



TECHNISCHE HOCHSCHULE
OSTWESTFALEN-LIPPE
UNIVERSITY OF
APPLIED SCIENCES
AND ARTS

Usability Engineering 2022

Project Work

Contact Information



General Questions

Mario Heinz-Jakobs

mario.heinz@th-owl.de

Software-related Questions

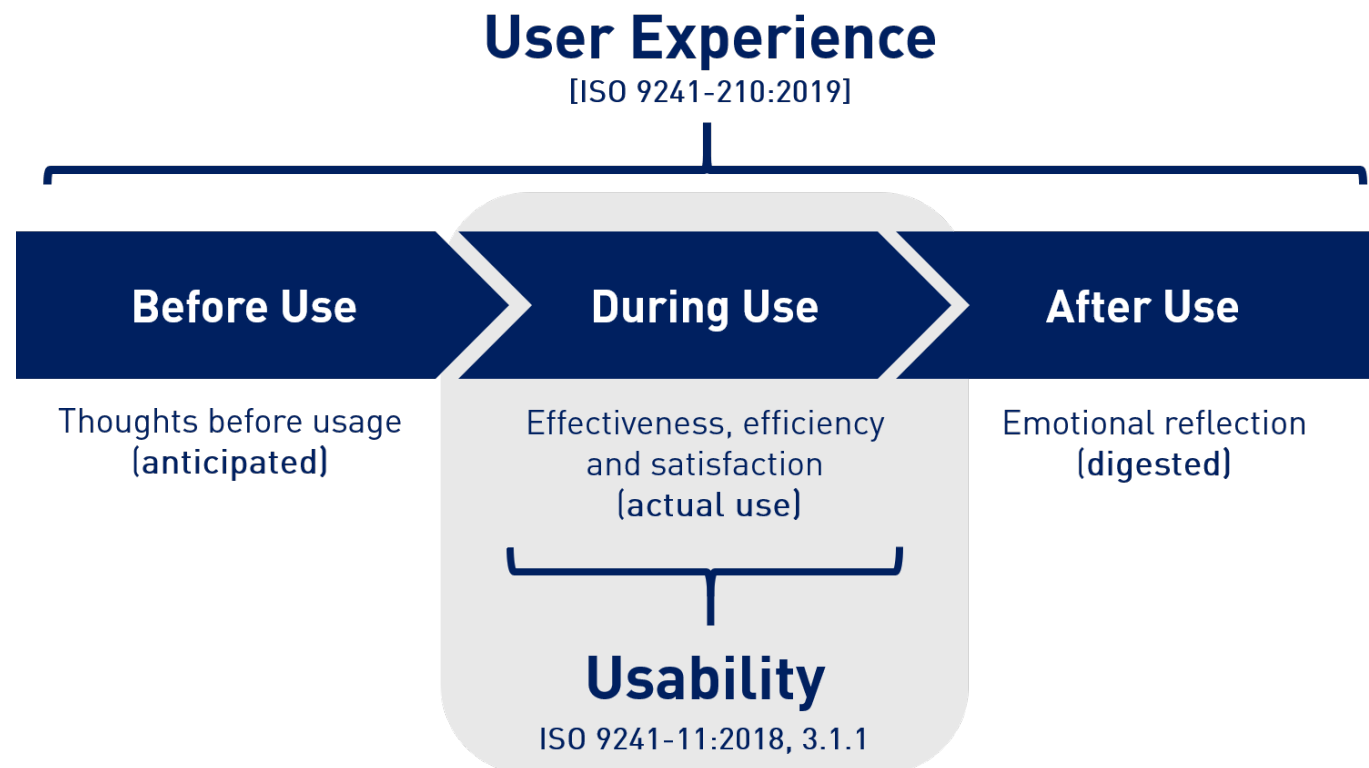
Behnaz Fayazi

behnaz.fayazi@stud.th-owl.de

Main Topic



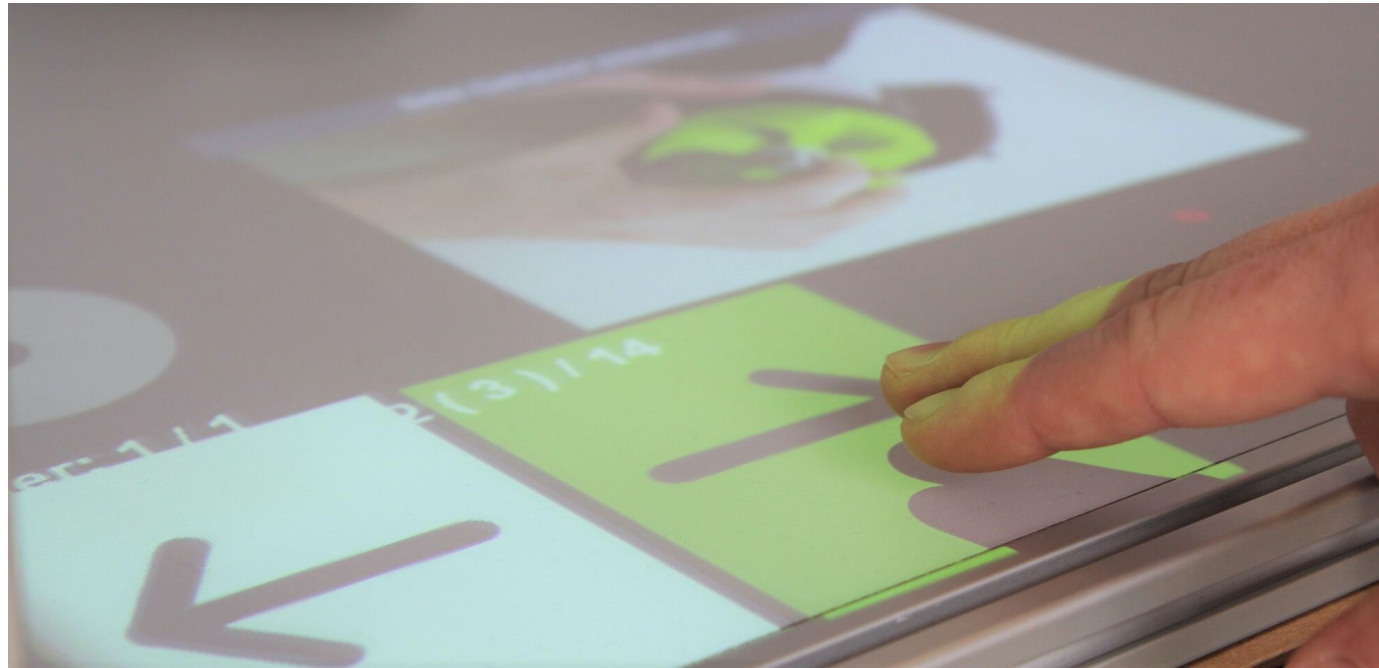
Evaluation of the **usability** and **user experience** of a digital assistance system for mobile devices (Android, iOS).



Introduction | Digital Assistance System



The delta3 digital assistance system supports users by providing step by step instructions for various activities, including texts, images and videos.



Introduction | Digital Assistance System



The delta3 assistance system consists of five software modules for creating, storing, managing, and presenting instructional information.



app

Your individual
knowledge library –
always at hand



editor

Your tool for creating
interactive content -
even without IT
knowledge



operations

The solution for
managing group-
specific content and
projects



cloud

Our storage medium
for the secure use
and administration
of your data



devices

Our interface for the
quick integration of
your devices and
machines



Introduction | Objectives



The project work focusses on the evaluation of the **usability** and **user experience** of three of the five software tools.



