



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

BA COMPUTER GAMES DESIGN

USER EXPERIENCE DESIGN

Wireframing, Prototypes & Mockups



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Wireframing, Prototypes and Mockups Overview



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OVERVIEW

Any interactive product development includes **three significant developmental steps [1]**:





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OVERVIEW

Any interactive product development includes **three significant developmental steps [1]:**

① Wireframes



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OVERVIEW

Any interactive product development includes **three significant developmental steps [1]**:

① **Wireframes**

② **Prototypes**



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OVERVIEW

Any interactive product development includes **three significant developmental steps [1]:**

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③ **Mockups**



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OVERVIEW

Any interactive product development includes **three significant developmental steps [1]**:

① **Wireframes**

② **Prototypes**

③ **Mockups**

These steps offer User Experience (UX) and User Interface (UI) designers the opportunity to **conduct rounds of user testing** at each stage of their design process.



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OVERVIEW

This user testing helps designers to gauge the following:

- Whether their product is appropriate for their target audience
- How users navigate and draw value from their product and for what purpose
- If your product meets their expectations

UX and UI designers should conduct user testing at every iteration of the design! [1]



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OVERVIEW

Jaye Hannah suggests that the **human body can be used as an analogy** for introducing the different roles served by each. [1]

- The **wireframe** is the **skeleton**; the barebone structure of the product.





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OVERVIEW

Jaye Hannah suggests that the **human body can be used as an analogy** for introducing the different roles served by each. [1]

- The **prototype** is the **brain**; the organ that decides how the human should move and interact with those around him/her.





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OVERVIEW

Jaye Hannah suggests that the **human body can be used as an analogy** for introducing the different roles served by each. [1]

- The **mockup** is the **skin, hair, and facial features** that make the human instantly recognizable.



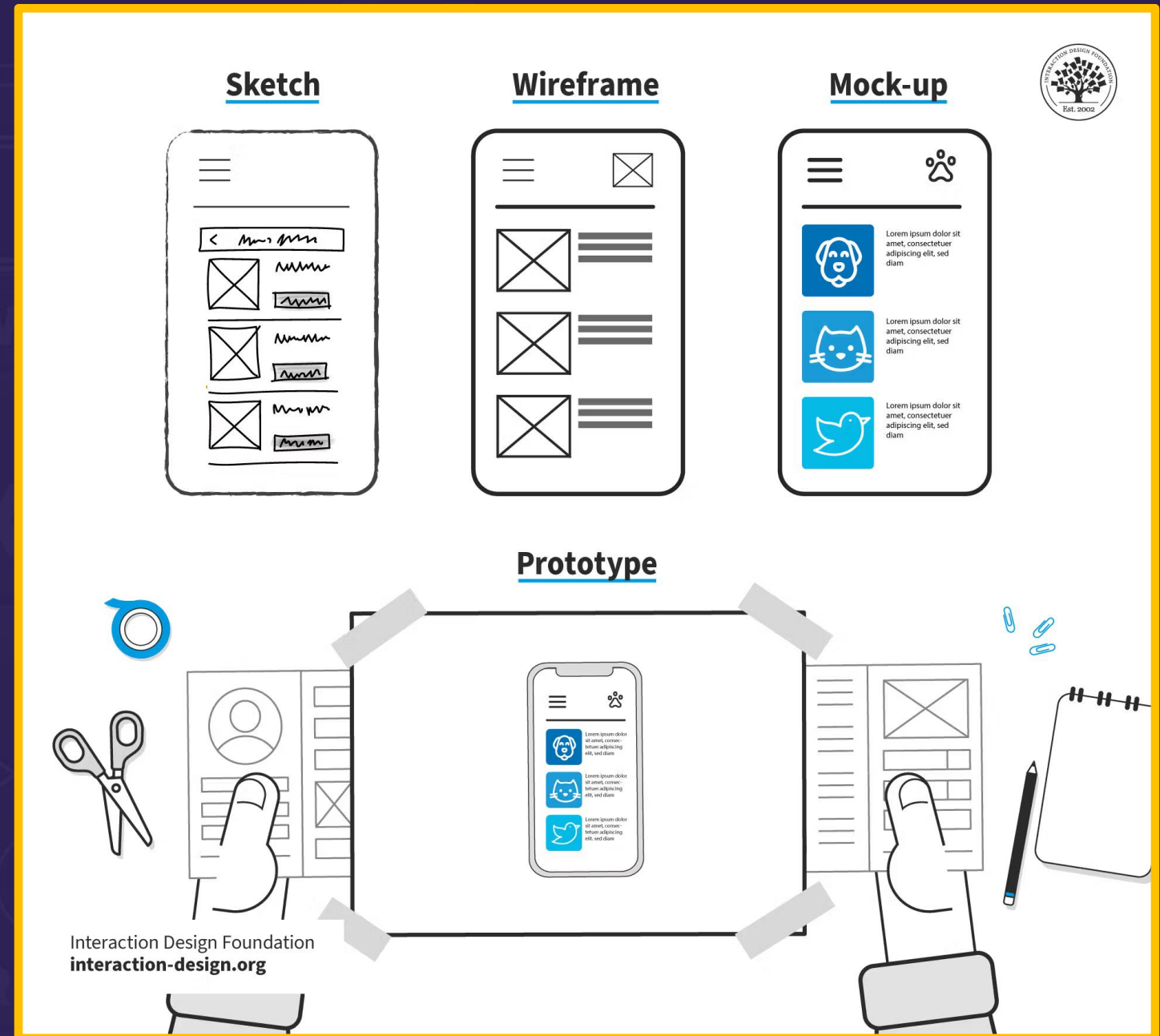


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OVERVIEW

To help **visualise the distinction between these stages**, use this image created by by Interaction-design.org



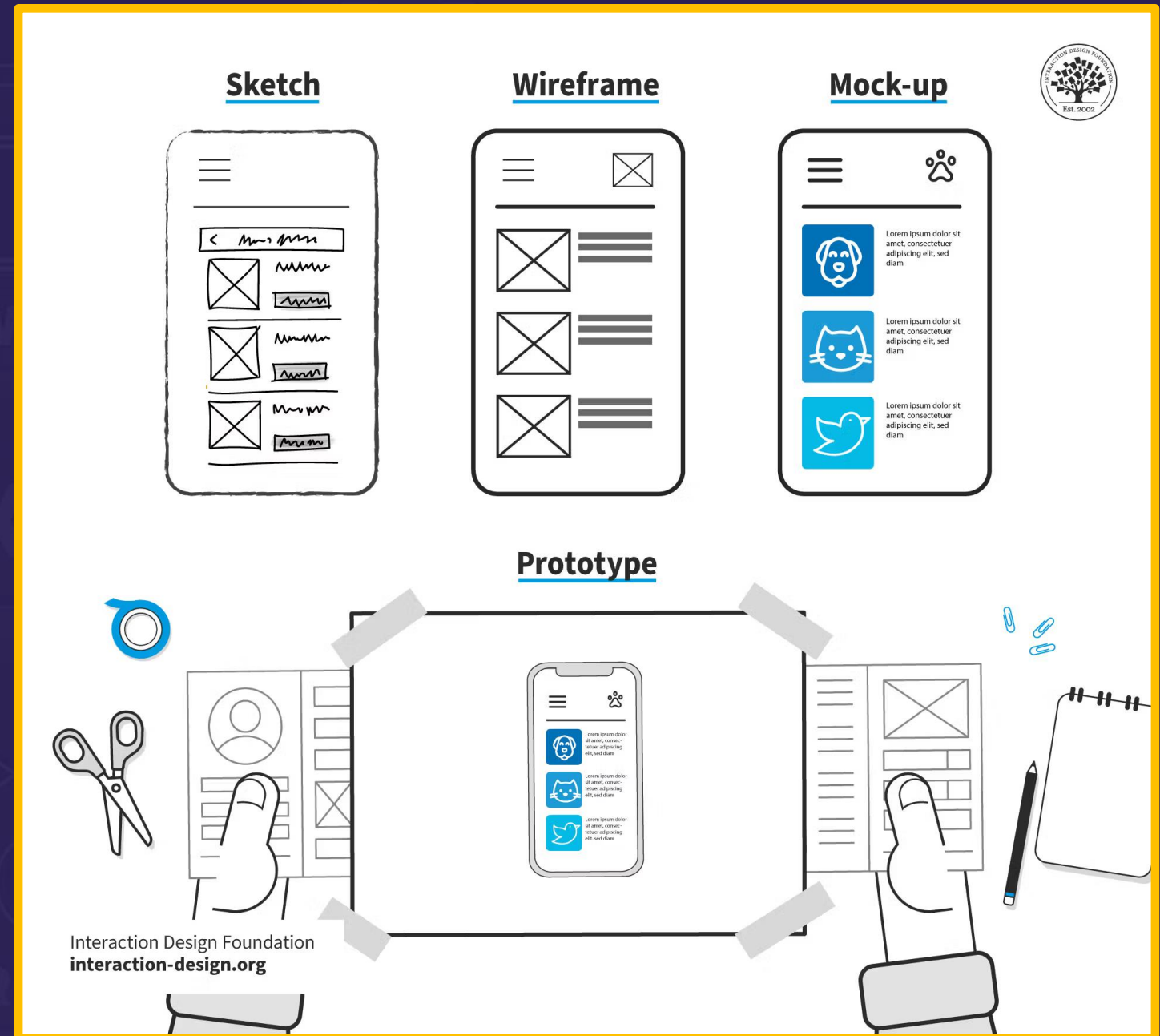


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OVERVIEW

Note that the Prototype stage features a **basic level of interactivity** by using a practical simulation of navigating an app made of card with **templates that can be changed** on the 'screen' of the device.





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Fidelity



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FIDELITY

The term **fidelity** is often used when describing the iterative processes involved in developing Wireframes and Prototypes.



