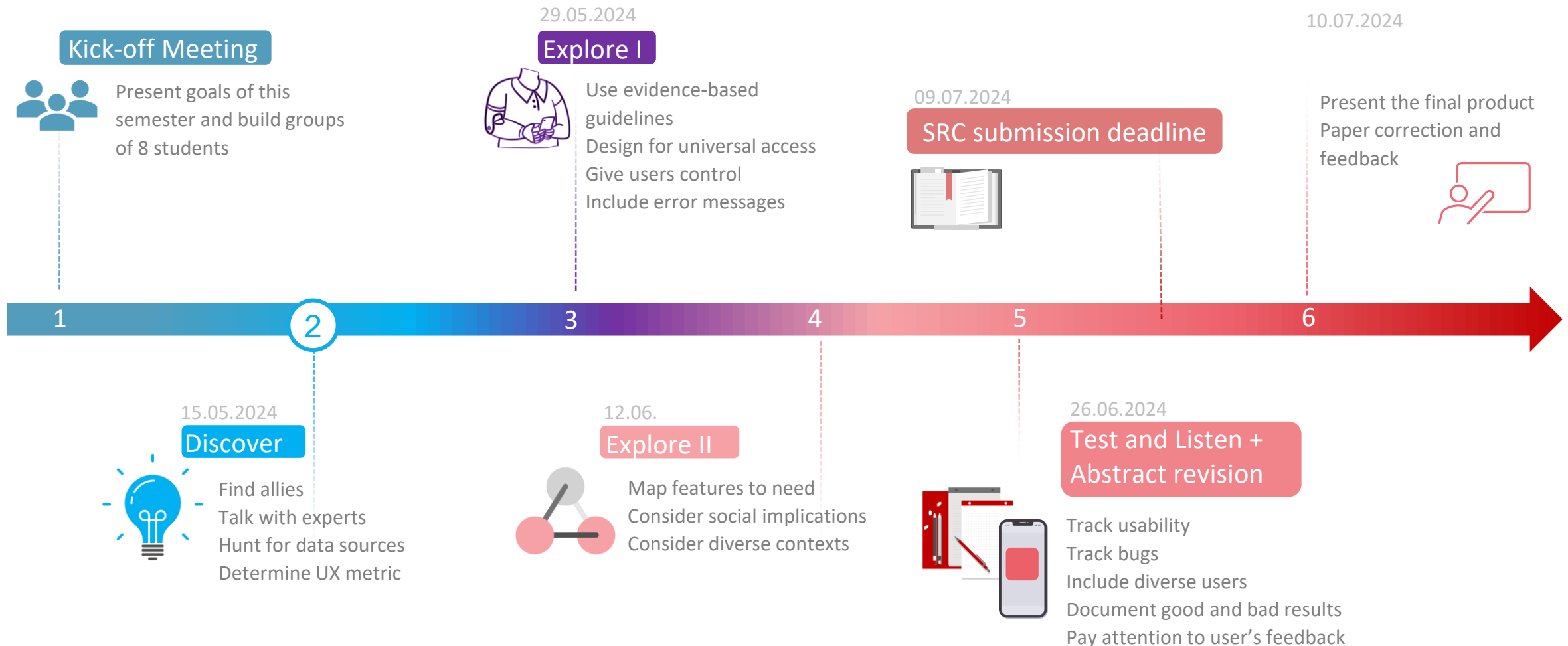# Human Computer Interaction

Exercise: Discover

Prof. Dr. Björn Eskofier

Machine Learning and Data Analytics (MaD) Lab

Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Summer Term 2024

You will work on one project idea over the course of the semester

Kick-off Meeting

Present goals of this semester and build groups of 8 students

1

15.05.2024

Discover

Find allies
Talk with experts
Hunt for data sources
Determine UX metric

2

29.05.2024

Explore I

Use evidence-based guidelines
Design for universal access
Give users control
Include error messages

3

12.06.

Explore II

Map features to need
Consider social implications
Consider diverse contexts

4

09.07.2024

SRC submission deadline

5

26.06.2024

Test and Listen + Abstract revision

Track usability
Track bugs
Include diverse users
Document good and bad results
Pay attention to user's feedback

10.07.2024

Present the final product
Paper correction and feedback

6

Which main obstacle/problem are you solving with your application?
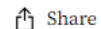
How to Discover?

Discover

Competitive Usability Evaluations

Tim Neusésser
January 5, 2024

Share

Summary: Data on what works well or poorly on other sites saves you from implementing useless features and guides UX investments to features that your users need.

