Prototyping

# Introduction

What is prototyping?

Why is prototyping important in a design workflow?

Lo-Fi and Hi-Fi prototypes

Guidelines for Prototyping

Example of Using Prototype

Advantages and Disadvantages of Prototyping

# What is prototyping in Figma?

Prototyping in Figma is a way for designers to create interactive previews of their designs (how users will interact with the design). These previews, or prototypes, act like early versions of a product, letting teams try out design ideas before fully developing them. In Figma, you can make prototypes that look and feel close to the finished product and share them with others to get feedback. This feedback helps make sure the design works well for the people who will use it, saving time and money by catching any issues early on.

# Why is prototyping important in a design workflow?

* It lets users see and interact with a product's early model, so they understand how it will work.
* It provides stakeholders with a visual and functional representation of the product, helping them see potential benefits, risks, and costs.
* It helps identify and minimize unnecessary elements before product release by getting early feedback from your target audience.
* It is much cheaper to share and iterate ideas at this stage than after development
* It enables the exploration of different design approaches quickly, making it easier to compare and choose the best solution.

Low-fidelity vs High-fidelity prototyping

At the start of making something new, designers often use basic models called "Lo-Fi" prototypes. These are simple and not too detailed, kind of like a draft.

They might show how to go from one screen to another, but they won't have all the fancy parts yet. Even though they're simple, these early models are really useful. They help designers and the people they're working for to see if an idea is going to work. This way, they can figure out if an idea is good or not without spending a lot of time and effort on it.

Here's what these simple versions can look like:

Telling a story with pictures to show how your idea works.

Drawing your ideas on paper (even though some smart folks say drawing isn't quite the same as making a model).

Sorting ideas like playing cards to organize them.

Pretending your idea works to see how people react to it.

# The advantages of the Lo-Fi prototype:

They're fast and don't cost much.

You can change them easily and try out different things quickly.

It's okay if you mess up; you can just start over.

They help you get a big picture of your idea without getting stuck on little details.

Anyone can make them, no matter how much experience they have.

They help you get creative and think about the design.

# The disadvantages of the Lo-Fi prototype:

They don't feel like the real thing, so they might not give you the best test results.

If your real product needs to be just right for certain people, like those with disabilities, these rough versions might not help much.

They usually mean the person trying out your idea doesn't get the full experience like they're just pretending or telling you what they would do instead of actually doing it.

When you're halfway done making your idea real, you might make a "Hi-Fi" prototype. This is a fancy version of your model that looks and works a lot like what you want to end up with. At this point, you might check just one important part of your idea to make sure it's working great, while other parts are still being worked on. As you get closer to finishing, you'll make even better versions that look good, work smoothly, and make sense from start to finish.

High-fidelity prototypes require more time to create and revise, with designs that:

Solve UX and UI problems with refined functionality and interactivity

Include specific, fully functional features for user testing

Cover more details, including conditional logic, micro-interactions, polished animations, and even hardware functionality (like phone cameras or sensors)

# The advantages of the Ho-FI prototype:

* They're really eye-catching, and the people who care about the project can see exactly how their ideas will turn out. This helps them decide if they like it and if it has everything they need.
* When you let people try these detailed models, you get really good feedback that you can trust. Since these models are so close to the final thing, you'll know how people will really feel about your product.

# The disadvantages of the Ho-Fi prototype:

* They generally take much longer to produce than low-fi prototypes.
* Designers might not want to change things after they've spent so much
* time making the product and work just right.
* Software prototypes may give test users a false impression of how good the finished article may be.
* Making changes to prototypes can slow everything down because it takes longer time than making quick changes to Lo-Fi prototypes.

Guidelines for Prototyping

It is important to remember that prototypes are supposed to be quick and easy tests of design solutions. Here are a few guidelines that will help you in the Prototyping stage:

* **Just start building**

When you’re unsure about your idea, the best thing to do is to start making a model of it. This hands-on approach will help you see your idea more clearly and might give you new ways to make it better.

* **Don’t spend too much time**

Making a model should be quick. If you spend too much time on it, you might start liking your idea too much. This can make it hard to see if it's truly a good idea or not.

* **Keep your main goal in mind**

Every prototype should focus on one main thing you want to check. Make sure you don't forget this main point but also be open to learning other things from your model.