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FIDELITY

The term **fidelity** is often used when describing the iterative processes involved in developing Wireframes and Prototypes.

Fidelity simply means **how precisely a wireframe or prototype lines up with the final product.**



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FIDELITY

The term **fidelity** is often used when describing the iterative processes involved in developing Wireframes and Prototypes.

Fidelity simply means **how precisely a wireframe or prototype lines up with the final product.**

Different fidelities have different **uses, functionality, visual design** and **content**. [2]



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FIDELITY

The **three categories of fidelity** in these processes are:

- Low Fidelity
- Mid Fidelity
- High Fidelity

Testing should take place from the earliest, most low-fidelity wireframe to the high-fidelity prototype.

Engaging in this process should result in a **strong, well-rounded product** that **delivers value to your users**. [1]



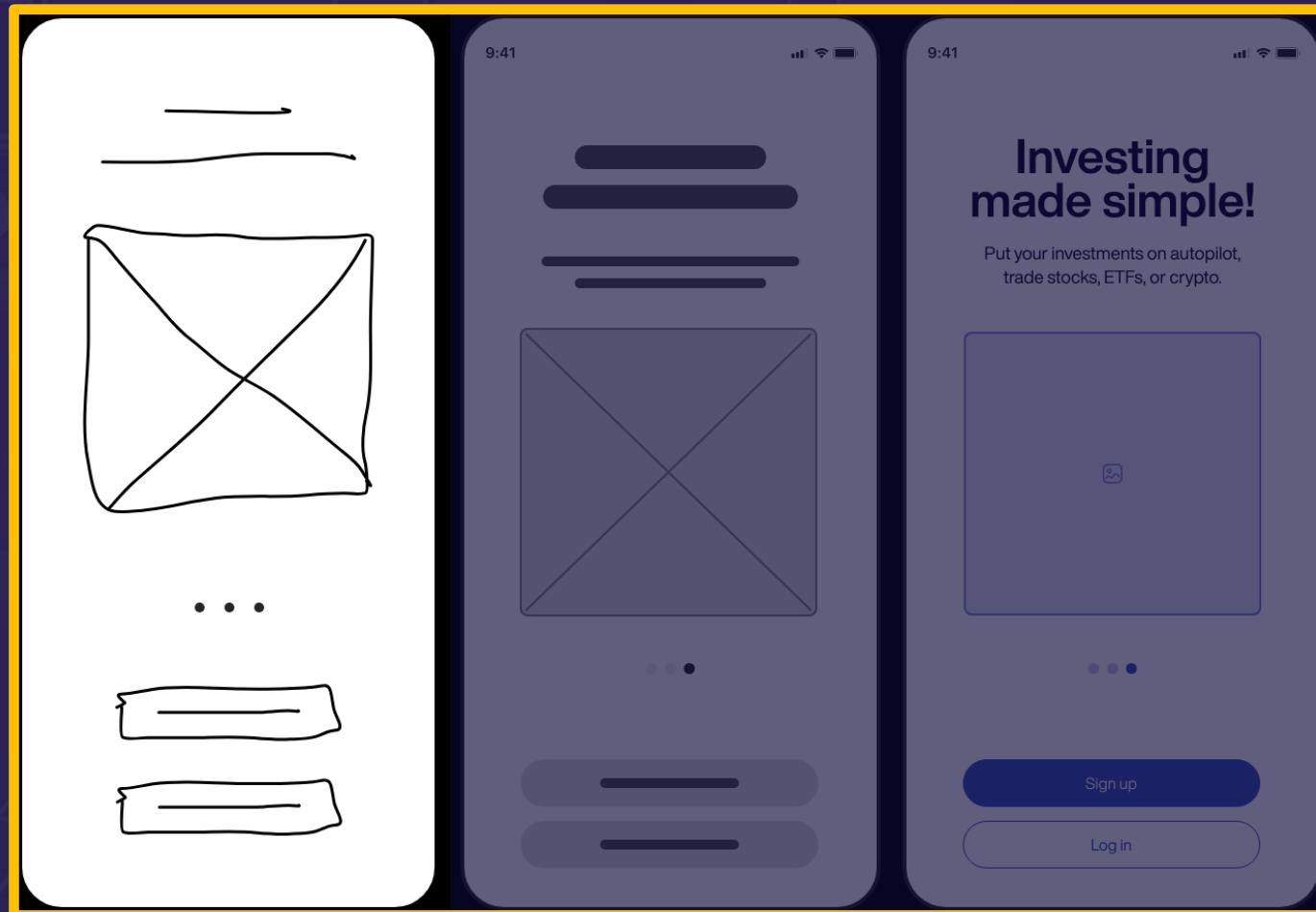
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FIDELITY

Low-fidelity wireframes or prototypes are **rough visual representations**.

This is usually what the designer starts with. These are simple and **don't usually consider scale, grid or pixel accuracy**. [2]



LOW FIDELITY



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FIDELITY

Low fidelity plans are often **hand-drawn** and **don't include actual content**.

Instead of images or text, they'll often have boxes with an X through them, basic labels or scribbles instead of actual text or pictures.

They also **don't include typography** or **colour**. [2]



LOW FIDELITY



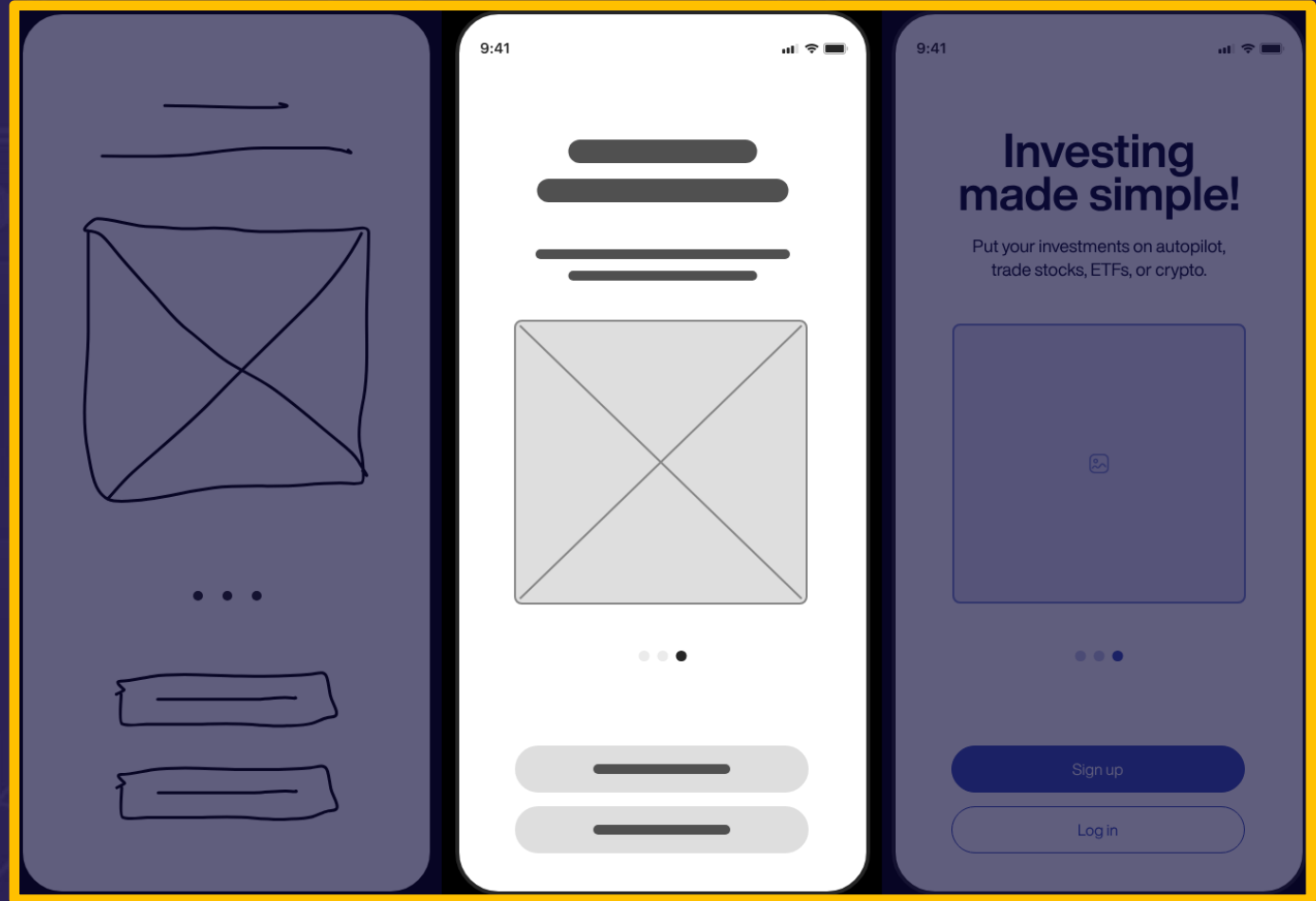
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FIDELITY

Mid-fidelity (sometimes called medium fidelity) wireframes or prototypes provide **more precise representations of the layout**. These still don't include images, typography or detailed content.