Competitive evaluations let you assess if your design is better or worse than your competitors and discover the relative strengths and weaknesses of competing designs. They allow you to take an in-depth look at how others solve the same design problems.

https://www.nngroup.com/articles/competitive-usability-evaluations/

Use Cases for Design Personas: A Systematic Review and New Frontiers

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ABSTRACT
Personas represent the needs of users in diverse populations and impact design by endearing empathy and improving communication. While personas have been lauded for their benefits, we could locate no prior review of persona use cases in design, prompting the question: how are personas actually used to achieve these ben-

1 INTRODUCTION
Personas are fictional persons that represent real user segments [7], enabling designers to go beyond mere descriptive segments (p. 60) and truly empathize with end-users [84]. Cooper [41] defined personas as a user-centered design (UCD) and human-computer in-teraction (HCI) technique that promotes immersion into end-users'

Competitive Usability Evaluation

Benefits:
- Reduce risk of failure
- Empathize with customers
- Learn from others and apply value driven improvements (initially implementing valuable features that benefit the users)

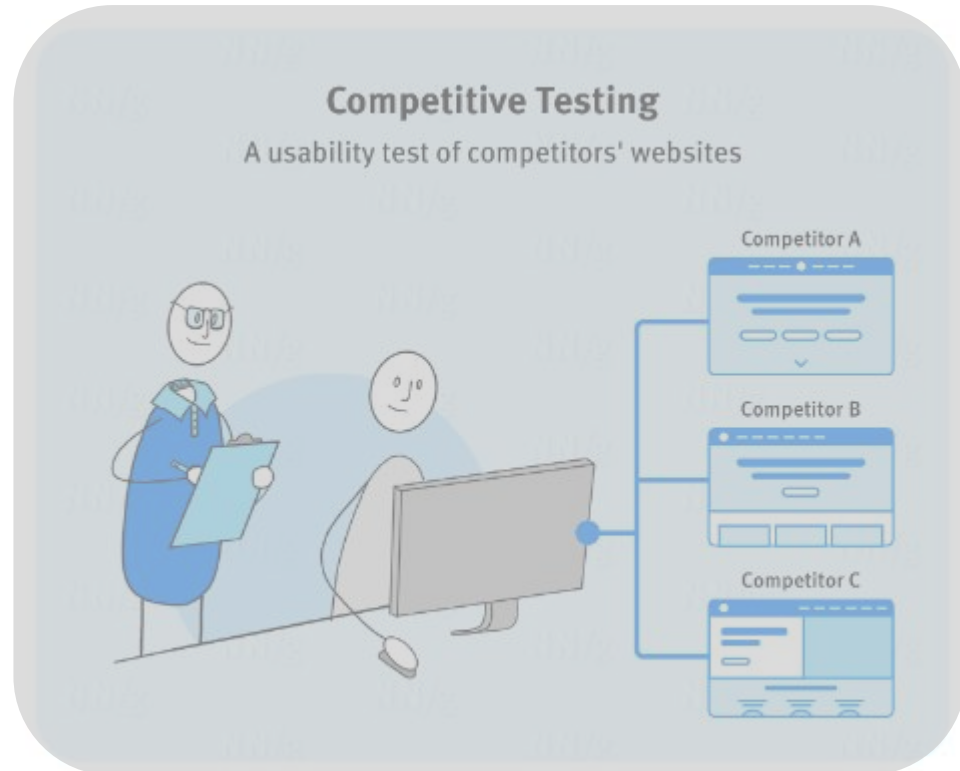Typically focus on 2 to 4 competitors that:
- Offer similar content + functionality
- Provide the best UX overall
- Use innovative design that sets them apart
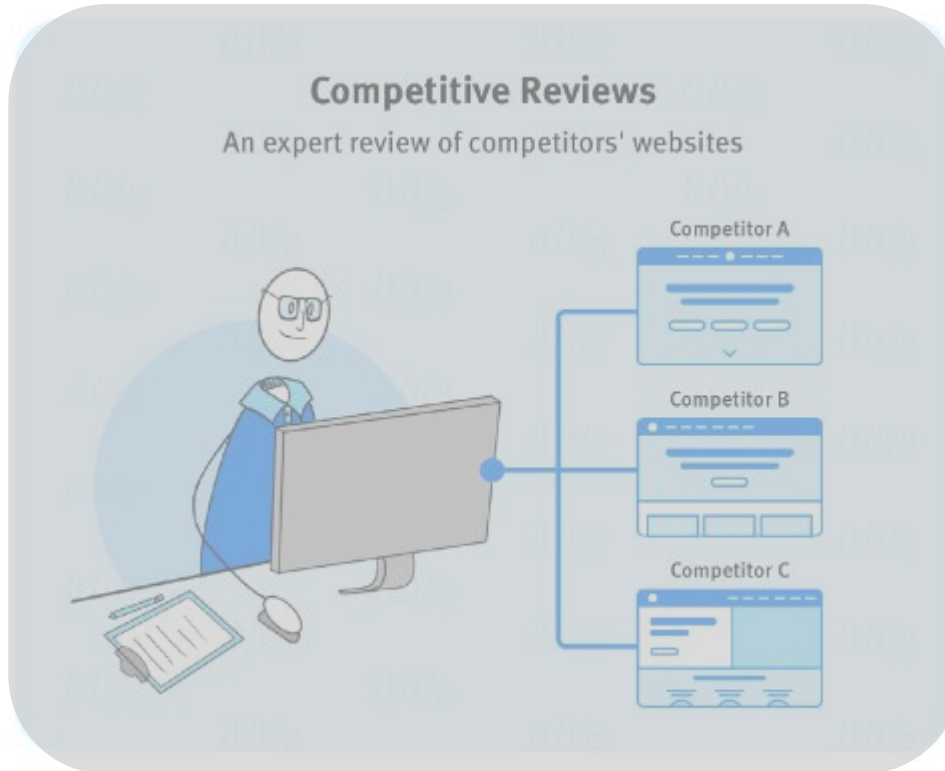- The competitors that your customers are most likely to compare you to!

