



Animation, transitions and interactivity

MAD9034

Major Project
User Flows | Ideation and
Design Concept Mockups

Major Project
Prototyping

Week 5 of 9

Major Project
Testing

Week 5 of 9

Major Project
Digital Wireframing |
**Working with Risks and
Unknowns**

Week 6 of 9

Major Project
Visual Design |
**Animations, Transitions
and Interactivity**

Week 7 of 9

Major Project
Final Testing

Week 8 of 9

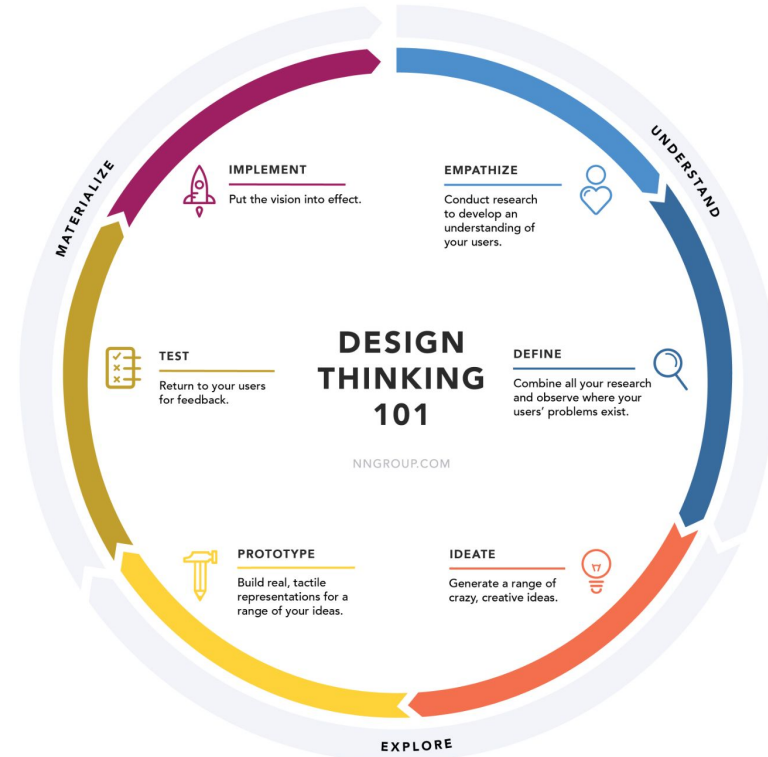
Major Project
Usability Testing Report |
Final Presentation

Week 8 of 9

UX Design Process

Prototype

- Empathize
- Define
- Design/Ideate
- **Prototype**
- Test
- Implement + Measure



Animation, transitions and interactivity

What are they?

- Animation?
- Transitions?
- Interactivity?

Animation, transitions and interactivity

What are they?

- **Animation?**

Animation (sometimes referred to as motion) is any element that moves on your screen. This can include:

- Moving from one place to another
- Fading, rotating, scaling, etc.

- Transitions?

- Interactivity?

Animation, transitions and interactivity

What are they?

- Animation?
- **Transitions?**

Transitions are the visual effects (or lack thereof) that occur between one state and another. This can include:

- Moving from one screen to another
 - Scrolling, loading content
 - Indicating selection, direction, or progress
-
- Interactivity?

Animation, transitions and interactivity

What are they?

- Animation?
- Transitions?
- **Interactivity?**

Interactivity is the user-initiated input or trigger that results in an action or outcome. This can include:

- Touch gestures (tap, hold, swipe, flick, pinch, etc.)
- Voice input, physical buttons, other device input methods...
- ... any action which causes a reaction from the app

Animation

Animation

Why do we use it?

- For orientation and navigation
- For feedback and status
- For education and guidance
- For character
- For mood

Animation

For orientation and navigation

Motion helps orient users by showing how elements are related to one another.

Motion reflects the relationship between the parent element (a calendar) and child elements (the appointments).



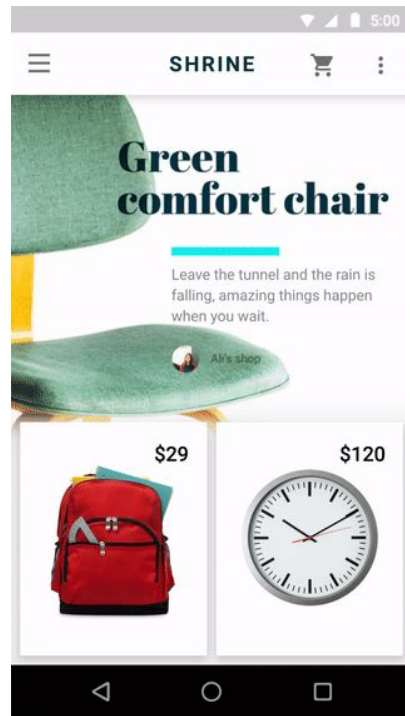
[Source](#)

Animation

For orientation and navigation

Animated navigation transitions use motion to guide users between two screens in your app.