More detail and attention are dedicated to showing specific components and features clearly. [2]



MID FIDELITY



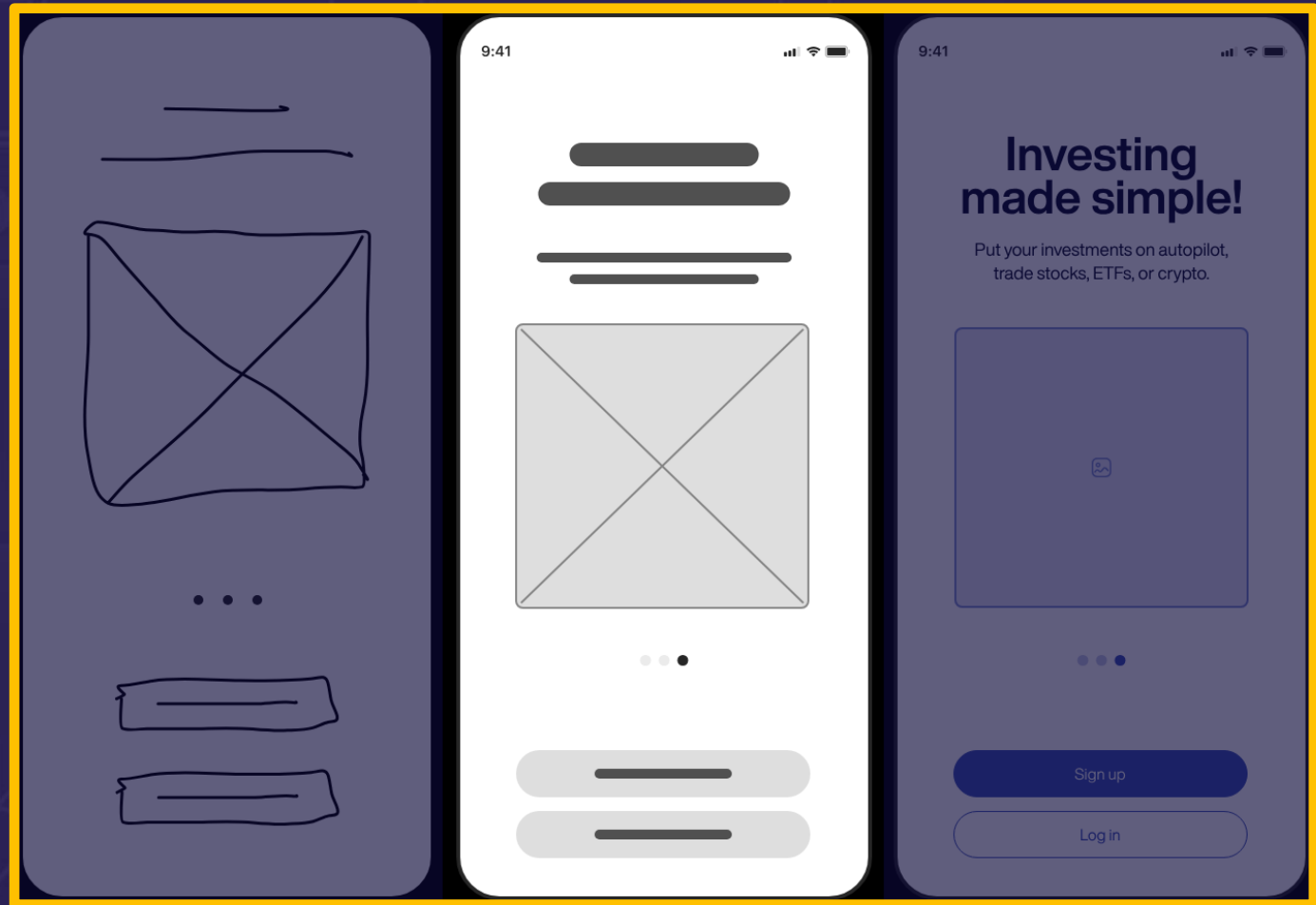
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FIDELITY

Mid-fidelity wireframes are still in black and white but designers will often use **different shades of grey** and **different font weights** to convey visual differences.

This wireframe phase is usually created with a **digital design tool**. [2]



MID FIDELITY



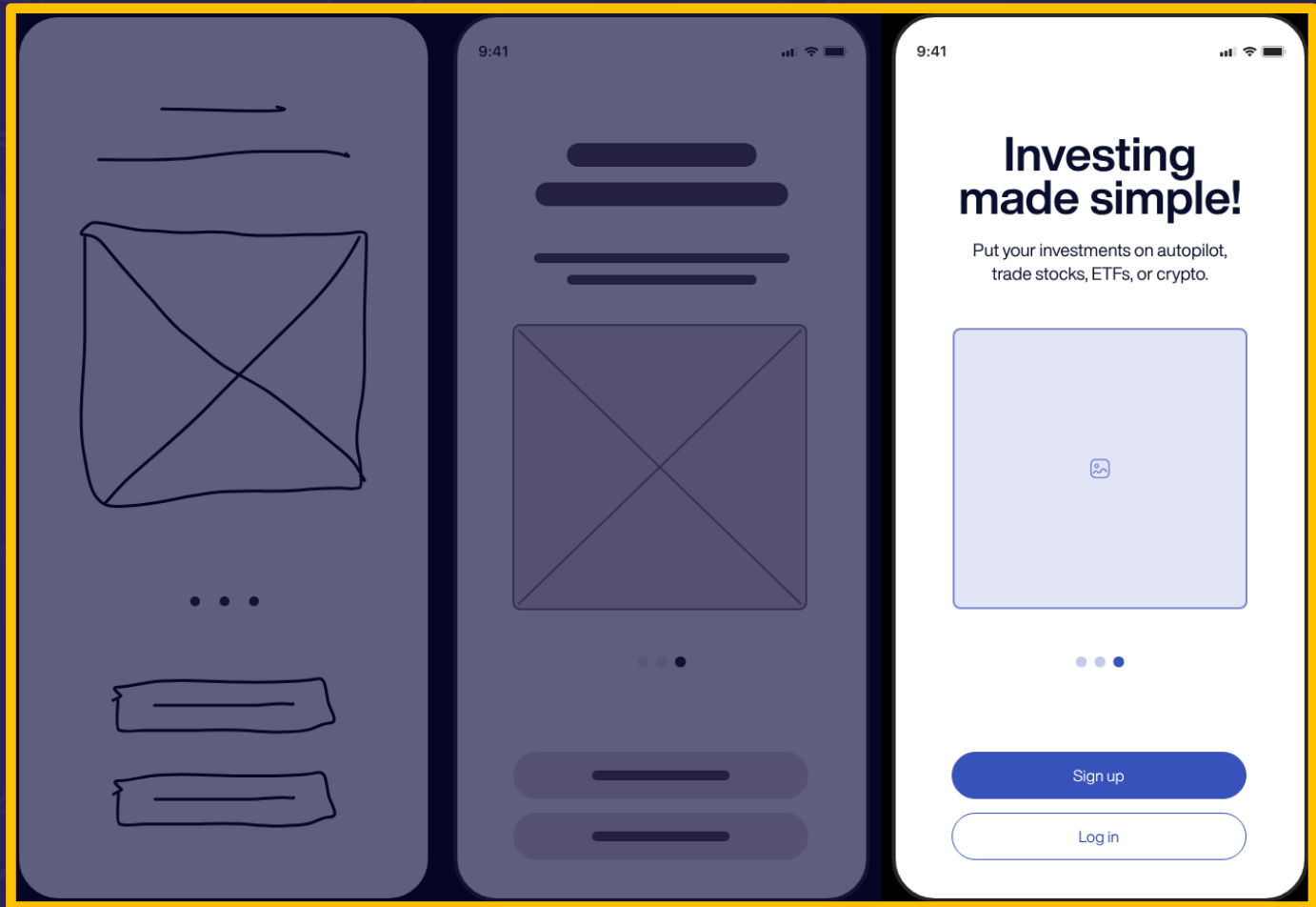
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FIDELITY

High-fidelity wireframes have pixel-specific layouts that are **designed to scale**. These wireframes are often presented as initial **prototypes**.

A high-fidelity wireframe will usually have **actual images** and **written content that is proposed to appear** in later iterations of the app or webpage. [2]



HIGH FIDELITY



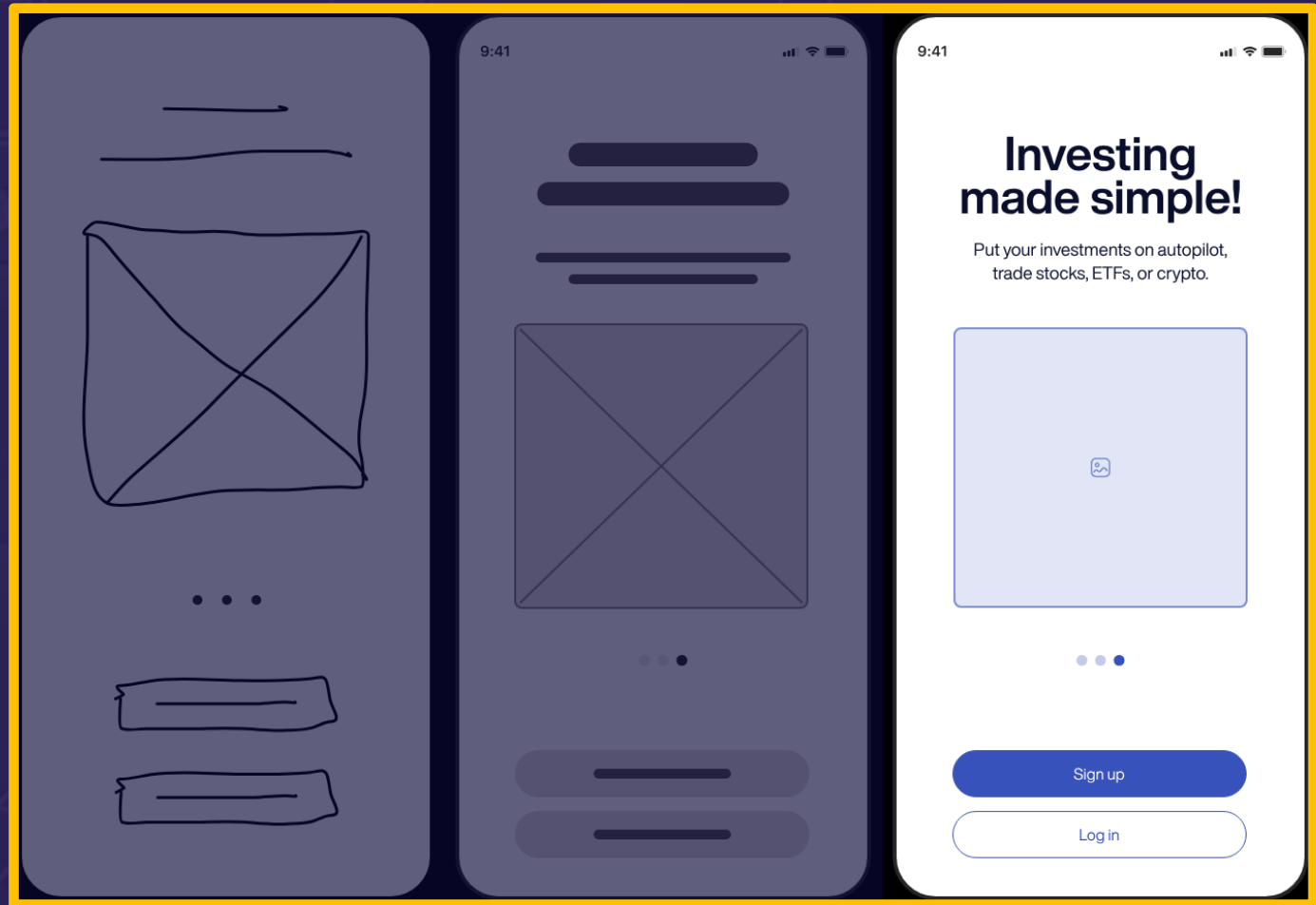
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FIDELITY

