# 91901 2023 User Desgin Methodologies

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# **UX Summaries**

**User Experience Study** 

A user experience study is an investigation of what your client wants and their thought processes and common thinking patterns. You need to understand what the client and other similar users. Then you create a general persona of the users the product is directed towards to make sure you are not trying to cater for too many different personalities and likes and dislikes, but still being accurate. Make sure to understand what they want and solely what *they* want, do not influence their choices and decisions with your own ideas and solutions and thoughts. User experience studies can be carried out through many tasks, e.g. stakeholder questions, gut tests, competitive analysis, card sorts, etc. These tasks give you all the information you need to create a product.

#### Stakeholder Questions

Stakeholder questions are questions you ask the client that give information about the product. It is best to ask general questions first, then ask more in-depth questions that outline more specific aspects, then finally ask questions that give you a background of them and their persona, and their desired audience's persona. This method is very useful as it gives you a lot of concise, important information for the design as well as lots of background information about the client.

#### **Gut Test**

Gut tests are lots of examples from different digital products and ask the client to rate each example from 1 to 5; 1 meaning terrible and 5 meaning brilliant. Use a collection of at least 5 final designs / products that were rated 4+ to get a good idea of what the client desires. This helps you understand what the client expects and how they want the product to respond and look like.

#### Relevant Implications

Relevant implications are issues your design addresses, eg: legal, social, privacy, accessibility, future-proofing. This makes sure that you know what errors could arise, and how you will fix or prevent them.

#### **Feedback**

Ask the client about the issues and don't suggest a solution. Getting the client's pure and uninfluenced point of view is crucial to tailoring the design to their wants and needs. Make sure that the design you give them is up to a standard where it can be tested / reviewed efficiently to ensure you have. This makes it easy to apply changes and tailor your design to the client perfectly.

# **Competitive Analysis**

A competitive analysis is a where you evaluate and compare the user experience of your product against competitors' products. It provides useful information to improve your own design and create an overall better design.

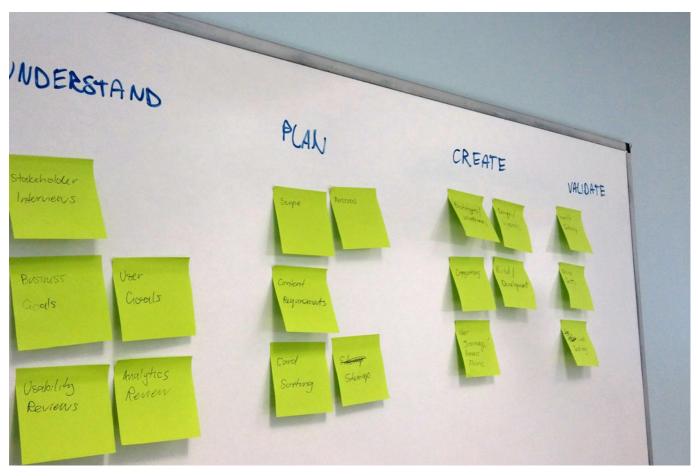
To conduct a competitive analysis, the first step is to identify the main competitors in a similar product scene. Look for companies that offer similar products that target people similar to your clients and testers and created user personas. Decide on what aspects of other products you want to incorporate into your own designs. This could be visual design, accessibility, targeted personas, etc.

Next, have your clients and testers use the products of the competitors and give feedback on what they do and don't like. Use this information to alter and test your design. Also note down what the clients and testers

did not like, as you can excel past what the competitors got wrong and make it a better fit for your design.

Conducting a competitive analysis is very helpful and can make it a lot easier to replicate what other companies do good while simultaneously avoiding what they do badly.

