefore delivered in the intended formats that will be needed for the developers to code for the different devices. This information should be decided upon in the beginning of a project. What format should we be designing in? Is it strategically better than this becomes an app or a website product?

This process of the designer and developer going through these details is normally quite a creative one, that sparks new innovation into the designer's work. With interactivity added it can improve the design even further than what the designer had imagined.

#### 5.5 Exercise: Visual Inspiration



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 can then build upon.

When designing your wireframes take the time to gather visual inspiration.

There are plenty of UI projects to inspire you on behance and pinterest as well as awwwards which shows nominated UI designs. You will find unlimited inspiration there. Search also other sites if you know them!

Pic source: behance.com

Paus! Next: UI design principles

## 5.6 Title, text, pictures and content



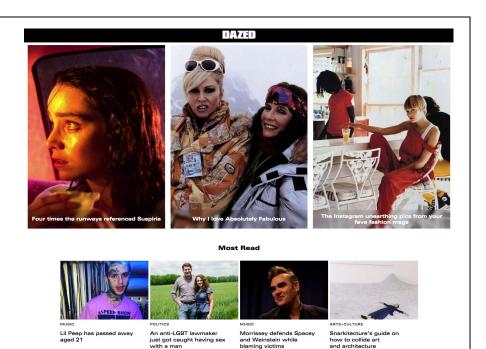
Now we shall continue with principles used in user interface design. Here is an image of a website which isn't fundamentally wrong, but where the content lets the UI design and makes the general experience not very simple.

The pictures are too large and have been reduced to fit into the specific blocks of the UI without consideration if they are in the pictures! THe scale therefore is totally wrong and it is pretty much impossible to read them properly. The typeface is also too large and thin and too large, making it difficult to read, it also blends in with these complicated pictures so instead of weighing them down, the text gets lost in the pictures. The framework therefore loses its structure, ruining the experience for the user.

There has been no clear UX process here, the content has come into the process at the end of it's development and ruins the UI design. Also, there is no larger user journey for the whole site. You can see therefore how content is incredibly important in building a functional UI design and supporting the intended structure of a website / app.

Pic source: http://www.reaktion.se/2318 Beviset - Case

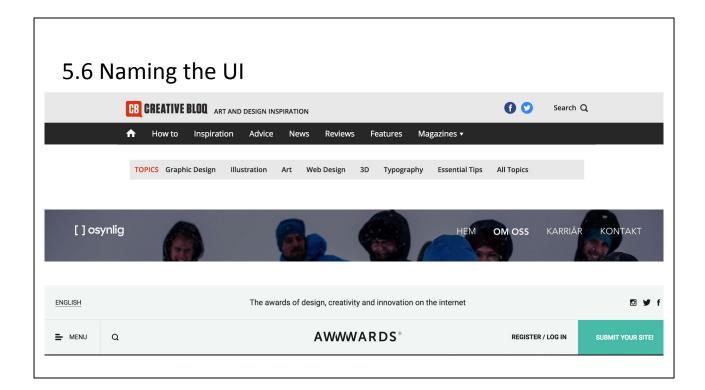
# 5.6 Title, text, pictures and content



Dazed and confused is a magazine and digital magazine which produced A LOT of content, that of image, text, articles, information, artistic direction. They have a basic website structure in black and white which is simple to support all the creative content which they produce. This means they don't have redesign the website with new content, but that as soon as they update content (Which is every day) the site stills works well, keeps it structure and UX, and frames that content extremely well. The UI is very basic, in black and white with a focus on picture and text to divide up the content. Then the content of colour brings that UI to life. The only thing they really need to do in terms of visual changes is to crop pictures accordingly and update text.

Appropriate to the user, what do they expect?

Pic source: http://www.dazeddigital.com/

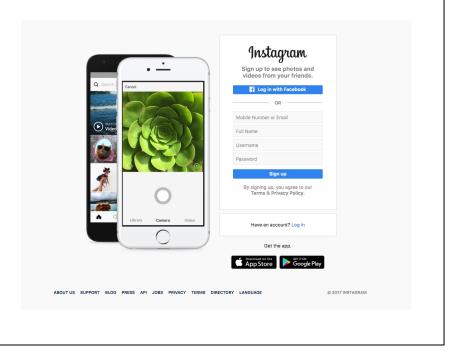


The names involved in user interface design are also important in creating a sustainable UI that is adaptable to grow with time. This includes names on each individual page which translates into specific button names. This then affects the actions' names and builds a brand's UI language. It is important to create a consistent name system for pages, actions and buttons so that the site is navigable and so that a user can learn and remember a simple system.

Question: Which of the menus on the screen have the easiest menu to understand? Which show clearly the next step and which leave you a little confused? The simpler ones have succeeded in building a good UX of the site and names which support that intended user experience.

Pic sources: <a href="http://www.creativebloq.com/features/10-top-ui-trends-for-2017">https://www.creativebloq.com/features/10-top-ui-trends-for-2017</a> <a href="https://www.awwwards.com/">https://www.awwwards.com/</a> <a href="https://www.awwwards.com/">https://

### 5.6 Standing out as a brand

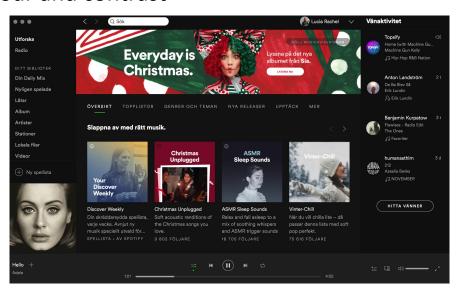


Making a clear visual statement, having a presence that stands out and is consistent through all channels is an incredibly important element of UI design.