app

Your individual
knowledge library –
always at hand



editor

Your tool for creating
interactive content -
even without IT
knowledge



operations

The solution for
managing group-
specific content and
projects





cloud

Our storage medium
for the secure use
and administration
of your data




devices

Our interface for the
quick integration of
your devices and
machines





My Worksheets


Feature Präsentationen




player
Demo




operations
Demo



editor
Demo




devices
Demo




Mathetrainer
Anwendung


XTEND Samples




PDF
Capabilities




Step-By-
Step Guide




Single Page
View



Video View
Subtitle



Deep Linking
AR Demo



Linking
Link Demo





Image
Functions



Form Dat

[Show all](#)

Offline Workflows



Offline
Worksheet 1

[Show all](#)

Client Samples



CAYAGO
Repair Scenario

[Show all](#)



My Worksheets



My Projects



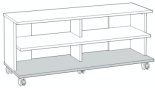
Offline Workflows

[< My Worksheets](#)

Your Worksheet

Samples

Step-By-Step Guide




This is a description text...


Priority

HIGH

Team Members



Project Lead



Peter Miller
Quality Assurance

Project Progress [0/8]

Worksheet Progress 100% - Worksheets Completed [0/0]

Due Date

26. Mai 2022

Status

IN PROGRESS

Change

PICK A WORKFLOW

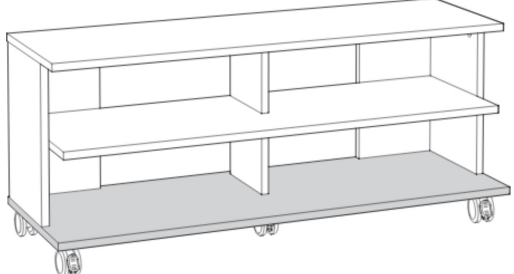
[< Worksheet](#)