### **Card Sorting**



From: https://archive.smashing.media/assets/344dbf88-fdf9-42bb-adb4-46f01eedd629/f63cce8b-97c9-4475-a786-9123af33aa97/3-img-cardsortinternal-lrg-opt.jpg

Card sorting is a way to understand how your clients and testers prioritize and group certain aspects of the outcome. It reveals what the client and testers are thinking and how they would have different parts of the outcome placed. The cards are placed under headers created by either you or the client and testers. Card sorting has two main execution methods: Open and closed. Each come with pros and cons and are useful in certain situations. Closed card sorting is where you create the groups and have the user sort the cards into those predetermined sections, it is useful if you have lots of testers or already have certain headers chosen that you think will be best. Open card sorting is where the client and testers create the groups and organize everything how they want, it is better if you are trying to cater to exactly what the client and testers want. There is also a third possibility: hybrid. Hybrid card sorting allows the client and testers to add onto your predefined groups. Hybrid is good as it gives a good mix of consistency between results and more in-depth information on what the client and testers think about certain aspects of the product.

Card sorting follows a simple structure. First, create a multitude of cards each containing aspects of the product, e.g. account login and creation, posting and commenting, etc -- these aspects could more simpler, for example, if the design was for a pharmaceutical website, some of the aspects could be cosmetics, health, body, supplements, substances, etc. Next, you need to decide if you are going to conduct an open or closed

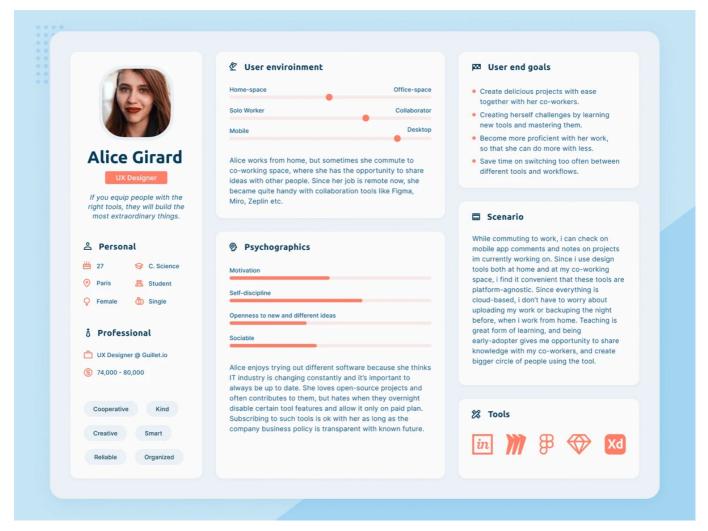
or hybrid card sort. After making the decision and creating the groups if necessary, begin the process. Give the cards to the client and testers and have them sort all the cards.

Open card sorting, as stated before, is useful if you are trying to cater the design exactly to what the client and testers want. It gives you in-depth feedback with a lot more information on what the client and testers think about the different aspects of design. But, the results are not very consistent, and are very specific to what the client and testers think, and compiling all the results into one main set of groups that works with your design can be difficult, especially if you have lots of testers.

Closed card sorting, as stated before, is useful if you have lots of testers and need the feedback to be consistent, and is easy to compile down into one set of sorted cards. Though, the feedback will not be exactly what the client and testers want, as you have already given them groups and do not let them create their own, therefore they will not be able to express exactly what they believe. This makes the design less client-orientated and is a bit more systematic, but the pros can outweigh the cons in some situations; the same can also be said for open sorts.

Hybrid card sorting gives a good mix of both open and closed sorts. The client and testers can either put the cards into your groups, or create their own if they see fit. This gives a good mix of consistency and in-depth feedback. It is still easily viable for large-scale products with a multitude of testers, but is then also a good option for smaller designs and less testers. There are not many cons at all of hybrid sorting, except slightly less consistent and in-depth results. The pros really show how useful this method is and how it is, in my opinion, the best one to use.

#### User Persona



From: https://www.datocms-assets.com/38511/1649934494-image.png?auto=format

User personas are a fake identity created from information collected through research on clients / testers. The research is conducted through user feedback questions, such as: card sorting, stakeholder questions, GUT tests, feedback, user experience studies, etc. User personas are a generalized / averaged-out collection of data from multiple clients / testers. They contain information such as: Name, age, sex, hobbies, employment, education, marital / family status, ideologies / views / opinions, wants and needs, frustrations, abilities, etc. All this in information is used to tailor the product to similar people. User personas are very useful as instead of having to keep referring to the many sets of information from clients / testers, you can simply use a handful of crafted user personas to help keep the product going in the direction the clients / testers desire, while still maintaining pace and keeping up with a schedule or plan. As the information isn't as specific, it will not fully fit what the clients and testers' desires entail, but it will most definitely be sufficient.