High-fidelity wireframes are **created using a digital tool**.

They feature **actual typography, detailed features** and **menu systems**. [2]



HIGH FIDELITY



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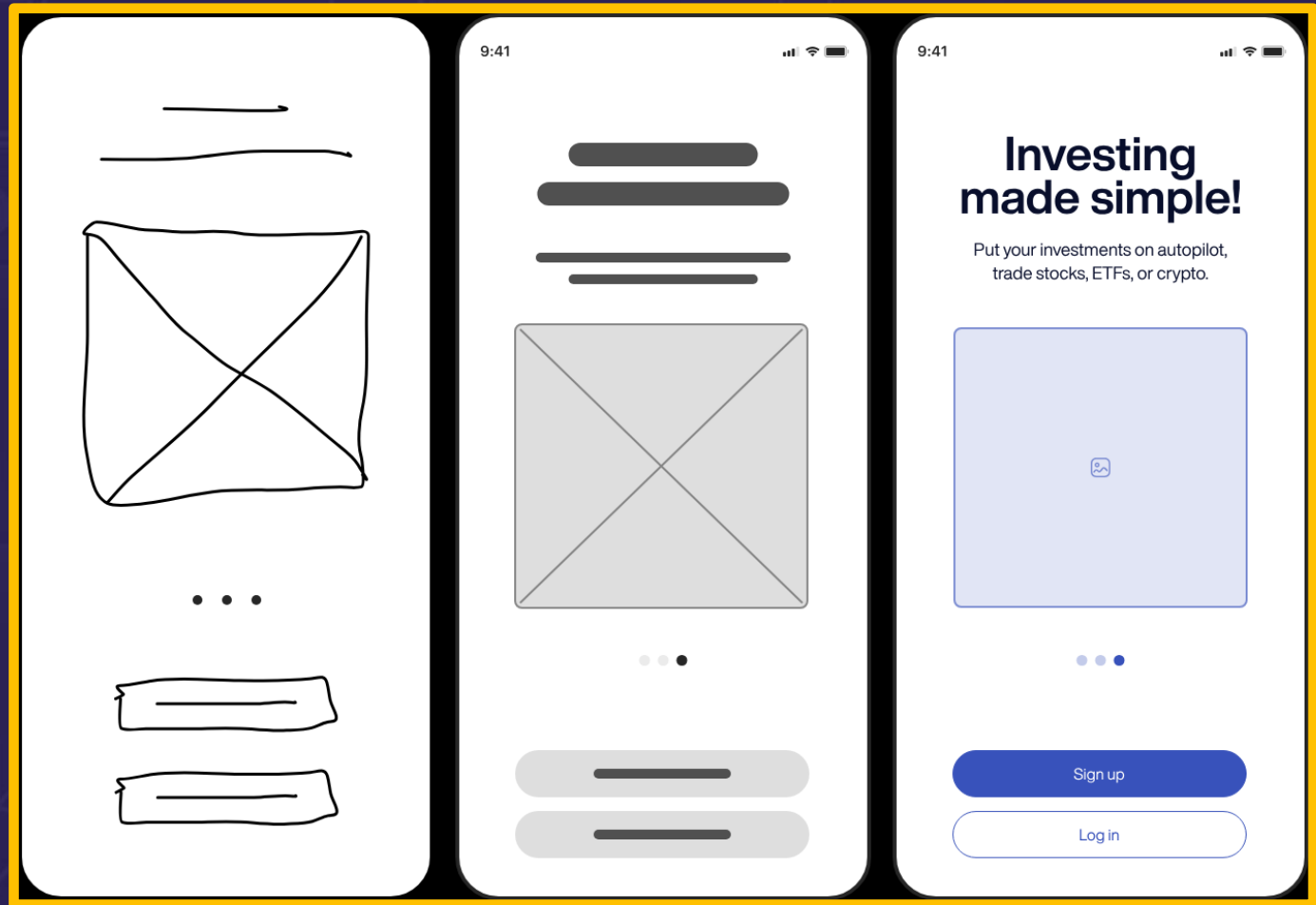
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FIDELITY

Although the fidelity of Wireframes, Prototypes and Mockups is most commonly understood as the main distinction between them, **they are fundamentally different.**

Each step contains **unique characteristics** in terms of their design and function in the UX design process.

[1]



LOW

MID

HIGH



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Wireframing, Prototypes and Mockups

Wireframes

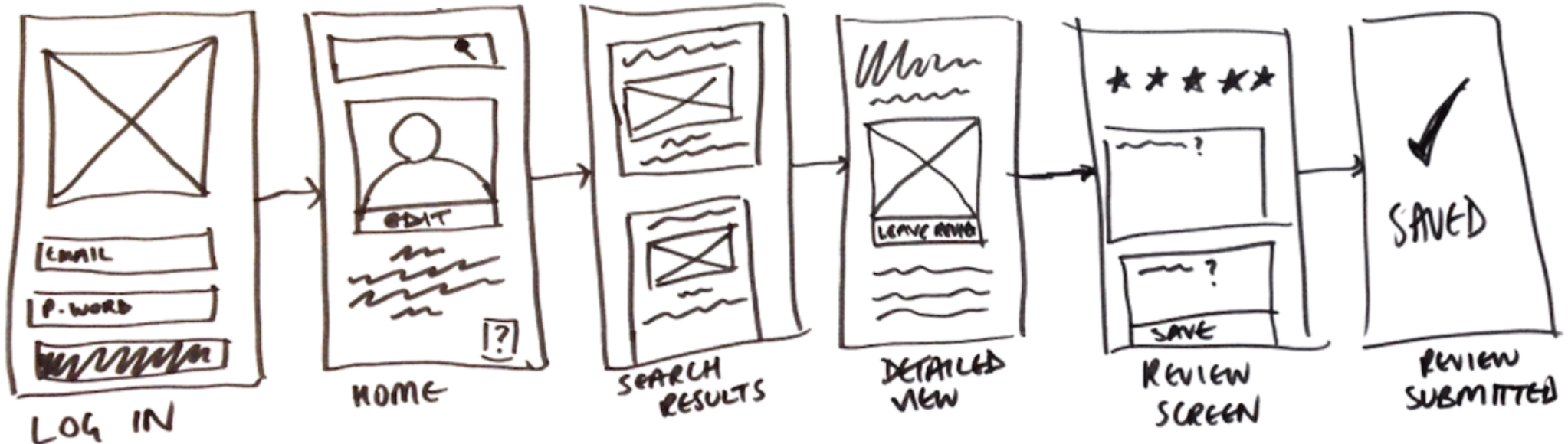


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WIREFRAMING

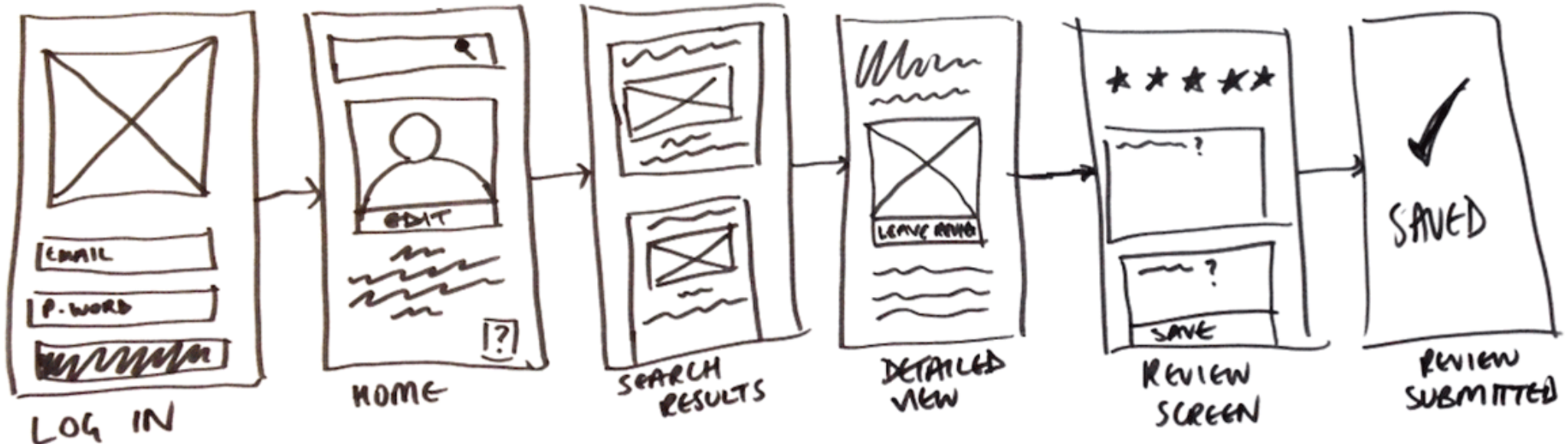
Wireframing is a practice most commonly used by UX designers. This process allows the design team to **agree on where the information will be placed** before the developers build the interface with assets and code. [3]