Instagram doesn't have a very strong branding for its logo but it doesn't RELY on its logo to stand out as a brand. Instead, instagram relies on its set user interface which is extremely simple and never really changes for people to recognise their business and products. It defies the accessibility rule in a way and is clearly focussed on the APP version on mobile. That of a scrolling home, a picture grid as a profile, simple image editer and filter options. Anyone would be able to recognise this user interface, which is very impressive to make the stand out factor of your product your minimalistic UI rather than your branding.

Pic source: instagram.com

#### 5.6 Colour and contrast

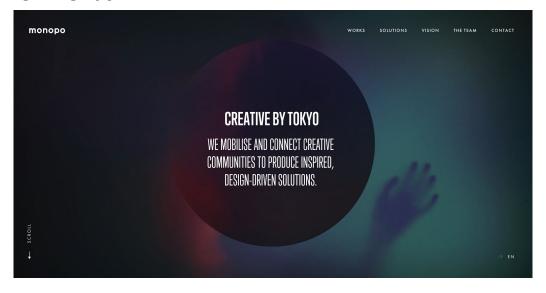


Before defining anything on your UI design, there needs to be a general colour and contrast plan in place to follow. Such as, is there a white background or dark? This creates a completely different feeling to a site and affects its legibility as well as content, typeface, UX, everything. Play around with this FIRST and the pick your general visual language of the site.

Spotify has quite a stand out UI in this sense, that it is black when everything tended to be white. Other streaming sites have really incorporated this colour scheme such as netflix and HBO nordic, although spotify was first. This works well for video streaming sites as it is more relaxing for the eye when watching films to be surrounded by darkness rather than bright white. It creates more of a cinema feeling than say, youtube's colour set.

Simple and bold is better

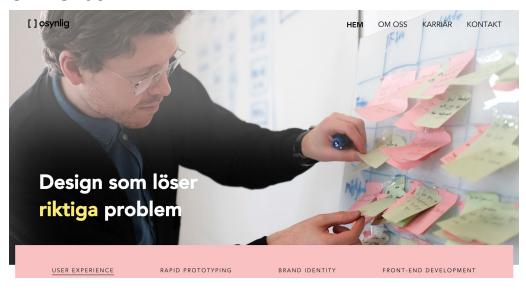
#### 5.7 UI Trends



One of the top trends for UI in 2017 was that of the moving video as a fullscreen background for a site. This has been incorporated in all walks of websites and is incredibly effective for companies which already produve high resolution video content, therefore it has been incorporated into maky sites. It draws attention from the user and makes the site stand out against competitors and is incredibly effective for companies with visually strong video content rather than generic videos. It succeeds on varying levels.

Pic source: <a href="https://monopo.co.jp/">https://monopo.co.jp/</a>

#### 5.7 UI Trends



Another one of the top trends for UI in 2017 was longform content, where all the content is put onto one long scroll page. This comes from the same action on smaller devices, people are quite comfortable navigating through a long screen and has become very popular in desktop form. The cut off elements is an effective way to illustrate that a site is longform and scrollable (as mentioned in a previous example).

Longform UIs use cut off elements to illustrate hidden content which needs to be scrolled down to, such as this site where the pink block clearly continues beyond the screen limits and so, must be scrolled down to, encourage the user to scroll further than the original landing parameters.

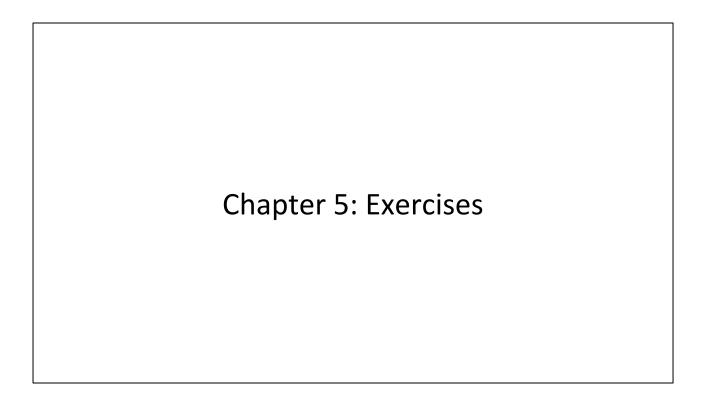
Pic source: osynlig.se

#### 5.7 UI Trends



Another one of the top trends for UI in 2017 was lock scroll, where the page jumps to full screen placement as the user scrolls. (the opposite of long scroll where everything overlaps) this is based on specific screens which are defined and therefore experiences in exactly the way intended. There is often a strong visual framework built into these sites so that the user understands there is a border to the page which is also where text starts to be used as building blocks outside of traditional typeface formations.

Pic source: <a href="https://vintage.agency/">https://vintage.agency/</a>



The next stage of the project is to take the wireframes and starting developing them into finished UI designs. Do this with pen and paper or simple sketch programs at this stage. Develop them far enough to be able to be drawn into photoshop next lesson. You can complete them at home or here. Document your drawn designs as part of your design report.

We need photoshop for next lesson to start drawing up the UI design sketches into digital version.