### **Empathy Map**

An empathy map is visualization of feedback from clients and testers. It contains a map of patterns and common issues and comments, and how they affected the design. This map makes it easy to visualize and understand how clients and testers' needs and desires and feedback and how they change the design, allowing you to better understand their perspective and the bigger picture of the project. Empathy maps focus mostly on the feelings and thoughts of the clients and testers, whereas journey maps are more focused on how all feedback from the clients and testers affects different aspects of the design.

# Journey Map

A journey map is a map of all the changes you make and the feedback you receive. Show how the design changed and what worked and what didn't. It is useful to get an overall view of your plan and see where it is going and find patterns that may have worked or may not have worked. The map helps visualize the changes the feedback from clients and testers make, and how they all come together.

### Site map

A site map is a map of where different buttons and pages / scenes go to for an easy way to see the overall. It creates a simple outline of progression through the product for the clients and testers to give feedback on. This makes it very easy to apply changes without having to change the entire design.

# Low Fidelity

A low fidelity is a very simple mockup of what the design could look like to get feedback from the client that can easily be applied. The lower quality and simplicity makes it easy to change the design without having to spend too much time on rearranging or even completely redesigning. Low fidelities are very useful due to this and are an essential part of the design process that can be extremely good for feedback on the general feel of the design.

# **High Fidelity**

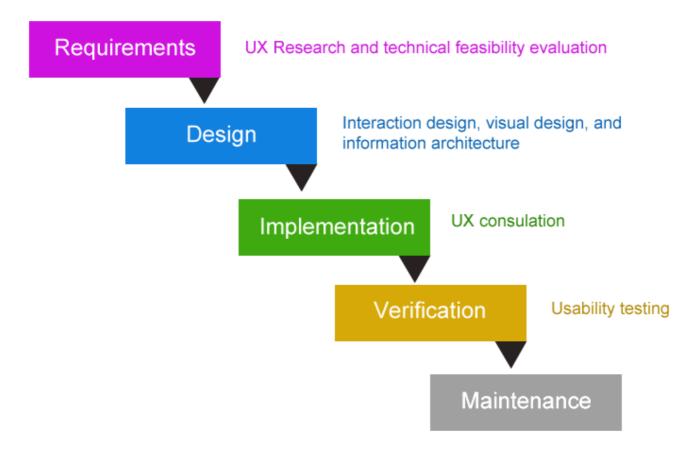
A high fidelity is higher quality layout mockup with more detail. It is a full mockup of what the product will look like to show the client and testers. It fully visualized what the finished product would look like, but it does not have any functionality, it is purely just for looking at. High fidelities are very useful as they do not take as much time to create as the actual product, and they are easier to work on and change. Applying feedback can be done very quickly, meaning you can rapidly adjust the design to meet the clients' wants.

#### **Build and Test**

A build and test product is a minimal working version of the see if the interaction between the user and the product is as desired. This makes it very easy to get useful and detailed and accurate feedback on the final product, and allows precise feedback on everything. This comes at the very end so apply the feedback should not be too hard as most of the design feedback is on the wireframes, low fidelity, design tiles, and high fidelities.