WIREFRAMING

A wireframe is a **two-dimensional skeletal outline** of a webpage or app and provide a clear overview of the **page structure, layout, information architecture, user flow, functionality, and intended behaviours**. [3]





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WIREFRAMING

Styling, color, graphics, and **other design elements are kept to a minimum**. [1] Most wireframes are created in **shades of grey** to represent colours. They can be **drawn by hand** or **created digitally**, depending on how much detail is required. [2]

A wireframe depicts the **“bare bones”** of a website or app, focusing on the **layout and positioning of different elements** on the screen. [4]



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WIREFRAMING

Example:

A wireframe for a mobile app login screen would map out the position of:

- The company logo
- Any text on the screen
- The field where the user would enter their login details
- Any buttons a user could click

Each of the above elements would be represented by a **simple, static shape**. [4]



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WIREFRAMING

Wireframing generally occurs **during the exploratory design phase of the product life cycle**. This phase is where designers begin to understand the **product's scope**, **collaborate on ideas** and **nail down business requirements**.

The wireframe is usually **the first iteration** of a webpage or app. It's used as the **basis** for the rest of the product's design.

After the initial wireframe is created, it's usually presented to users to **gain user feedback**. Then, designers can make the next iteration of the product's design, another wireframe, the prototype or a mockup. [2]

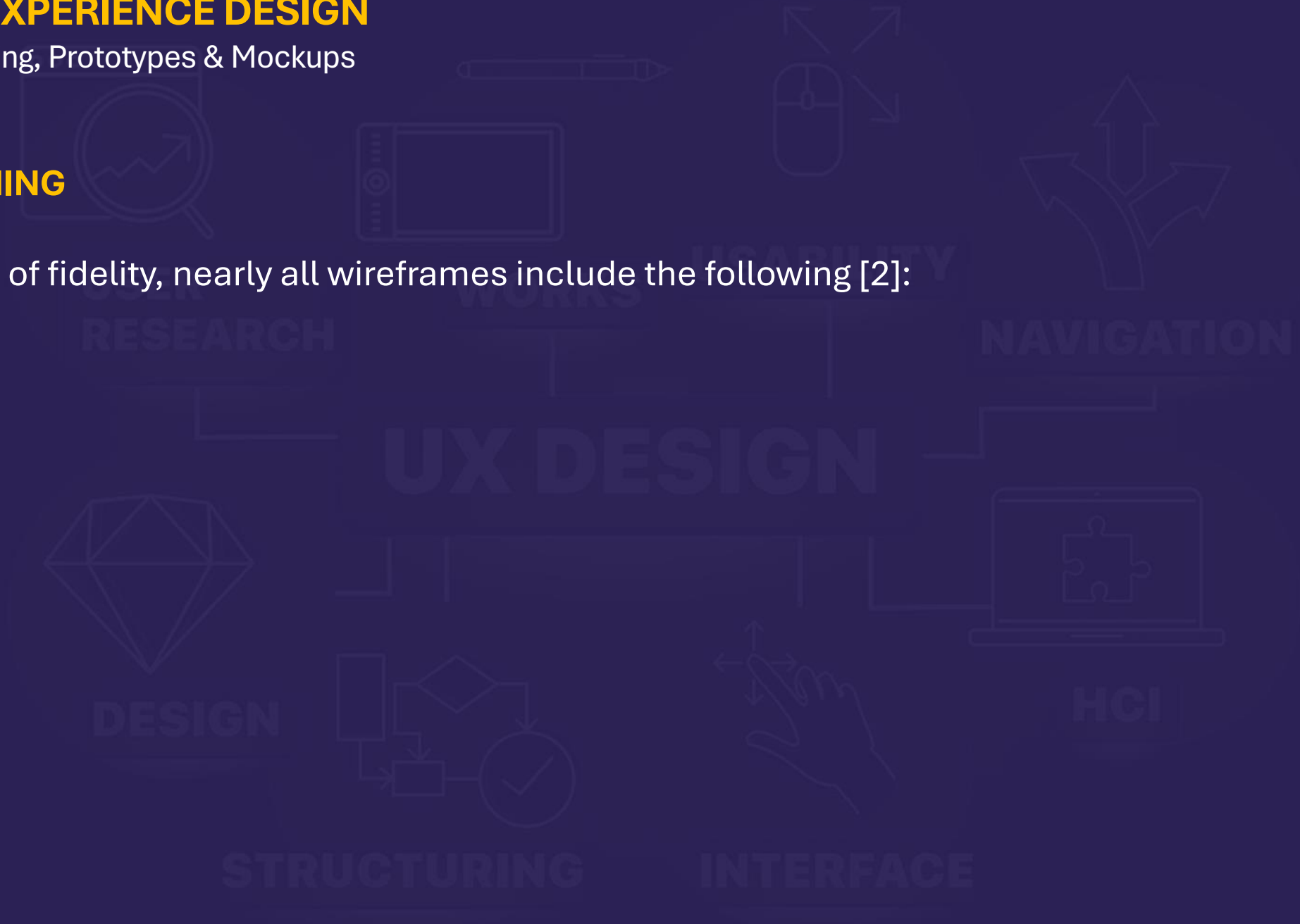


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WIREFRAMING

Regardless of fidelity, nearly all wireframes include the following [2]:





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WIREFRAMING

Regardless of fidelity, nearly all wireframes include the following [2]:

- **Placeholder text**
- **Headers**
- **Search fields**
- **Image placeholders**
- **Logos**
- **Share buttons and menus**



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WIREFRAMING

Some **benefits** of applying the wireframing process are [2]:

- Wireframing **saves time** in development because developers won't have to re-do their work if the functional prototype isn't to the designer's liking. It also **saves money** because companies won't have to pay for as many design phases.
- Wireframing helps designers **see if the ideas they have in their heads translate well into real life**. They are sometimes presented in user testing to determine whether they'll work for the final prototype.
- Wireframes also help designers **keep users at the centre of their focus**, which leads to the best results.



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Wireframing, Prototypes & Mockups

WIREFRAMING

Potential **downsides** of wireframing may include [2]:

- Wireframes **can feel complicated** to present to clients or non-technical team members. You may find yourself explaining that **wireframes aren't prototypes** more than once during your career!
- It can also be easy to get bogged down by your wireframes. You might **spend too much time designing them** or even over-designing them.
- **Changing your wireframes multiple times** can be tricky if you're hand drawing or using a complicated technical system.



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Wireframing, Prototypes and Mockups

Prototypes



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PROTOTYPES

The next step in the product design process after wireframing is **prototyping**. A prototype is a **working model of an app or a webpage**.

Prototyping allows designers to **test the user journey**, reflect on how the user might move between **different actions** or **tasks** to **achieve certain outcomes**, and pinpoint any potential issues with interaction flow.



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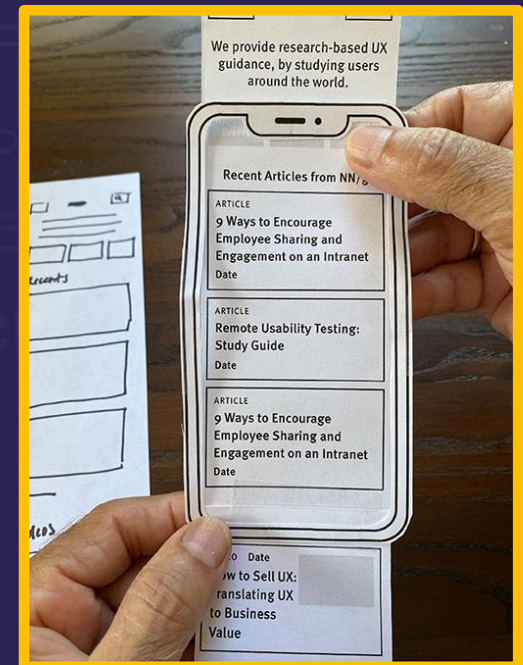
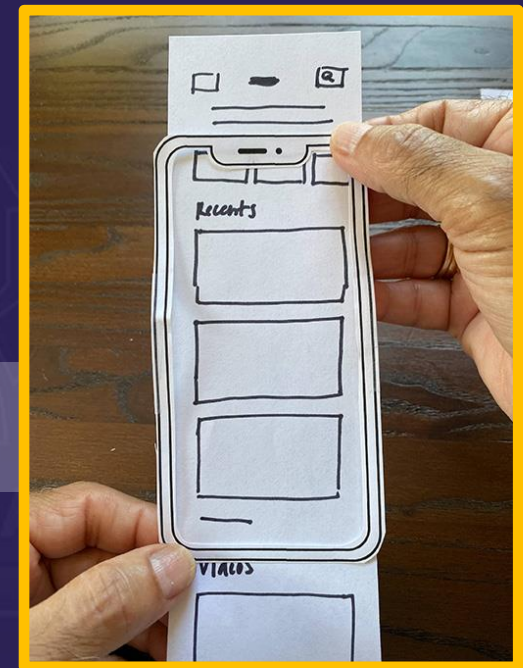
Wireframing, Prototypes & Mockups

PROTOTYPES

Similar to a wireframe, a **prototype can be low, medium or high-fidelity.**

Low-fidelity prototypes can either be static **paper sketches, digital drawings** or **webpages/content** that are interactive and clickable.