XTEND Samples

[Done](#)

The final product

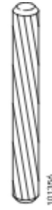
Build the lower part of the shelf






Partlist


These are the parts you'll need to complete the process




2x




28x




6x




6x



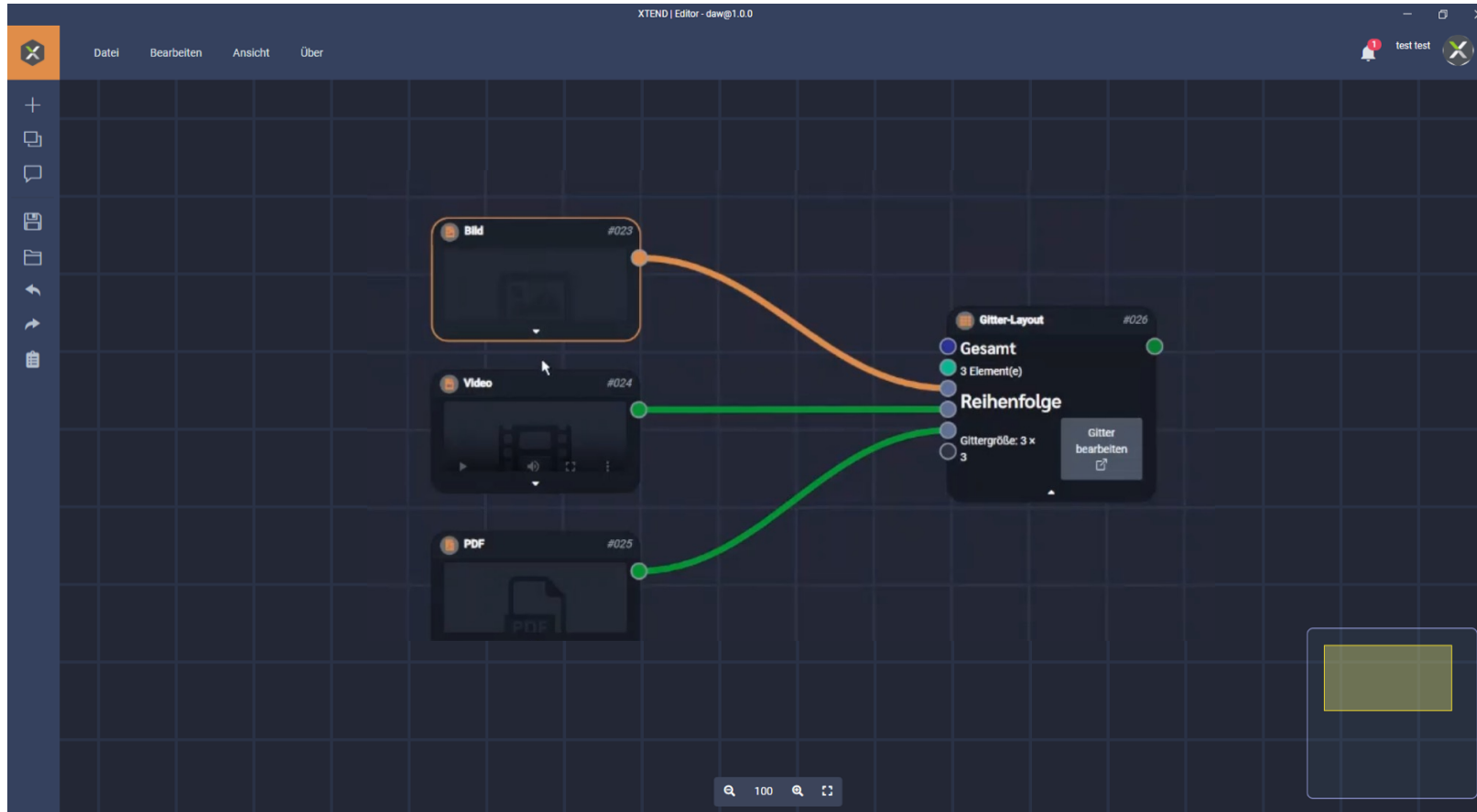
8x



20x



delta3 | editor



delta3 | operations



The screenshot shows the delta3 operations dashboard. At the top, there is a navigation bar with tabs: Dashboard, Projects, Workflows, Users, Devices, and Logs. The user profile "Mario Heinz-Jakobs" with initials "MH" is in the top right. On the left, a sidebar contains icons for adding projects, users, and teams. The main content area features three project cards: "welcome to delta3", "Carstens Test-Projekt", and "Training Project". Each card shows a "Team Members" section with a user icon and a "Completion" progress bar at 0%. Below the cards is a table with columns: PROJECT NAME, STARTED, LEAD, DUE, and STATUS.