Define Competition

Competitive Usability Evaluation

Methods

https://www.nngroup.com/articles/competitive-usability-evaluations/

Competitive Usability Evaluation

Methods

https://www.nngroup.com/articles/competitive-usability-evaluations/

Competitive Usability Evaluation

Methods

https://www.nngroup.com/articles/competitive-usability-evaluations/

Competitive Usability Evaluation
Competitive Evaluation of Design Variation

A competitive evaluation can also involve multiple variations of a single design instead of competitor products.
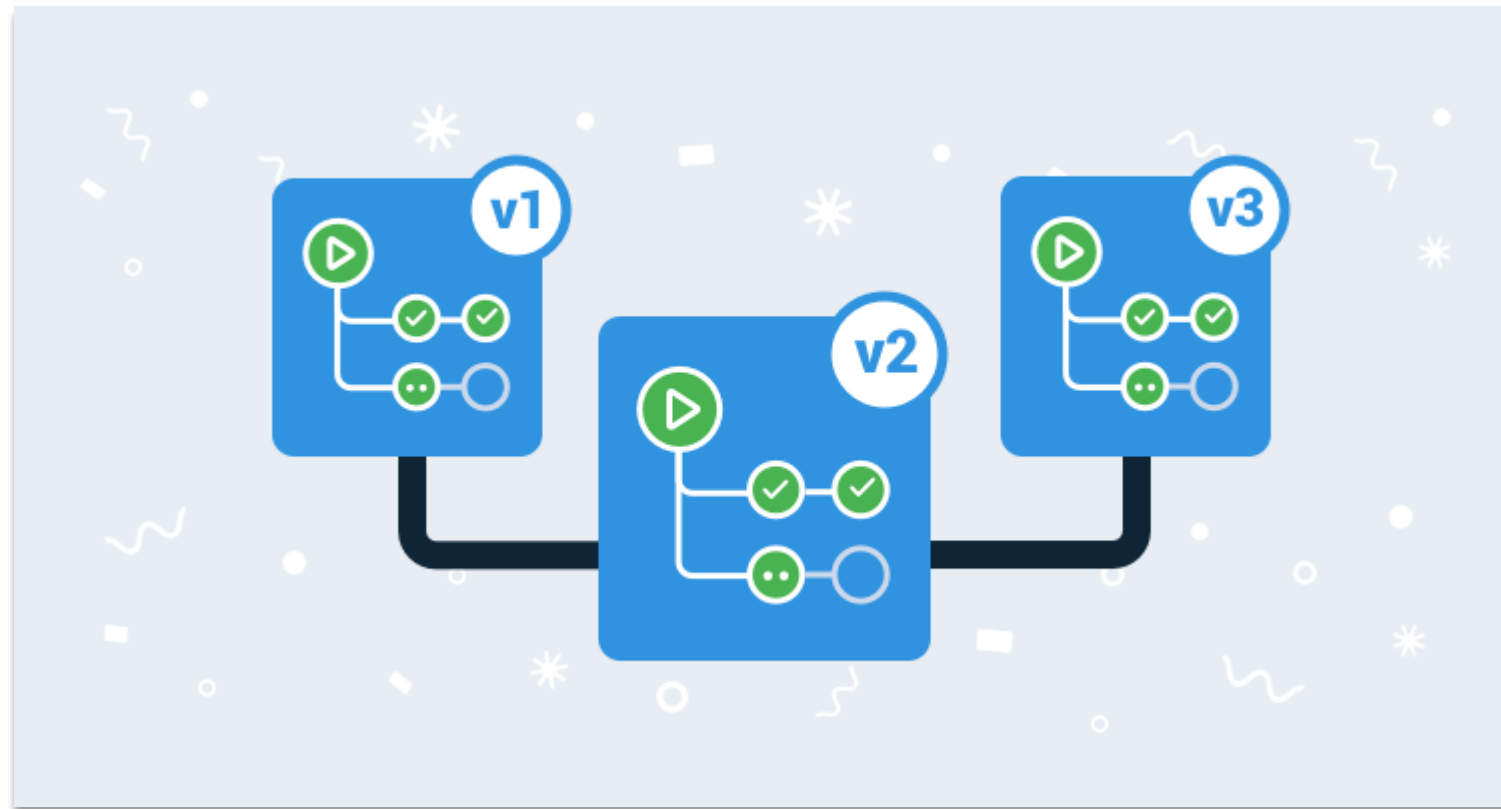
Design Personas
Who are you designing for?