Low-fidelity prototypes are **vital for generating user feedback**, as they allow the user to **test the interaction flow** without a vast expenditure of time or resources.





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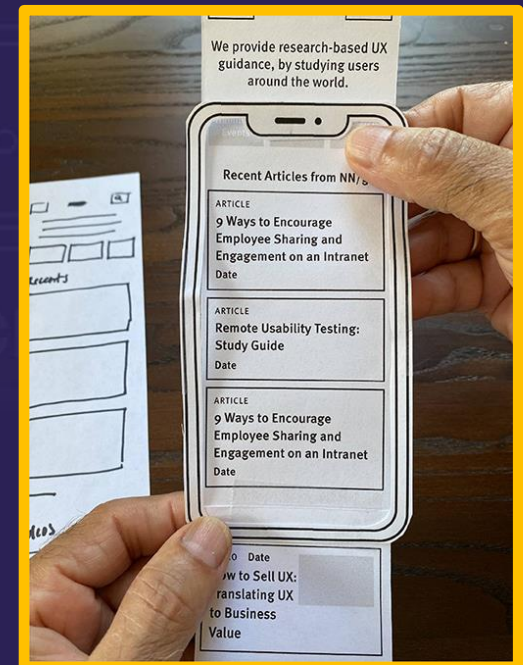
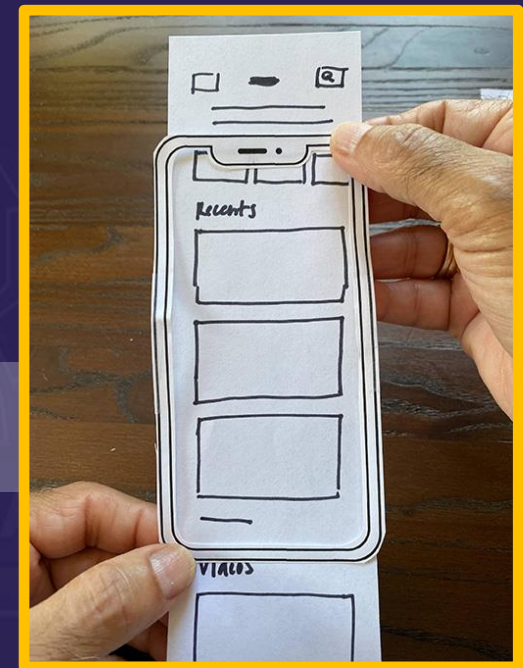
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PROTOTYPES

Similar to a wireframe, a **prototype** can be low, medium or high-fidelity.

Mid-fidelity prototypes can also be **inexpensive to create** (depending on the tools you choose), and don't require much design knowledge or experience.

This is a great approach to take if you're **short on time and/or just need to get an overview across screens** to be sure that the solutions you've designed actually work and don't overlook any key considerations.





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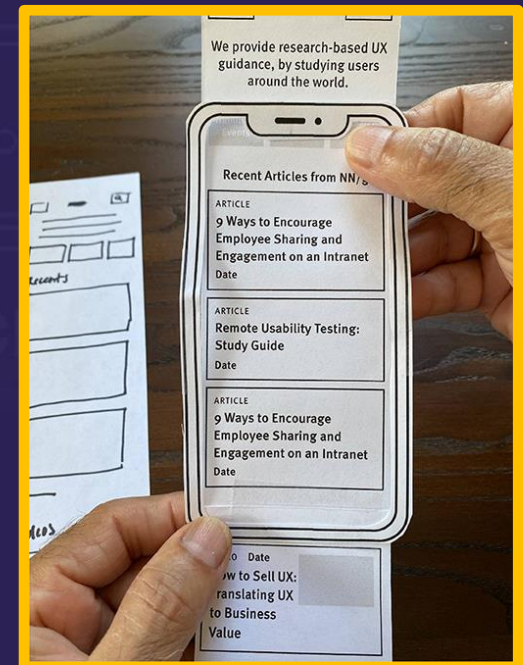
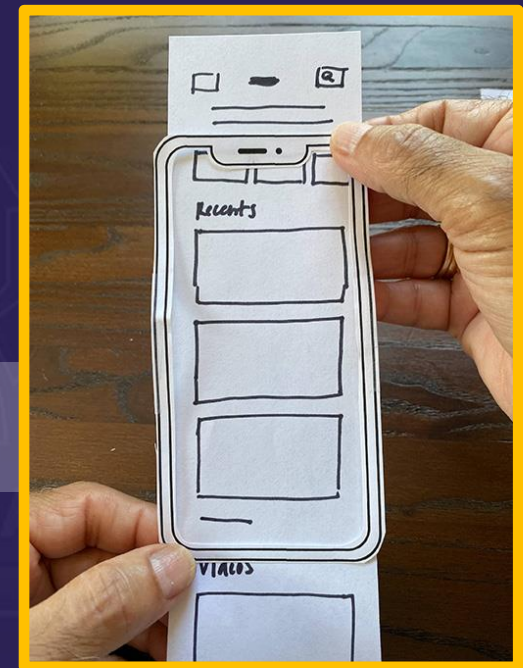
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PROTOTYPES

Similar to a wireframe, a **prototype** can be low, medium or high-fidelity.

Some of the most common low and mid-fidelity prototyping techniques include **paper prototyping** and **clickable wireframes**.

These methods are particularly useful **for iterating on initial design ideas**, and getting the designers and stakeholders aligned on basic design elements.





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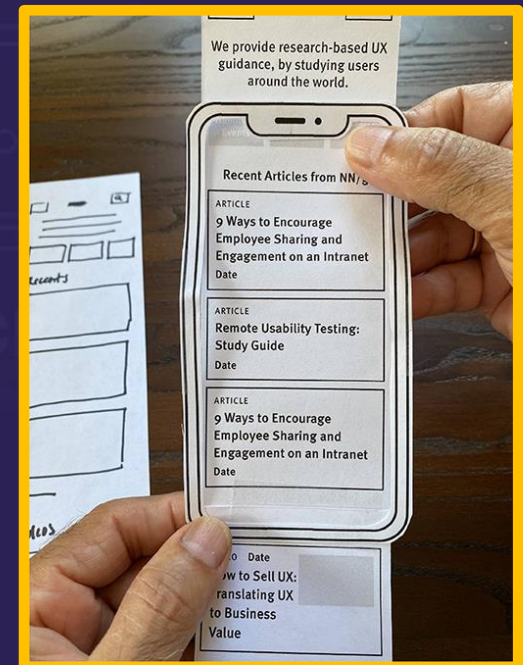
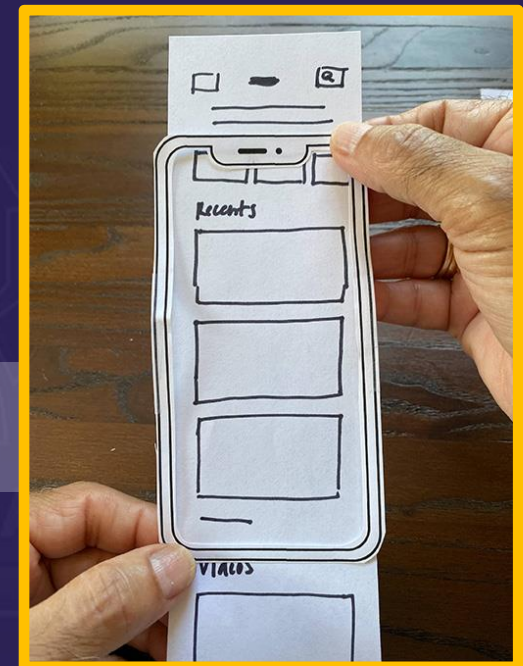
PROTOTYPES

Similar to a wireframe, a **prototype can be low, medium or high-fidelity.**

High-fidelity prototypes, on the other hand, will **include colour, text and other content**, and often take the form of **a fully functioning and coded website or app.**

A high-fidelity prototype is more likely to be used in the later stages of the design process.

Both low and high-fidelity prototypes are important processes when **refining a product's useability**, enabling a design team to gauge how the product might be used on a daily basis.





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Wireframing, Prototypes and Mockups

