

# App Design Tutorial

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# Vorstellung

- Katharina Winkler
- 2013 - 2016: Master in Medieninformatik an der LMU München
- 2017 - 2018: Dozentin für das Praktikum Entwicklung von Mediensystemen
- seit 2016: Projektleitung bei Siemens AG



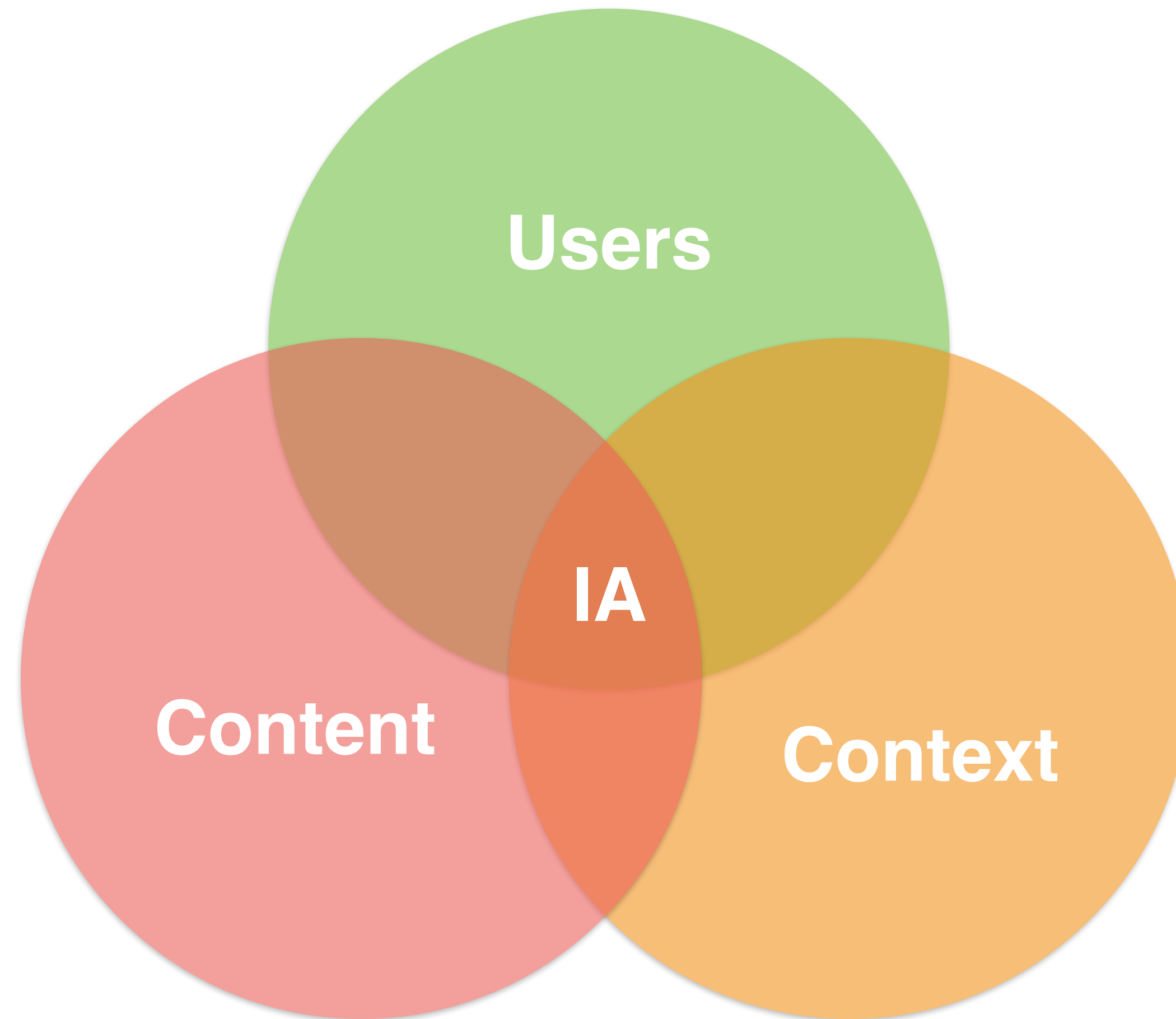
# Overview

- Information Architecture
- The eight principles of Information Architecture
- Design Guidelines
- Wireframes
- Usability Testing