PROJECT NAME	STARTED	LEAD	DUE	STATUS
Behnaztest	18. Juli 2022	alex alex	19. Juli 2022	OPEN
Carstens Test-Projekt	8. Sept. 2022	Carsten Röcker	31. Okt. 2022	OPEN
Customer Projects	1. Juli 2022	Eckard Bicker	31. Dez. 2022	OPEN
Demo Project	30. Apr. 2021	John Doe	14. Mai 2021	OPEN



Introduction | Objectives



Apply what you learn in this course!

- **Get familiar** with the three software tools of the delta3 assistance system
- Carry out an **expert evaluation** to investigate the usability and user experience of the three delta3 assistance system software tools (operations, editor and app)
- Conduct **usability tests** with at least 5 participants (family, friends, ...) to investigate the usability and user experience of one the delta3 assistance system tools (operations, editor or app)

Gain experience for research in this domain

Introduction | Examination



- Uploaded results of the expert evaluation (Individual)
 - Uploaded results of the usability tests (Individual)
 - Submitted written project report (Individual, approx. 10-12 pages)
- Grade will be awarded individually!

Introduction | Project Report



Overall Structure (example)

- I. Introduction (Tasks, Goals, ...)
- II. Expert Evaluation
 - I. Methods
 - II. Procedures
 - III. Results
- III. Usability Tests
 - I. Methods
 - II. Procedures
 - III. Results
- IV. Discussion
- V. Recommendations

Guidance | Expert Evaluation Methods



- Design Review (Heuristic Evaluation)
 - <https://www.nngroup.com/articles/ux-expert-reviews/>
- User Experience Questionnaire (UEQ)
 - <https://www.ueq-online.org>
- Individual Questionnaire (Provided by us)

Guidance | Usability Test Methods

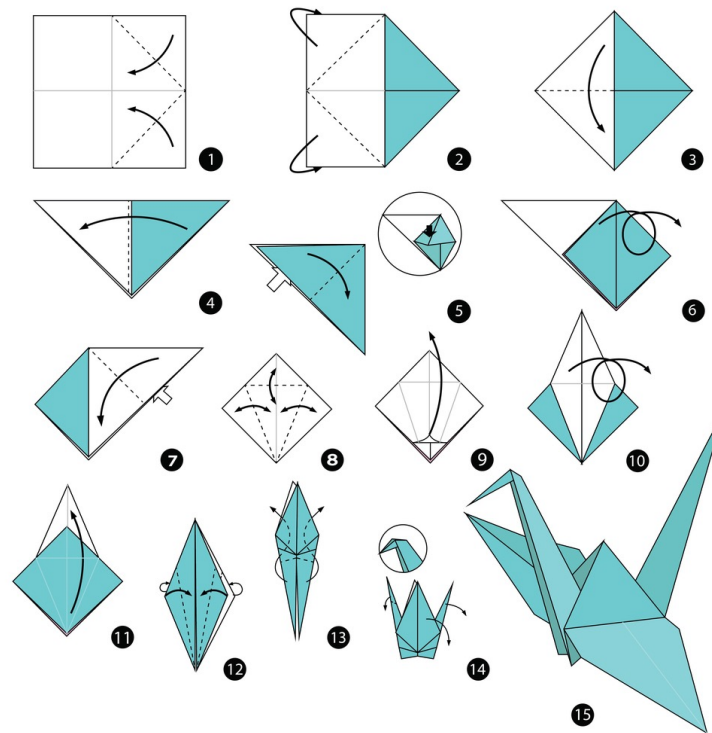


- (Think-Aloud) Observations + Protocols
 - <https://www.nngroup.com/articles/usability-testing-101>
- After Scenario Questionnaire (ASQ)
 - Applied after each task carried out with the software
- User Experience Questionnaire (UEQ)
 - Applied after using the software
- Individual Questionnaire (Provided by us)

Guidance | Supported Activity



As part of the project work, instructions to support the folding of an origami figure will be implemented and executed.



Guidance | Tips



- Start early
 - You have less time than you think!
- Document your results
 - Document every aspect provided by the participants
 - Stay neutral when criticizing

Guidance | Groups



Let us know by 2th November, if

- You plan to participate in the project work
 - You dont have an Android or iOS device (needed for the App)
- The software tools for the usability tests are assigned depending on the number of participating students

Guidance | Access to the Software



On 3th November, you will

- Get additional information on how to access the software tools
- Get manuals and instructions on how to use the software
- Get further information on the procedure of the evaluations
- Get the instructions for the origami folding activity

Questions?



TECHNISCHE HOCHSCHULE
OSTWESTFALEN-LIPPE
UNIVERSITY OF
APPLIED SCIENCES
AND ARTS

Thank You!