



DGRh Rheumazentrum
Rhein-Ruhr

DRFZ
Deutsches Rheuma-Forschungszentrum



Rhekiss

UX Design Challenge (Interim)

with a focus on user participation

by Silas Kraume, Léon Lehnen, Anh-Thu Dinh and Alejandro Soto



Table Of Contents

- About Rhekiss 03

- UX Design Callenge 07

- UX Methods 08

- Preliminary Results 11

- Current Challenges 14

- Conclusion 15

About Rhekiss



- › **Nationwide pregnancy registry** for rheumatism patients



- › Focus on **family planning, pregnancy and postpartum** outcomes
- › Patients are included by their treating rheumatologist



- › Both **physicians** and **patients** enter data via the web-application (surveys)
- › Investigates, inter alia, the **safety of medications**

Current UI

The screenshot displays the current user interface of the system. At the top, there is a navigation bar with the following items: Rhekiss (logo), Patientenliste (selected), Infomaterial, Neuer Patient, Studienstatus, Nachrichten, Mein Profil, Willkommen: (dropdown menu), and Abmelden.

Patienten Module:

For Fragebögen bitte auf Patientennamen klicken

Name	Modul	Woche	Offene Bögen	Nächstes Ablaufdatum	Nächste Dokumentation
Schwangerschaft 14		7		09.02.2026 SS: 17.02.26 - 07.04.26	
Schwangerschaft 11		7		03.03.2026 SS: 11.03.26 - 29.04.26	
Kinderwunsch	4	10		02.03.2026 KW: 10.03.26 - 02.06.26	
Kinderwunsch	4	10		01.03.2026 KW: 09.03.26 - 01.06.26	
Schwangerschaft 6		7		09.04.2026 SS: 17.04.26 - 05.06.26	
Schwangerschaft 18		7		13.01.2026 SS: 21.01.26 - 11.03.26	
Schwangerschaft 21		6		18.02.2026 SS: 26.02.26 - 11.06.26	

7 Patienten

Termine Module:

Dez 29, 2025 - Jan 4, 2026

	Mo 29.12	Di 30.12	Mi 31.12	Do 01.01	Fr 02.01	Sa 03.01	So 04.01
0:00							
1:00							
2:00							
3:00							
4:00							
5:00							
6:00							
7:00							
8:00							
9:00							
10:00							
11:00							
12:00							

Current UI (Wide Screens)

The screenshot displays a user interface for a medical application. At the top, a navigation bar includes the logo 'Rhekiss', a 'Patientenliste' button, and links for 'Infomaterial', 'Neuer Patient', 'Studienstatus', 'Nachrichten', 'Mein Profil', 'Willkommen' (with a dropdown arrow), and 'Abmelden'.

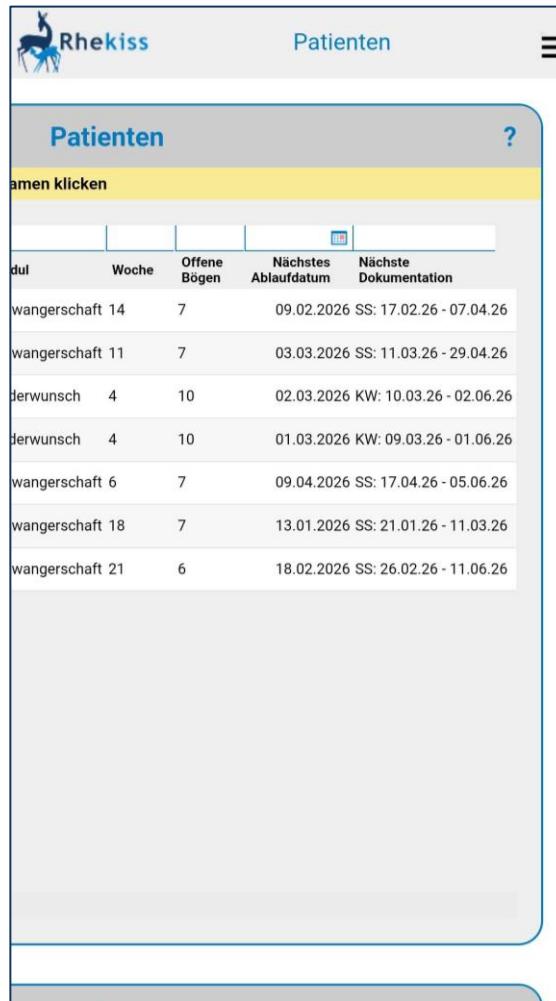
The main area features two overlapping windows:

- Patienten**: A table listing patients with columns: Name, Modul, Woche, Offene Bogen, Nächste Ablaufdatums, and Nächste Dokumentation. The data includes:

Name	Modul	Woche	Offene Bogen	Nächste Ablaufdatums	Nächste Dokumentation
Schwangerschaft 14	7		09.02.2026 SS: 17.02.26 - 07.04.26		
Schwangerschaft 11	7		03.03.2026 SS: 11.03.26 - 28.04.26		
Kindenwunsch	4	10	02.03.2026 KW: 10.03.26 - 02.06.26		
Kindenwunsch	4	10	01.03.2026 KW: 09.03.26 - 01.06.26		
Schwangerschaft 6	7		09.04.2026 SS: 17.04.26 - 05.06.26		
Schwangerschaft 18	7		13.01.2026 SS: 21.01.26 - 11.03.26		
Schwangerschaft 21	6		18.02.2026 SS: 26.02.26 - 11.06.26		
- Termine**: A calendar view for the period from December 29, 2025, to January 4, 2026. It shows a grid of time slots from 0:00 to 12:00, with days of the week: Mo 29.12, Di 30.12, Mi 31.12, Do 01.01, Fr 02.01, Sa 03.01, So 04.01. The calendar is currently set to 'Wochen' (Week) view.

Current UI (Mobile)

- › **Limited mobile device friendliness** despite ever increasing use of mobile devices



The screenshot shows a mobile application interface for managing patients. At the top, there is a logo of a deer and the word "Rhekiss". To the right of the logo, the word "Patienten" is displayed. On the far right, there is a menu icon consisting of three horizontal lines. Below the header, the word "Patienten" is repeated in a larger font. Underneath this, there is a yellow bar with the text "namen klicken" (click names). A question mark icon is located in the top right corner of this bar. The main content area is a table with the following columns: "Wochenumfang", "Woche", "Offene Bögen", "Nächstes Ablaufdatum", and "Nächste Dokumentation". The table lists seven rows of data:

Wochenumfang	Woche	Offene Bögen	Nächstes Ablaufdatum	Nächste Dokumentation
wangerschaft 14	7	09.02.2026 SS: 17.02.26 - 07.04.26		
wangerschaft 11	7	03.03.2026 SS: 11.03.26 - 29.04.26		
derwunsch	4	10	02.03.2026 KW: 10.03.26 - 02.06.26	
derwunsch	4	10	01.03.2026 KW: 09.03.26 - 01.06.26	
wangerschaft 6	7	09.04.2026 SS: 17.04.26 - 05.06.26		
wangerschaft 18	7	13.01.2026 SS: 21.01.26 - 11.03.26		
wangerschaft 21	6	18.02.2026 SS: 26.02.26 - 11.06.26		

UX Design Challenge

- › User experience and performance improvements for Physicians and Patients
 - › Work should not be hindered by bad UX
 - › Identify pain points and suggest improvements
 - › Physicians workflow enhancements
 - › **efficient, fast and simple** design
 - › Patient participation is especially important
 - › UI needs to be **clear, self-explanatory, low barrier**
- Identify **culprits** and make the website more **convenient and usable** for patients and physicians!

UX Methods (Constraints)



- › Relatively small amount of users
 - › No large scale behaviour analysis



- › Budget and developer constraints
 - › No A/B testing



- › Time limitations
 - › No long term evaluations



- › Lack of web metrics due to anonymity
 - › No metric analysis

UX Methods



- › **Clickstream analysis**
 - › Analyze which parts of the website are difficult to use or are overly complex