# Information Architecture

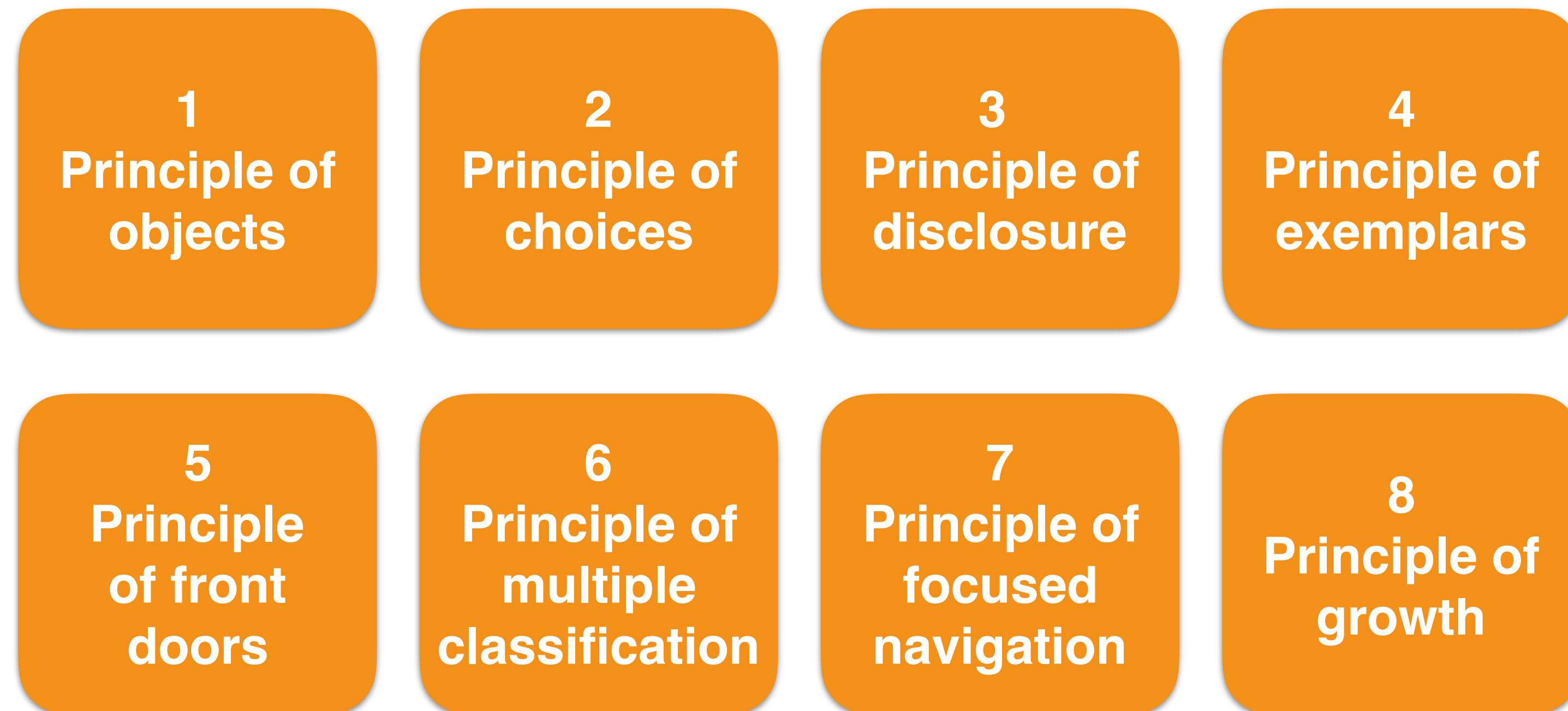


# What is Information Architecture?



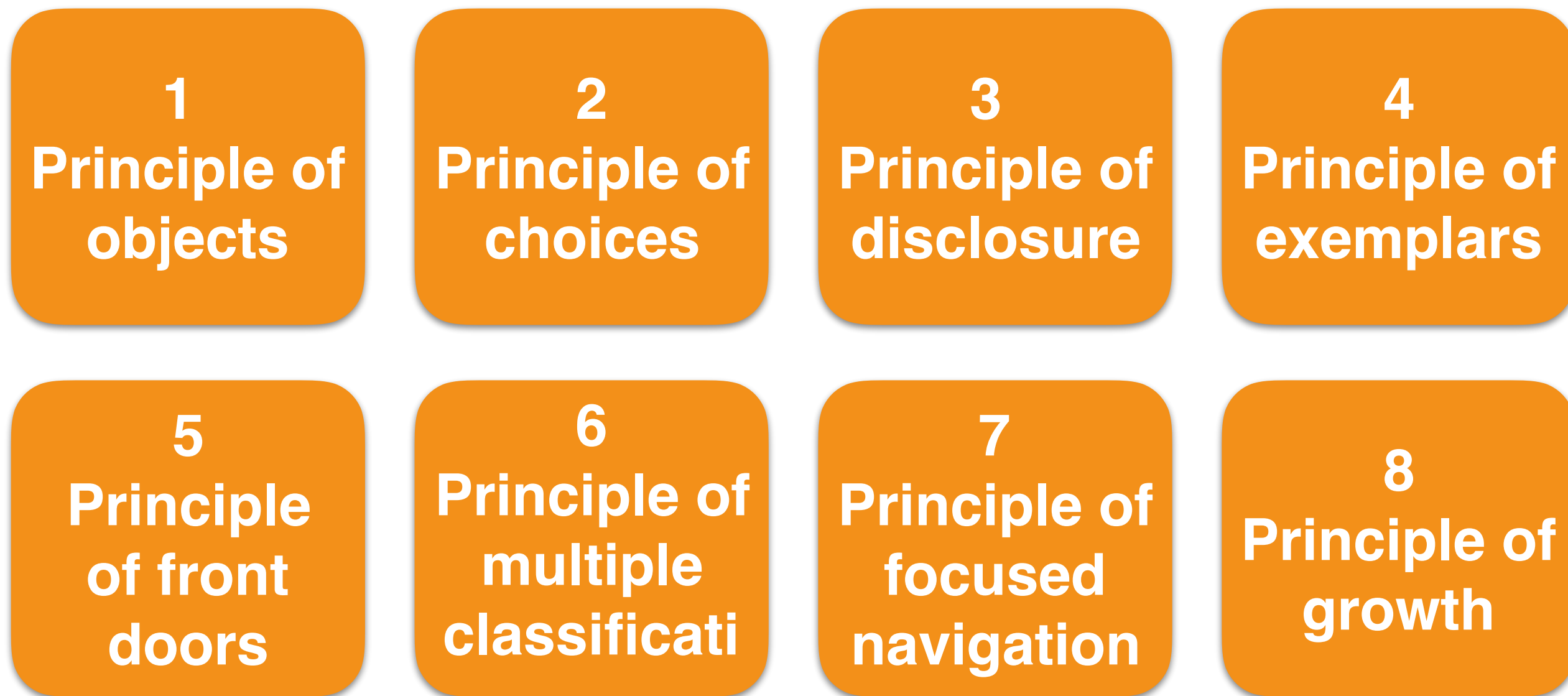
# **The eight principles of Information Architecture (by Dan Brown)**

# The eight principles of Information Architecture (by Dan Brown)



# Practical Part

## The eight principles of Information Architecture



## Groups Task

- For the group work you have **15 min** time
- Select 3 of the 8 principles. Find examples in your app (iOS or Android) where the principles can be applied. Discuss whether the principles have been implemented. What was implemented well? What could be improved?
- Prepare screenshots that will show the implementation of the principles.
- Define a group speaker who will present your results.

## Useful Resources

<https://www.designprinciplesftw.com/collections/eight-principles-of-information-architecture>

<https://theblog.adobe.com/a-beginners-guide-to-information-architecture-for-ux-designers/>



# Style Guide

# Before you start...



**Which operating  
system?**



**Phone and/or  
Tablet?**



**Which version?**

# Style Guide

## Android Guidelines

- <https://developer.android.com/design>
- <https://material.io/design/guidelines-overview>