Mockups



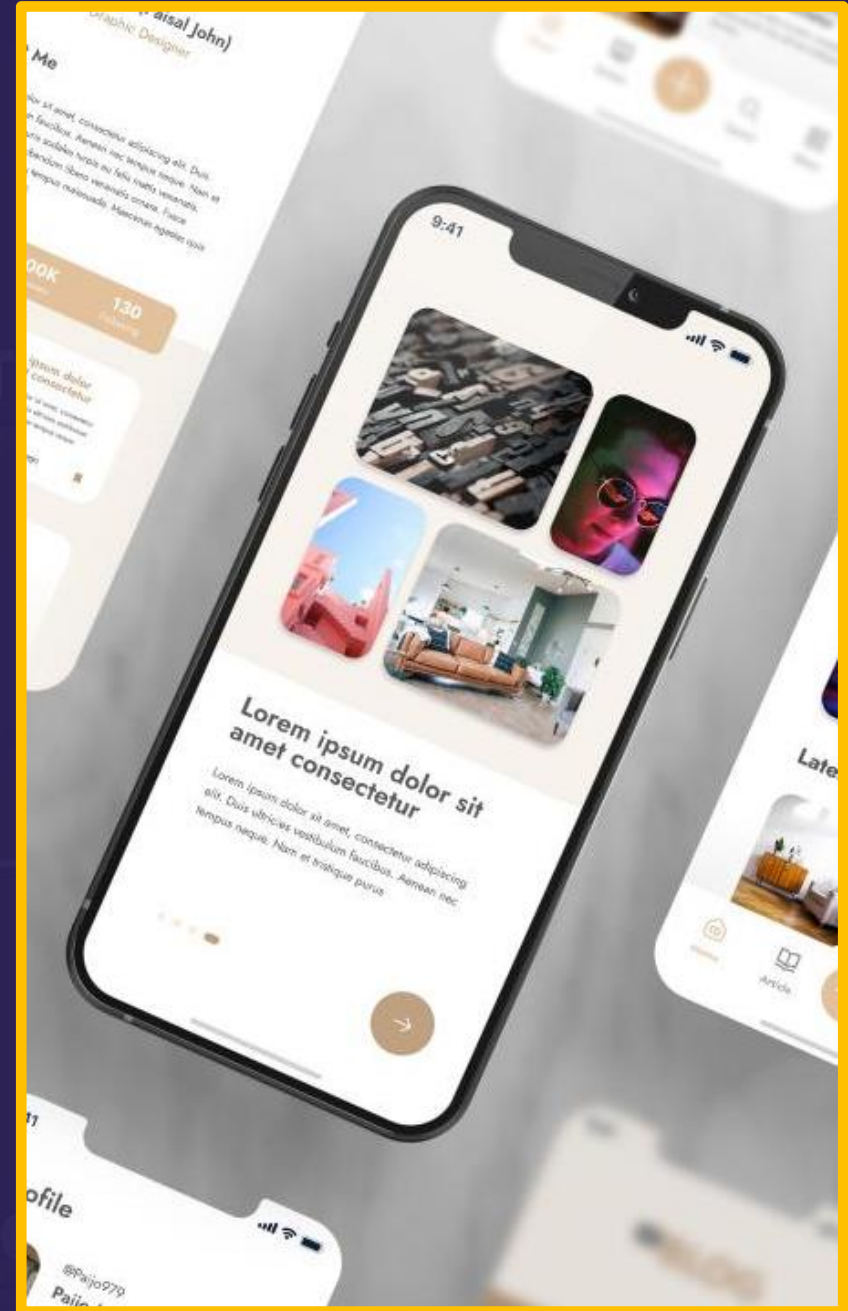
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MOCKUPS

A **mockup** is a **static, high-fidelity simulation** of the finished product that delivers the **visual look** of the product design [1].

This will likely include elements such as:





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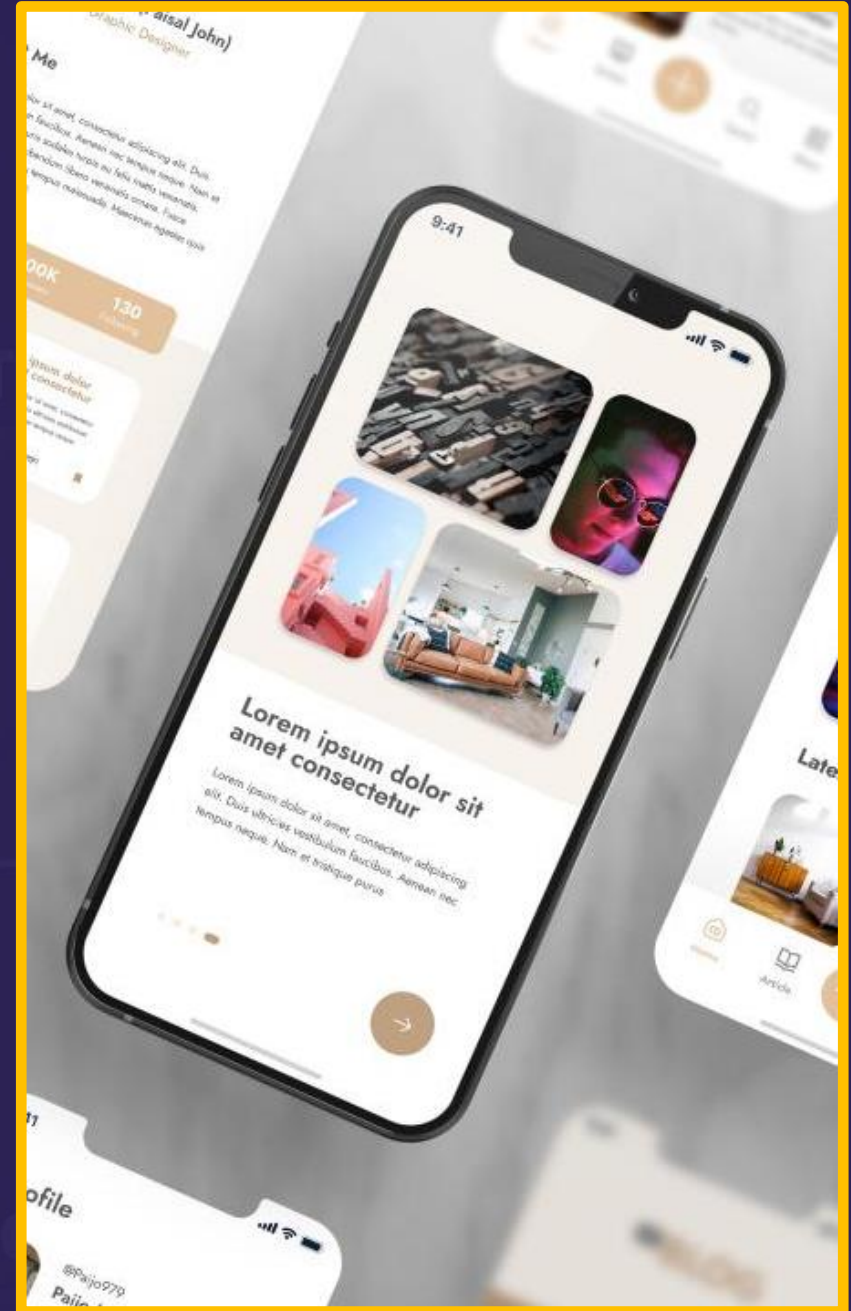
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MOCKUPS

A **mockup** is a **static, high-fidelity simulation** of the finished product that delivers the **visual look** of the product design [1].

This will likely include elements such as:

- **Typography**
- **Iconography**
- **Colour**
- **Overall style**





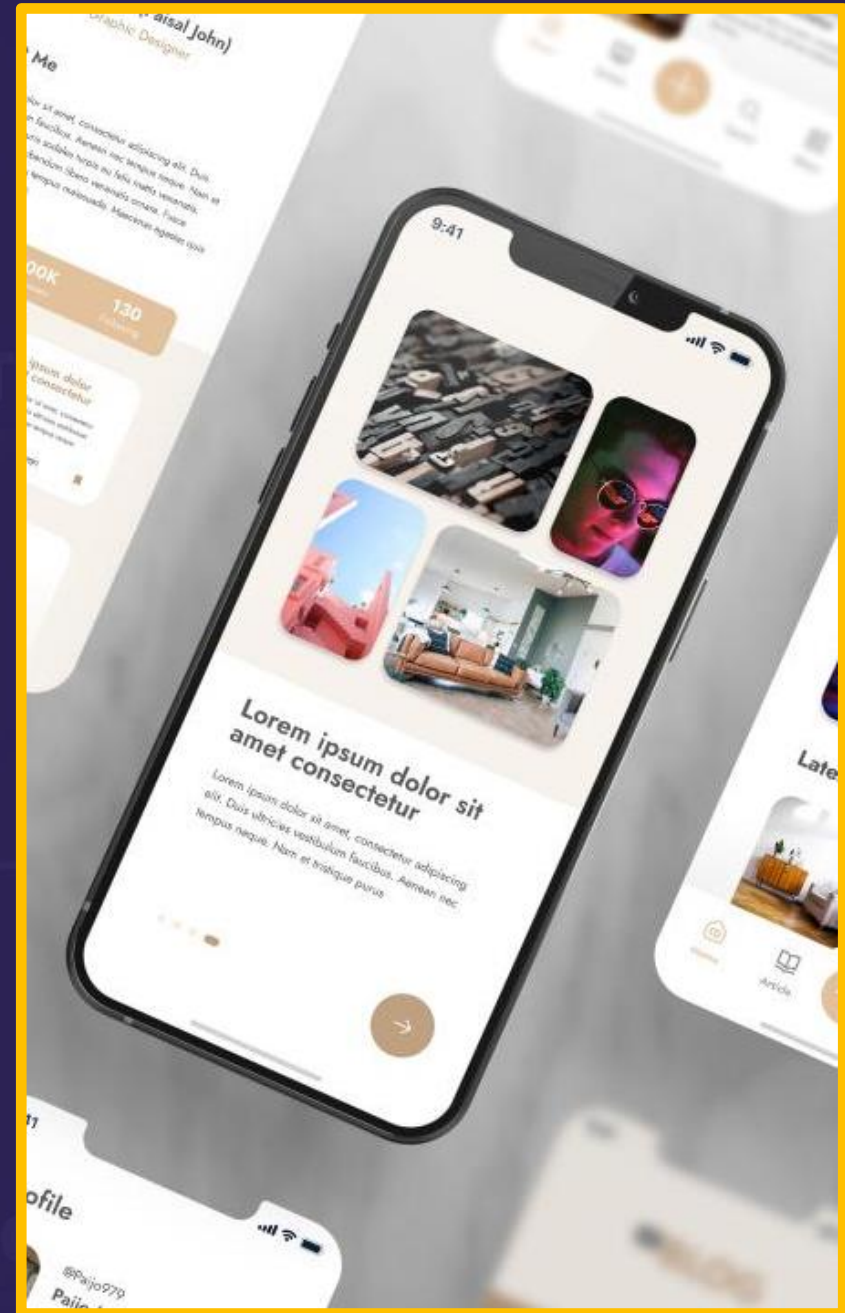
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MOCKUPS

Where a **prototype focuses on interaction design**, mockups establish how the users will interpret the brand through its **visual identity**.