They help users orient themselves by expressing your app's hierarchy, using movement to indicate how elements are related to one another.



[Source](#)

Animation

For orientation and navigation

Two versions of list-to-item animated transitions:

Simple
left-to-right
sliding
transition



More dynamic
transition with
selected item
expanding into
place



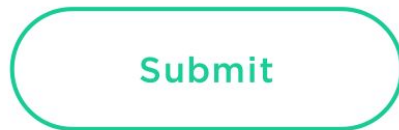
Animation

For feedback and status

Motion provides timely feedback and the st

Examples:

- Confirm keypad input
- Progress indicators



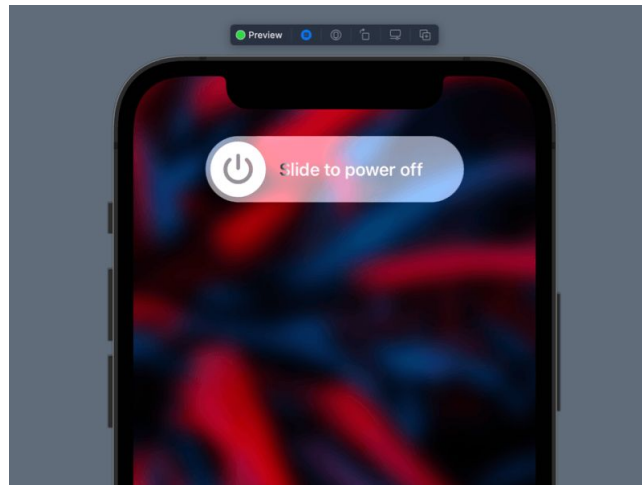
Animation

For education and guidance

Motion indicates how to perform actions and offers helpful suggestions.

Examples:

- Guidance for a specific action
- Animated intro of new feature



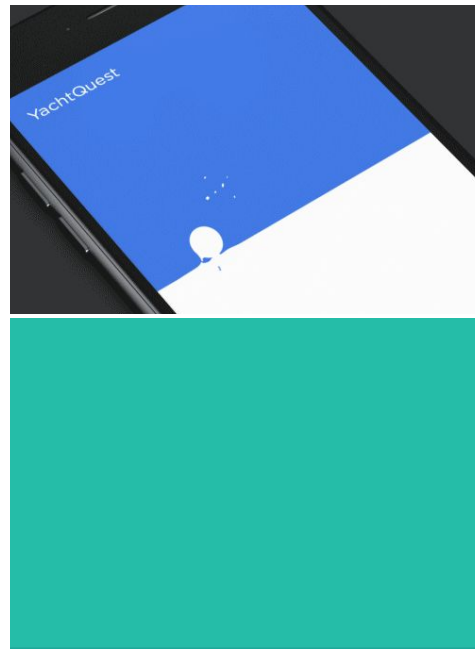
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Animation

For character

Motion adds character and appeal to interactions.

- Create a polished first impression
- Add a whimsical touch
- Reinforce brand



[Source](#)