## Apple Guidelines

- <https://developer.apple.com/design/human-interface-guidelines/>

# Wireframes

# Steps to the finished prototype



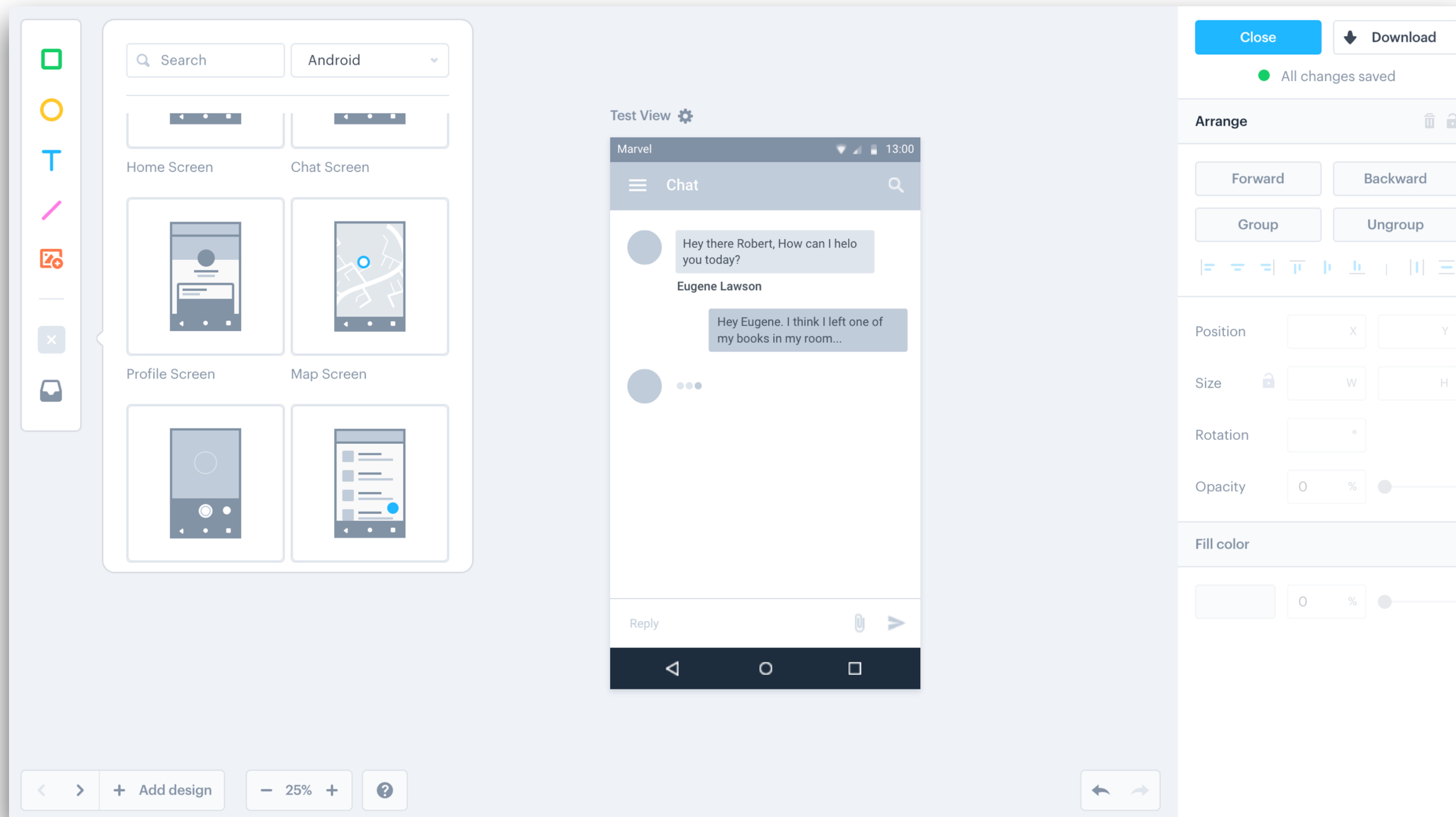
Conceptual level

Component level

Interactions level



# How to wireframe in Marvel

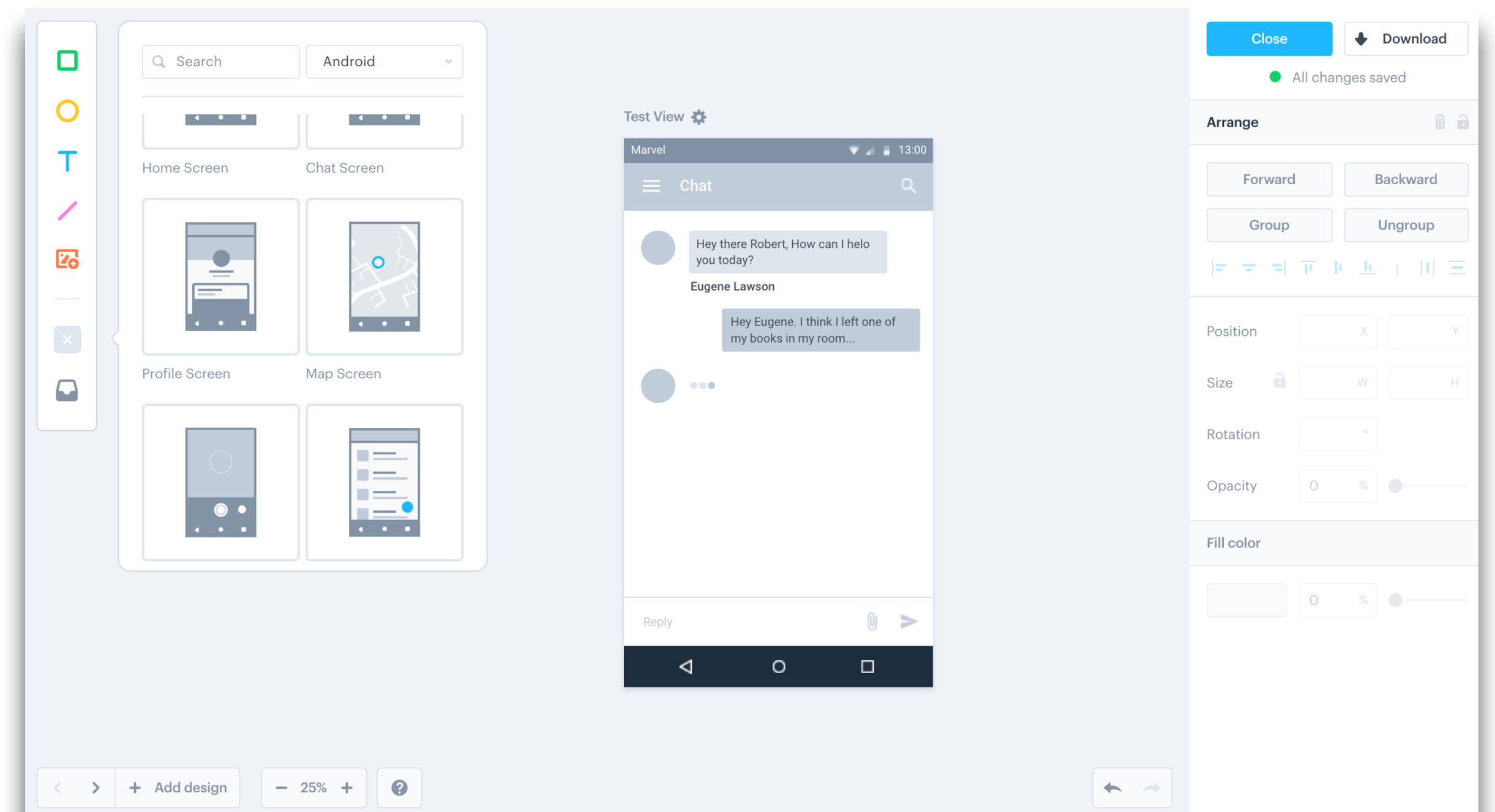


<https://marvelapp.com/>

# Practical Part

## Groups Task

- For the group work you have **30 min** time
- See „How to wireframe and design in Marvel“  
<https://help.marvelapp.com/hc/en-us/articles/360008947317--How-to-wireframe-and-design-in-Marvel>
- Perform the wireframing in the group with  
<https://marvelapp.com>
- Define a group speaker
- The group speaker presents your results after the group task



<https://marvelapp.com/>

# Testing

# Thinking Aloud Testing

*„In a thinking aloud test, you ask test participants to use the system while continuously thinking out loud — that is, simply verbalizing their thoughts as they move through the user interface.“ [31]*

# Thinking Aloud Testing

- Explain the test setting to the user and that he/she should thinking out loud
- Give the user a typical task in your software
- Observe the user behavior
- Document the user behavior.
- Afterwards: Evaluate the test results. What works well? What does not?
- Improve your app according to the test results



# Preparation for the next Lecture

**Prepare the following until the next lecture in groups.**

- Find five participants for a Thinking Aloud Test, close to the persona you made.
- Performed a Thinking Aloud Test with each participant and evaluate the findings.
- Improve your app according to the results.

# Resources and helpful Links

# Information Architecture

[1] <https://www.designprinciplesftw.com/collections/eight-principles-of-information-architecture>

[2] <https://theblog.adobe.com/a-beginners-guide-to-information-architecture-for-ux-designers/>

[3] <https://asistdl.onlinelibrary.wiley.com/doi/pdf/10.1002/bult.2010.1720360609>

# Style Guide

[11] <https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/>

[12] <https://developer.android.com/design>

[14] <https://developer.android.com/docs/quality-guidelines/tablet-app-quality>

# Wireframes

[20] <https://balsamiq.com/learn/articles/mobile-app-wireframing-guide/>

[21] <https://marvelapp.com>

[22] <https://help.marvelapp.com/hc/en-us/articles/360008947317--How-to-wireframe-and-design-in-Marvel>



# Testing

[30] <https://www.nngroup.com/articles/thinking-aloud-the-1-usability-tool/>

[31] <https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/>