* **Think about the people who will use it**

Test the prototype against expected the people who will use your final product. See where there are differences between what you thought would happen and what actually happens, and use this to make your idea better.

# Small Example of Using Prototype in Figma

For this example, we will use three Frames, so let’s create them:

Изображение выглядит как снимок экрана, Мультимедийное программное обеспечение, Графическое программное обеспечение, программное обеспечение

Автоматически созданное описание



So, as you see we created three Frames (pages), let’s give them background colors:

For that, click on one of your frames and go to Design settings.

Изображение выглядит как Мультимедийное программное обеспечение, Графическое программное обеспечение, программное обеспечение, Редактирование

Автоматически созданное описание



Now let’s put the names for the pages and put some colors to our page(A, B, C):

For that click on the Text and write the names for our pages.

Изображение выглядит как снимок экрана, Мультимедийное программное обеспечение, программное обеспечение, Графическое программное обеспечение

Автоматически созданное описание



Great! Let’s make interactions of pages:

Изображение выглядит как снимок экрана, Мультимедийное программное обеспечение, программное обеспечение, Графическое программное обеспечение

Автоматически созданное описание

So, now we can make functional interactions between pages:

For that, we will go to prototype settings, and by clicking on C (or B) we can see a small button +, by clicking on that button we can move the label to another Frame(page), so it will move as to another page, in our picture example to C page.

Изображение выглядит как текст, снимок экрана, программное обеспечение, Мультимедийное программное обеспечение

Автоматически созданное описание



Изображение выглядит как текст, снимок экрана, программное обеспечение, Мультимедийное программное обеспечение

Автоматически созданное описание



Okay, we connected all pages between them, let’s look at actions for going to another page, click on the label, and choose the action that you want.

Изображение выглядит как текст, снимок экрана, Мультимедийное программное обеспечение, программное обеспечение

Автоматически созданное описание

We can choose an animation for moving to another Frame(page), by clicking on the label:

Изображение выглядит как снимок экрана, текст, Мультимедийное программное обеспечение, программное обеспечение

Автоматически созданное описание

In Prototype settings, we can choose, for which Device we will make our prototyping, our device now in our example is Presentation:

Изображение выглядит как текст, снимок экрана, программное обеспечение, Мультимедийное программное обеспечение

Автоматически созданное описание

In the prototype setting we can change our prototype's background color:

Изображение выглядит как текст, снимок экрана, программное обеспечение, Мультимедийное программное обеспечение

Автоматически созданное описание

So, now we can run our prototype:

But before running let’s choose from which frame our prototype should start.

* Firstly choose Frame, and click on it, after that, in the Prototype setting click on Flow Starting Point, as you we have Flow 1 in our Frame 1, we can move that Flow 1 to another frame, of course, if you want to run your prototype and start with another Frame.
* For running our Prototype, we should click to Play button.

Изображение выглядит как снимок экрана, текст, диаграмма, программное обеспечение

Автоматически созданное описание



Congratulations, we ran our prototype successfully!

Изображение выглядит как снимок экрана, программное обеспечение, Мультимедийное программное обеспечение, Операционная система

Автоматически созданное описание

After Running our Prototype, we can move B or C pages, just by clicking. This is a small example that show us how Prototyping is working in Figma.

So let’s talk about Advantages and Disadvantages of Prototyping:

Advantages:

▪ This model is flexible in design.

▪ It is easy to detect errors.

▪ It can actively involve users in the development phase.

▪ It helps developers and users both understand the system better.

▪ We can find missing functionality easily.

▪ There is scope of refinement, it means new requirements can be

easily accommodated.

▪ It can be reused by the developer for more complicated projects in

the future.

▪ It ensures a greater level of customer satisfaction and comfort.

▪ Integration requirements are very well understood and deployment

channels are decided at a very early stage.

Disadvantages:

▪ This model is costly.

▪ It has poor documentation because of continuously changing

customer requirements.

▪ There may be too much variation in requirements.

▪ Customers sometimes demand the actual product to be delivered

soon after seeing an early prototype.

▪ There may be sub-optimal solutions because of developers in a

hurry to build prototypes.

▪ Customers may not be satisfied or interested in the product after

seeing the initial prototype.

▪ There may be incomplete or inadequate problem analysis.

▪ There may increase the complexity of the system.