During the mockup stage, UI designers also have the job of **creating stylistic continuity** between the desktop and mobile interfaces, if this needs to be considered [1].



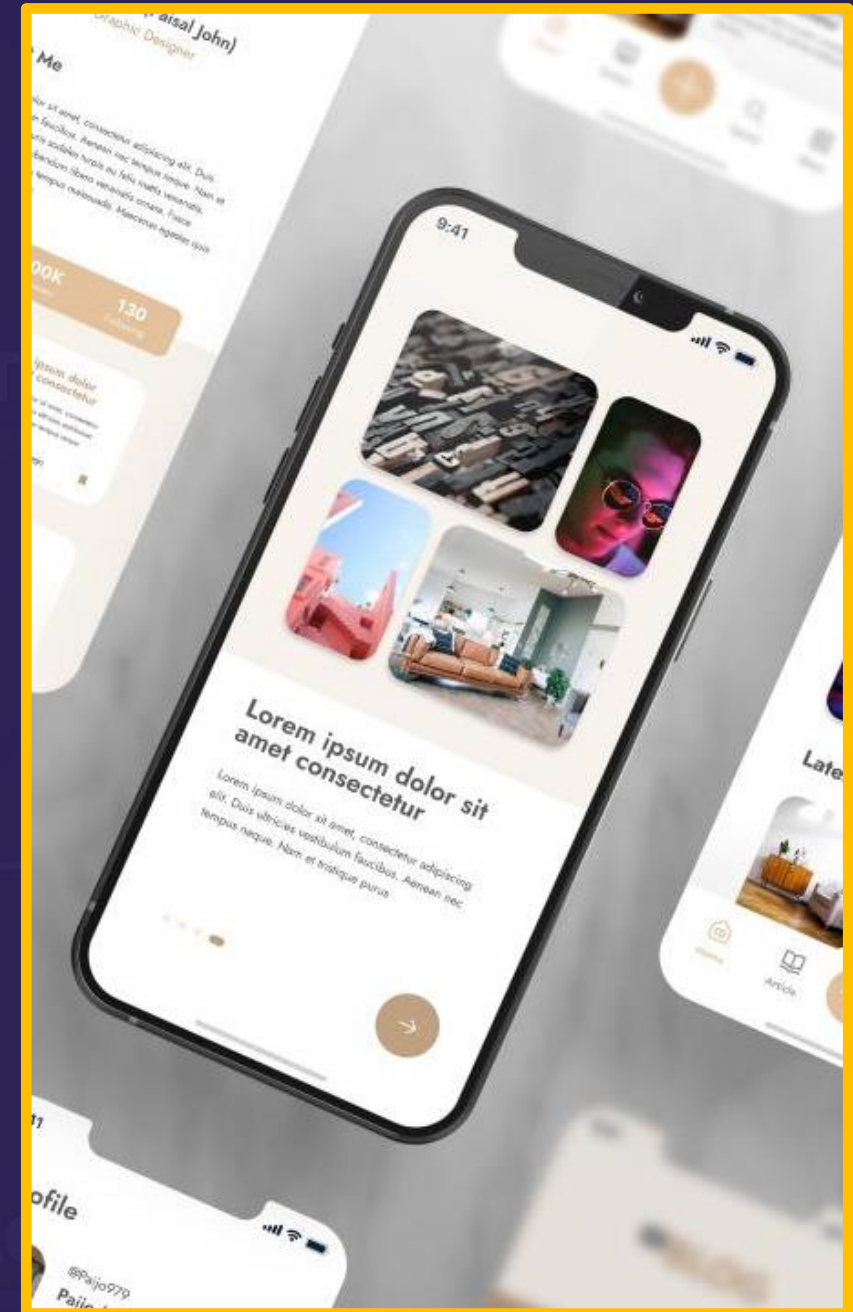


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MOCKUPS

At this stage the designers should have **answered a lot of the questions that arose in the wireframing and prototyping phases** of the product design process [1].





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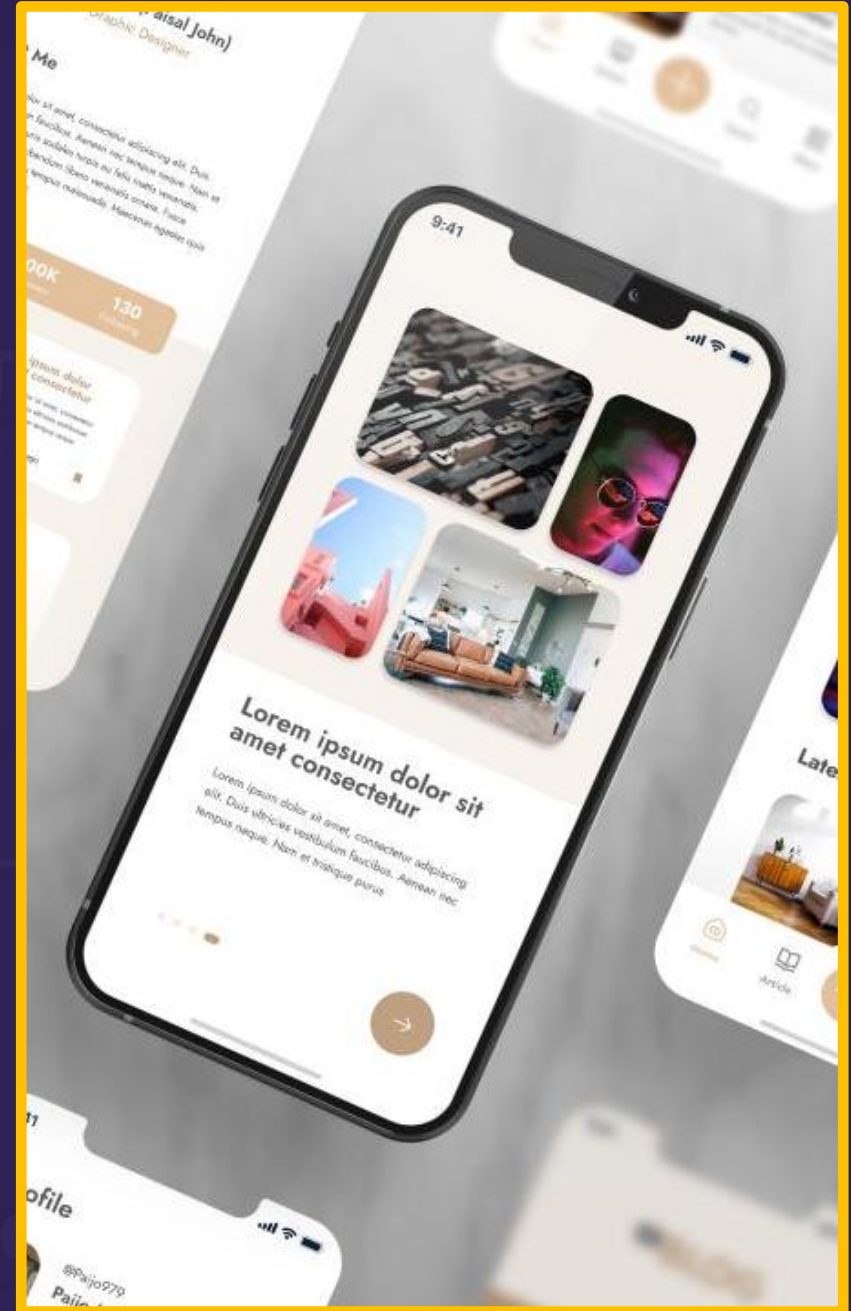
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MOCKUPS

Mockups offer a more **realistic perspective** to stakeholders and can help **reveal problems** that weren't so apparent in the wireframing and prototyping stages **such as colour clashes** or **typography issues**.

With a highly detailed construction of your product available to view, **users will not need to rely as much on their imaginations**.

This stage of development is the most effective way to explore your brand's **visual identity** before the design decisions are made permanent and **work can begin on the actual product**. [1]





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Wireframing, Prototypes and Mockups Summary



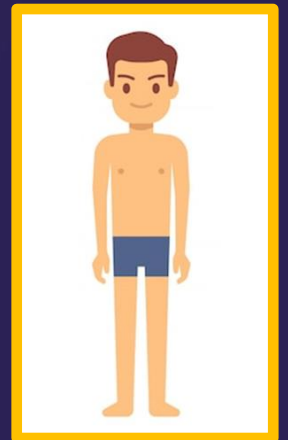
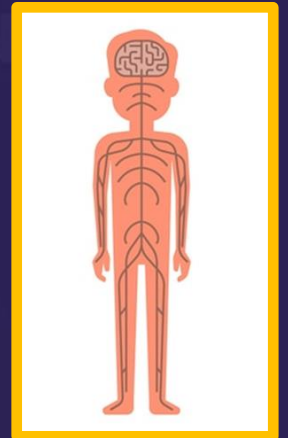
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Wireframing, Prototypes & Mockups

SUMMARY

There are a number of distinctions between **wireframes**, **prototypes** and **mockups**. These three processes may appear similar but are not the same.

A lot of the characteristics of these three design stages **complement each other** and because of this it is **good practice to incorporate all three** into the design process, rather than favouring one over the other. [1]





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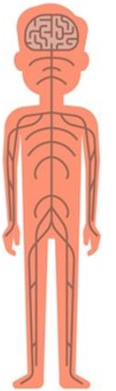
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SUMMARY

Always remember that it is important to **generate user feedback** as early on in the design process as possible.

Doing so means you can experience the **maximum amount of learning** and **meaningful development** while using the minimum **amount of resources**.

In this sense, these stages are very similar to those adopted for testing in games development.





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Wireframing, Prototypes & Mockups

Wireframing, Prototypes and Mockups Bibliography



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