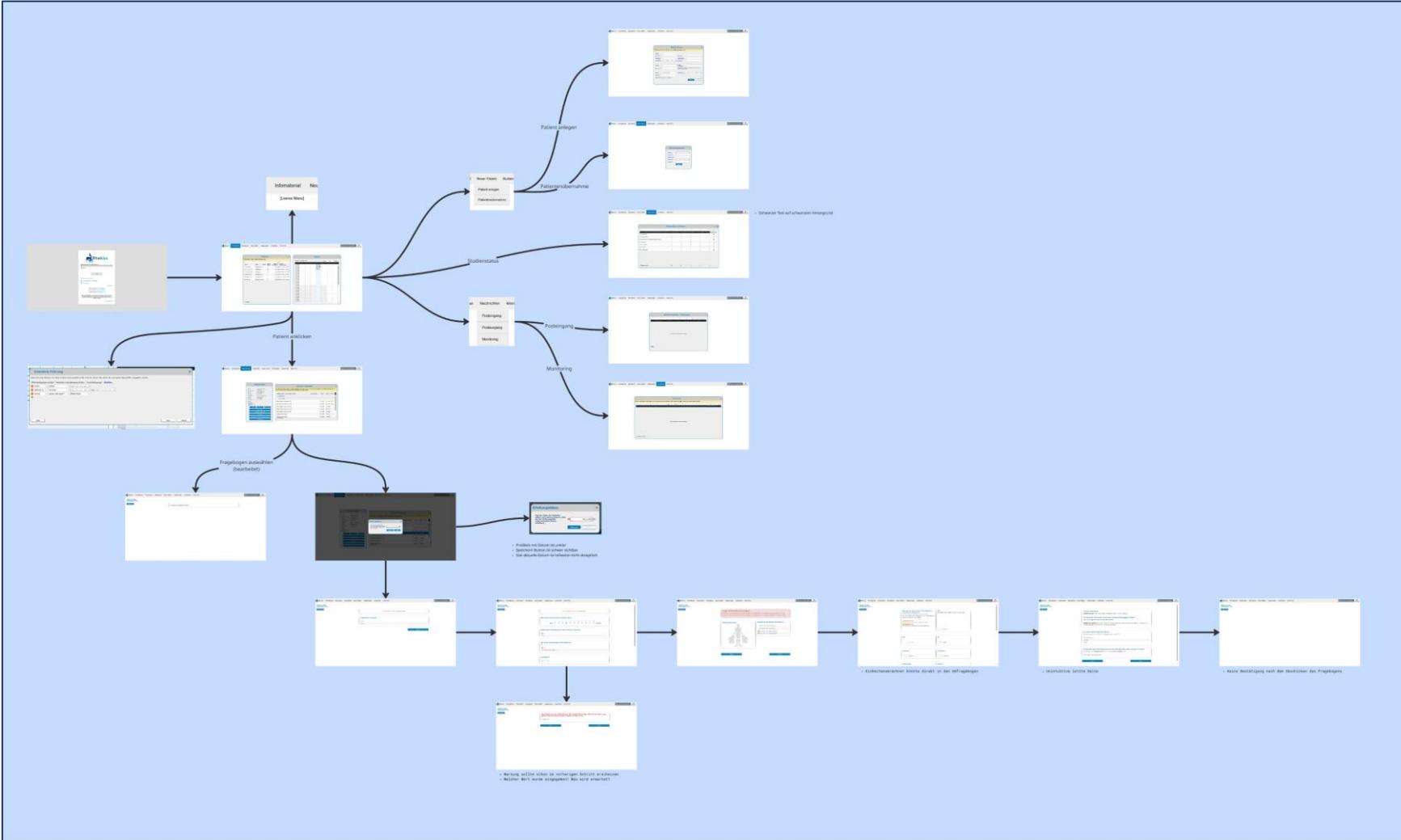


- › **User interviews** with patients and physicians
 - › Gather direct experiences



- › **Accessibility testing**
 - › Find out potential culprits for users with impairments

Clickstream Analysis



Preliminary Results

Bitte geben Sie noch die Art der gesundheitlichen Besonderheiten an. Wenn Sie diese Frage zu einem späteren Zeitpunkt beantworten möchten, markieren Sie bitte das Feld.

ignorieren

Zurück

Weiter

Warnung sollte schon im vorherigen Schritt erscheinen

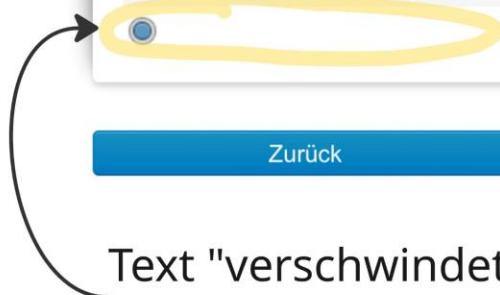
Preliminary Results

Hatten Sie in den letzten 3 Monaten einen akuten Schub (eine deutliche Verschlechterung Ihrer rheumatischen Erkrankung, die über mehrere Tage anhielt)?

- nein
- ja, inzwischen beendet

Zurück

Weiter



Text "verschwindet" nach
Auswahl auf Mobilgeräten

Preliminary Results

- ▲ [user-scalable="no"] is used in the <meta name="viewport"> element or the [maximum-scale] attribute is less than 5.



Disabling zooming is problematic for users with low vision who rely on screen magnification to properly see the contents of a web page. [Learn more about the viewport meta tag.](#)

Failing Elements

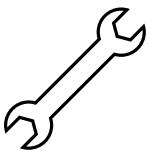
head > meta

```
<meta name="viewport" content="initial-scale=1.00, width=device-width, user-scalable=no, minimum-scale=1....">
```

Current Challenges



- › **Scheduling interview** appointments with patients proves difficult



- › **Technical problems** make certain analyses more complex than anticipated (e.g. user gets logged out after site refresh)
 - › Accessibility testing relies on page-reloading



- › Solutions/Improvements need to be **security conformation** and viable given the **limited budget**
 - › Implementation needs to be considered

Conclusion

- › Goal has been determined
- › UX methods chosen to achieve this goal

- › Future work
 - › Perform user interviews for further analysis
 - › Investigate alternative tech solutions
 - › Create improved design prototypes