# **Project Management**

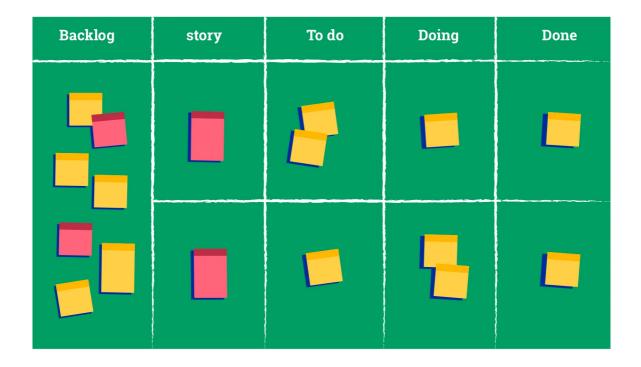
#### Waterfall



From: https://samirshomepage.files.wordpress.com/2014/07/waterfallmodel\_uxphases.png

A linear graph that visualizes the process structure. It shows what tasks follows after each other and does not allow any experimentation of order. A typical waterfall graph entails a Requirements tab, a Design tab, an Implementation tab, a Verification tab, and a Maintenance tab. Each tab has a set of child tasks within, which all come together to form the parent tab. The waterfall method is very useful for keeping a strict set of tasks in a specific order to make sure you have everything that needs to be done before another task completed. Though, if you wanted to make changes or alter the order of tasks on the go, you have to go back and change the entire structure of the child tasks and what parent tab they fall under and what is required before and after them. If you have a concrete idea of how the project will be carried out, then the waterfall method is very useful. But if you want a more dynamic approach to your project outline structure, this is not a very good way of going about it.

# Agile Scrum



From: https://www.zohowebstatic.com/sites/zweb/images/sprints/seo/sb-how-img2.webp

Agile UX is a more flexible and feedback-orientated method od project development. The agile design process is split up into sprints. Each sprint has a set of tasks that are visualized with scrum boards.

Scrum boards entail a collection of cards put into columns. Each card has a task to be completed, and it's current status determines its column placement. Generally, scrum boards have 5 columns: Backlog, Story, To do, Doing, and Done. Simple scrum boards may only contain 3 columns: To do, Doing, Done; but they do not provide as much depth and detail as the other 2 extra sections. The Backlog section is used to house errors on the outset or ones that occurred part way through. The Backlog column contains a list of tasks ordered by how important they are. The Story column contains sets of brief pieces of writing from the users that explain what they think and how they feel about certain aspects of the project. The developers then can add tasks to the Todo tab based off of the stories. The Todo column contains tasks that are not started and are to be completed. The Doing column contains tasks that are currently in progress. And the Done column contains all the tasks that have been completed. The tasks are moved from the Story column, to the Todo column and ordered into the Backlog column, then to the Doing column, then finally to the Done column. The scrum board offers a lot more flexibility and makes it very easy to visualize and organize tasks and their importance.

# Comparisons

Both scrum and waterfall methods are useful and have pros and cons, but in total I think that scrum boards are much better, as they are much more flexible and do not have a "set in stone" feel. Scrum is more useful for projects with constant feedback and change, and it is so much easier to alter the sprints. Scrum boards allow a much easier approach to project management and is my choice for this project. Glen from Navico says "If you're at the waterfall and you hit the bottom, and you find out, oh this was actually no good to my customer because we stuffed up the requirements or the requirements were really vague to start off with and we just kind of guessed and we pumped out a product and now the customer's not happy, you can't go back. So what you really need to do, is you need to work collaboratively. And this is where Scrum starts coming." This comment explains how the waterfall is not very good in most cases, and scum normally the place as being the better choice for project management.

#### **Tools**

Gantt charts visualize the time frames and dates of aspects and tasks of the product design. It shows the exact dates each task will span and flows downwards through each task. Each task's date span can easily be changed, but then each other task's date span must be changed. Tasks can have a colour and note attached to contain more information and can easily be changed. Gantt charts can be use for small projects with a tight schedule, but for projects that do not have a tight schedule and allow changes in dates and tasks it is not very useful.

Compared to scrum boards, gantt charts are not as flexible and they do not offer as much simplicity. Scrum boards allow for changes to be easily made without much concern for the rest of the items in the board, whereas in a gantt chart if one thing is changed, everything else much be changed to fit. Gantt charts can be useful if the project needs to be completed in a tight time frame, but if there's even just a little bit of leeway, scrum boards are much better, which is why I will be using them for my project.