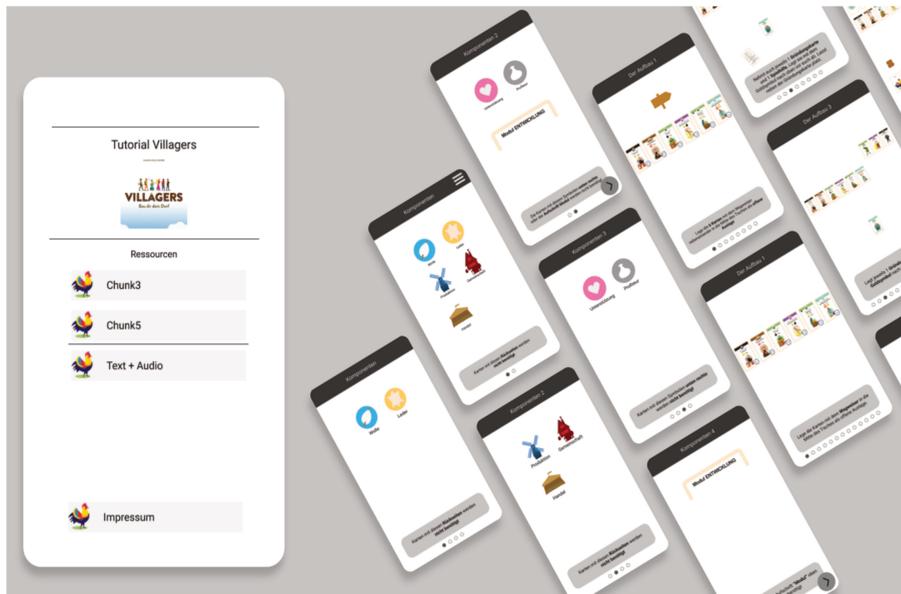


Digital enhancement of board games



First prototype used in Chunk Test Round 1
 Source: based on Sinister Fish Games (Hg.)(2019) and Franckh-Kosmos Verlags-GmbH & Co. KG (2019), Stuttgart

Special Focus

This study put special emphasis on how users interact with this type of app. The tests were conducted according to LeanUX to get results quickly and improve upon them. To follow these guidelines, several user tests were held over the course of this thesis to determine the best methods.

Each test focused on one specific question which was to be answered by using hypotheses and appropriate measurements. Depending on the parameters of those hypotheses, a new prototype was constructed. Each prototype was reduced to the basic functions necessary to confirm or deny the hypotheses.

The individual tests focused on:

- the general interaction with digital manuals
- the amount and size of information chunks provided at one time
- audio output and its influence
- configuration of the content

Once the results were analysed the most prominent problem was identified and became the focal point of the following user test.



Configuration Test User learning the rules

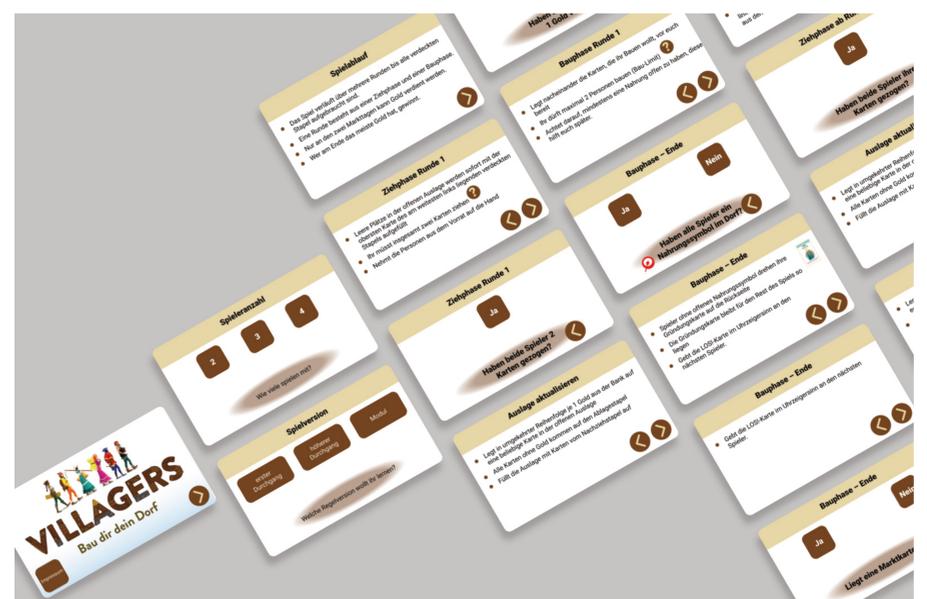
Abstract

Board games are a popular hobby, but board game instructions and their format have seen little development past the standard printed manual. This study aims to determine how digital rule books in the form of an app can improve the board game experience.

To answer the question which methods can be used to enhance the comprehension of instructions for players, multiple user tests were conducted. Different hypotheses were constructed for each test and then confirmed or rejected based on the data collected with new players. Each test featured a new digital prototype, which presented the instructions according to the hypotheses.

These tests showed that information users absorb must be delivered in small chunks that allow the users to play while learning the instructions at the same time. Users should be able to interact directly with the rule book. The app should only provide the information that is relevant to them in their current situation. Furthermore, users prefer having multiple options to absorb information based on their personal needs.

However, the users should not be using the tutorial continuously. The app needs to prevent the users from becoming passive and following the prompts without planning their own steps. Future works could focus on combining these findings or translating them into augmented reality. Further research must be conducted in order to ensure the app keeps the users engaged with the game over multiple rounds.



The configuration prototype app
 Source: based on Sinister Fish Games (Hg.)(2019) and Franckh-Kosmos Verlags-GmbH & Co. KG (2019), Stuttgart

Result and Future Work

The results of the user tests showed that users have specific needs and preferences within digital manuals.

The information must be provided in small chunks and only at the specific point when it is relevant. The wording needs to be precise and supported by appropriate graphics. Audio output can improve the experience with the app, but the user needs to be able to turn it off manually. Configuring the content for the current game situation helps with reducing insecurities and engages the user with the app.

However, more tests are necessary to ensure the reliability of the data. One question that arose in the last test was how to keep the user engaged not only with the app but the game itself. The players should deliberate their moves and not simply follow the provided steps.

The motivation of the players to learn rules with an app is high. Users can comprehend the rules and translate them from the app onto the game. The users are able to work together to overcome the barriers which are prevalent when learning new games.



Hochschule
 Augsburg University of
 Applied Sciences

Contact

julia@schiltach.de

Supervisor

Prof. KP Ludwig John