Animation

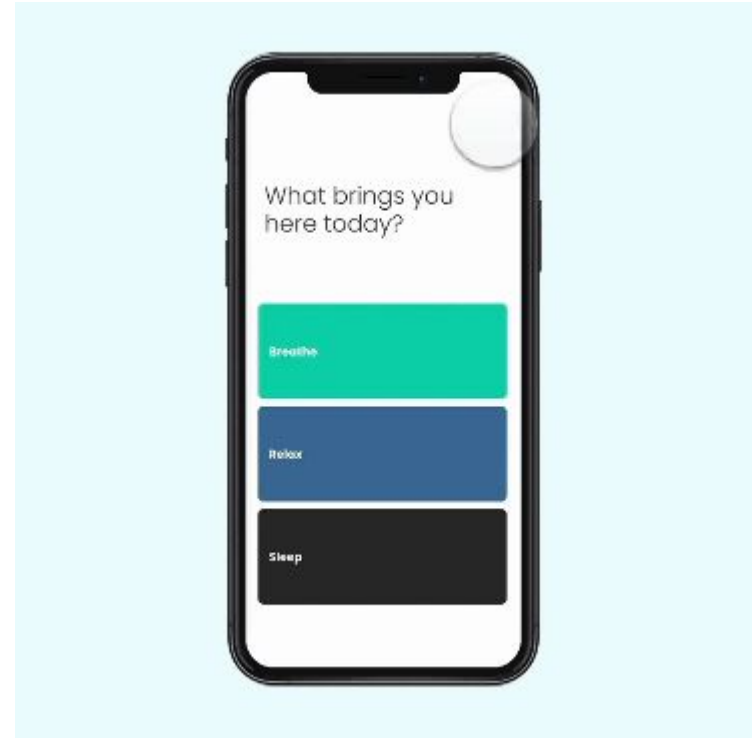
For Mood

Different animations can be used to create different moods or energy.

Example:

Meditation App

Uses slow, smooth animations to convey calm and peace.



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Putting joy on the roadmap



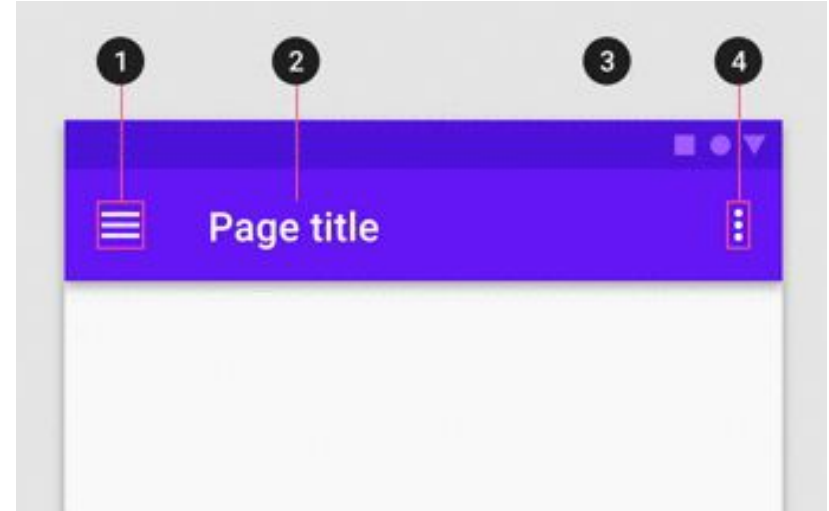
Transitions

Transitions

Anatomy of a transition

During a transition, UI elements that transform are categorized as persistent, outgoing, incoming, or static.

- ❶ Persistent
- ❷ Outgoing
- ❸ Incoming
- ❹ Static



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Transitions

Anatomy of a transition

1 Persistent element

A persistent element's transformation, such as a navigation icon, starts and ends on screen.

2 Outgoing element

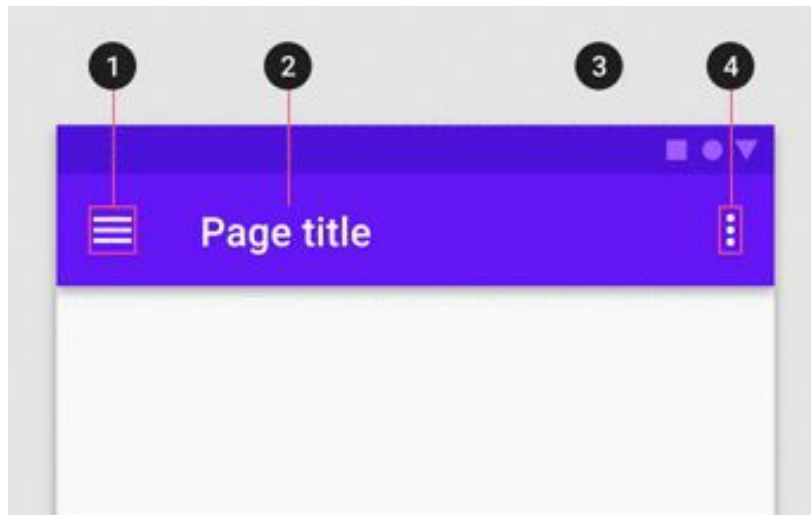
An outgoing element, such as a title, exits the screen by fading out.

3 Incoming element

An incoming element, such as each of these action items, enters the screen by fading in.

4 Static element

Static elements (ex. overflow menu) don't transform.