There is no „average" user

The goal of personas is to characterize vital end-user groups

User personas help a product team find the answer to one of their most important questions: **"Who are we designing for?"**
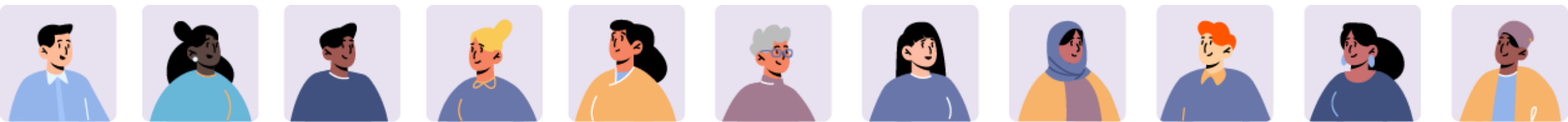
Design Personas

When To Create Personas?

Part of the research phase, before the actual design process starts

Field Studies

Interviews

Surveys

Methods of user research

To conceptualize a persona, you can create a personal profile of this person

FAU

> "
> Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Nicky Parker, 28
The Advocate

MARRIED	Yes
KIDS	Sarah 3, Jamy 10
EDUCATION	College Degree in Mathematics
OCCUPATION	9th Grade Math Teacher
LOCATION	San Francisco

Bio or Scenario

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volut. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volut. Lorem ipsum dolor sit amet, consectetuer.

Goals

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.
- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.
- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.

Motivations

PRICE
COMFORT
CONVENIENCE
SPEED

Frustrations

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.
- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.
- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh.

Personality

INTROVERT — EXTROVERT
ANALYTICAL — CREATIVE
LOYAL — FICKLE
PASSIVE — ACTIVE

https://ergomania-ux.medium.com/the-ultimate-guide-to-creating-personas-and-how-to-use-them-to-enhance-your-business-1066b0d1f50b

To conceptualize a persona, you can create a personal profile of this person

https://xd.adobe.com/ideas/process/user-research/putting-personas-to-work-in-ux-design/

https://uxdesign.cc/creating-research-backed-personas-ec31571cee47

Who are the main personas that will use your application?

Using ChatGPT in User Research

https://youtu.be/watkVh1U_ko?t=113

Understanding the **requirements** based on your target group
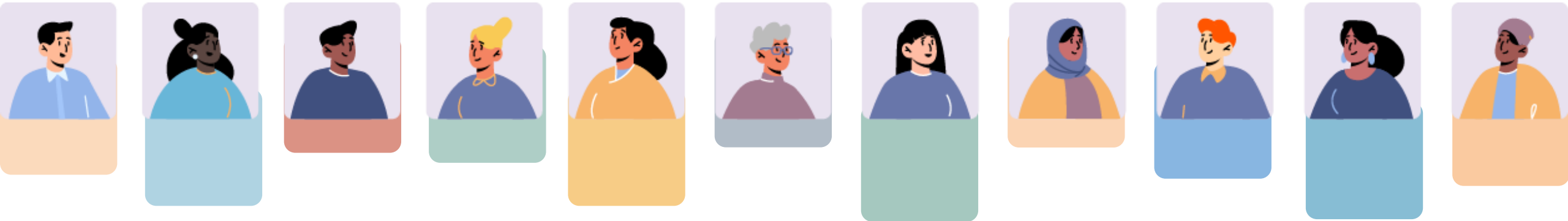
The different types of requirements (user, commercial, technical, etc.) must be considered

Thorough research on the needs of users and stakeholders is essential

Keep in mind that it involves many and diverse points of view

The requirements provide a complete vision of the product and expose its main features

User vs. Customer

- Customer is often not the user!

- Creating awareness with the customer for the user

- Design for the user not to please the customer (this is a difficult one)

- Clear assessment of target group and personas will help to convince the customer

Tasks

Please prepare the following for the next session

? Answer: Who is/are the Personas you are building your application for? You can use the provided form in StudOn

? Answer: What are the respective requirements of your application? You can use the provided form in StudOn

? Answer: Who are your competitors, how would you go above and beyond their solutions?