[Source](#)

Transitions

Transition Patterns

Transitions are short animations that connect individual elements or full-screen views of an app. They help users understand how an app works. Well-designed transitions make an experience feel high quality and expressive.

These are six common transition patterns:

- ❶ Container transform
- ❷ Forward and backward
- ❸ Lateral
- ❹ Top level
- ❺ Enter and exit
- ❻ Skeleton loaders



[Source](#)

Transitions

Figma



Interactivity

Interactivity

Touch gestures, and other input methods

Apps rely on various degrees of interactivity to allow users to complete tasks.

Minimally-interactive apps include passive, or primarily read-only apps.

Ex. Passive apps that monitor/track behaviour or activity

Primarily read-only apps that display content like Wallet

Highly-interactive apps include games, or anything where users create or manipulate content

Ex. Any game, note-taking apps, messaging, camera, etc

Interactivity

Touch gestures, and other input methods

Types of gestures

NAVIGATIONAL GESTURES

help users to move through a product easily

- Tap
- Scroll and pan
- Drag
- Swipe
- Pinch

ACTION GESTURES

perform actions or provide shortcuts for completing actions

- Tap
- Long press
- Swipe

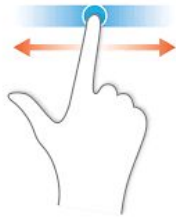
TRANSFORM GESTURES

transform an element's size, position, and rotation

- Double tap
- Pinch
- Compound gestures
- Pick up and move

Interactivity

Touch gestures, and other input methods



SWIPE



TAP



PAN



ROTATE



PINCH



ZOOM



SCROLL



LONG PRESS



**TWO FINGER
SCROLL**

Interactivity

Touch gestures, and other input methods

Gestures should:

- **Provide realistic responses**

Material responds to gestures in real-time to express direct user control over touch interactions. (e.g. pinch to zoom)

- **Indicate gestures**

How elements look and behave should indicate if gestures can be performed on them.

- **Show what gestures do**

As a user performs a gesture, elements should move in a way that demonstrates the gesture's purpose.

Interactivity

Touch gestures, and other input methods

Other input methods:

- Voice
- Position
- Location
- Proximity (Sensor)

Micro-interactions

Micro-interactions

What are they?

Micro-interactions are small moments where the user and design interact.

Examples:

- Pull to refresh (feeds)
- 'Typing' indicator in a chat window
- Swipe to dismiss

Micro-interactions

What are they?

Micro-interactions can help:

- Encourage behaviours/actions
- Reward behaviours/actions
- Provide continuity between steps
- Make interactions predictable
- Provide additional information about an interaction
- Add emotion or delight to your product

Micro-interactions

What are they?

Micro-interactions are good for:

- accomplishing a single task
- connecting devices together
- interacting with a single piece of data such as the temperature
- controlling an ongoing process such as music volume
- adjusting a setting
- viewing or creating a small piece of content, like a status message
- turning a feature or function on or off

Interactive Prototypes

Interactive Prototypes

What are they?

REVIEW FROM WEEK 3:

A **prototype** (interactive visual mockups) is an early model or sample which is built for the purpose of testing and learning.

In the UX Design process, we **prototype** as an experiment to test out a hypothesis.

Interactive Prototypes

What are they?

SO... AN INTERACTIVE PROTOTYPE IS:

Interactive Prototypes

What are they?

SO... AN INTERACTIVE PROTOTYPE IS:

... a model or sample of your product, that allows users to **directly interact with the product, manipulate the content, and complete tasks.**

Interactive Prototypes

Why do we create them?

Interactive prototypes (visual mockups) allow you to:

- Visualize the navigation between screens
- Observe direct user reaction to content
- Observe user response to components
- See how the concept 'feels' before building it
- Identify what is working, and what isn't
- Demonstrate exact intended behaviour to stakeholders

Interactive Prototypes

Why will you create one?

You will need to assemble your individual screens into an interactive prototype (visual mockups) to:

- Perform a final round of user testing
- Present as part of your final deliverable

Note:

There is no individual assignment to submit for the interactive visual mockups. It is required for user testing, and incorporated into the final project and presented at your final presentation.

Visual Design

Major project: Week 7 of 9

Today in class

Unstructured working session

- Continue with visual design
- Start on interactive prototype (introducing transitions and interactivity)
- Get feedback on your work

Notes

Important

For your Visual Design Deliverable you are required to complete 6 key screens.

But you **must convert your entire flow to Visual Design** (High fidelity) for Week 13-2 in order to conduct usability testing.

Coming up

Visual Design



Mandatory

Submit your visual design assignment