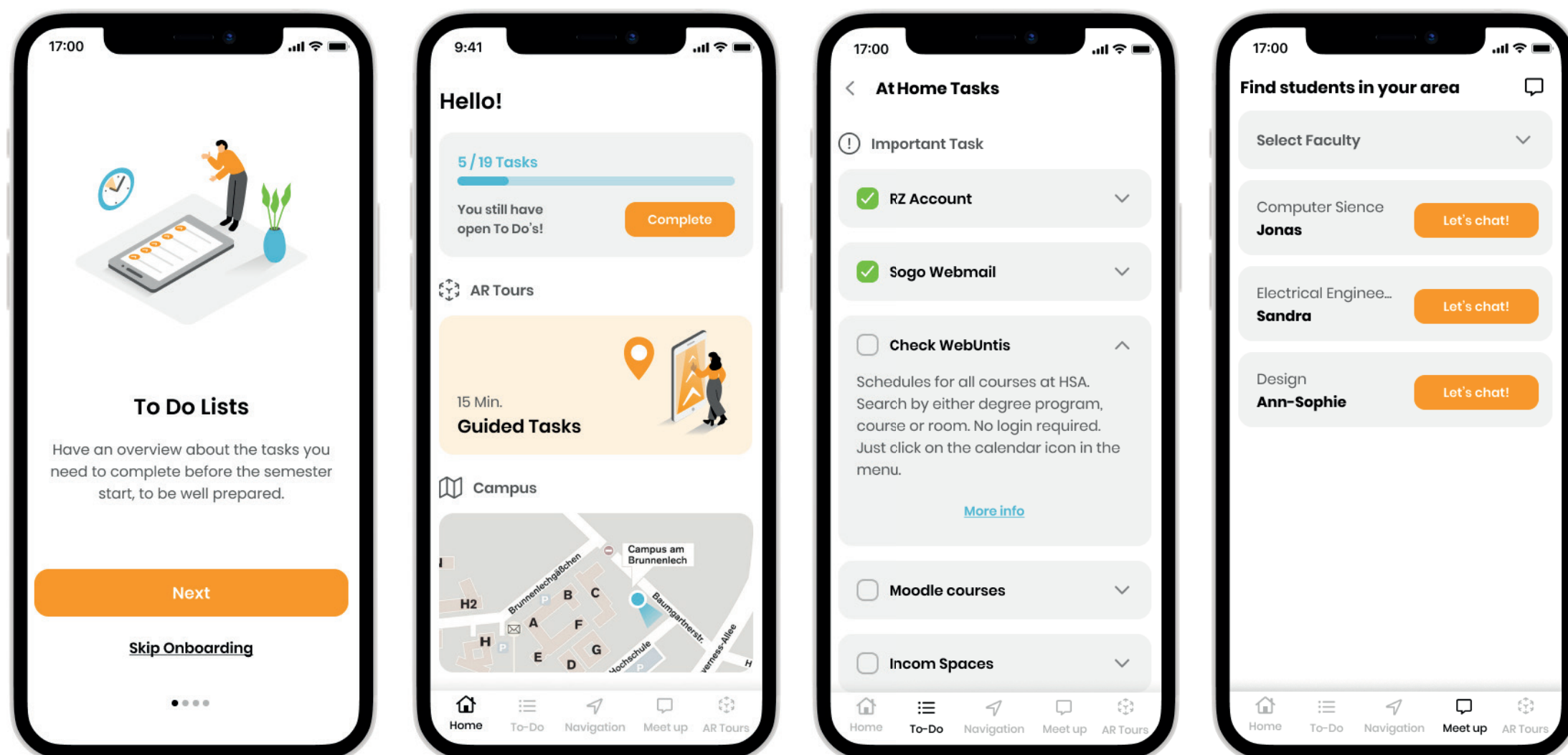# Gamification of University Onboarding

Start your studies right!

An app for freshmans

App logo and slogan

Abstract

University onboarding can be a challenging time for first-year students. To aid in their navigation and completion of important tasks, an app was developed as part of the "Interactive Media Systems" program's master's project. Nonetheless, the situation can be stressful and overwhelming for students. The app provides technical assistance but no interpersonal support. Gamification is increasingly being utilized in education to increase motivation and enjoyment. This master's thesis investigates the use of gamification in the app START, to help students during their university onboarding process.

The implementation of gamification elements in the app START is investigated by applying the user-centered Lean UX approach. Through prototypical implementation, gamification elements are evaluated in relation to app features, and lastly, recommendations for gamification usage at the beginning of studies are defined.

This work is aimed at UX designers and universities to demonstrate gamification approaches to increase motivation and enjoyment during the onboarding process of study.
The correct balance of gamification elements is important, therefore the findings and recommendations of this thesis can only be transferred to similar functions and contexts.

Example screen of the original version

Special Focus

The aim of the research was to determine whether gamification elements increase student motivation and enjoyment, and how they should be applied to the features of the app. Furthermore, the use of gamification to facilitate networking among students was also considered.

The hypotheses were derived from research on gamification elements, user goals, and basic psychological needs
Using the Lean UX method, the gamification elements were built into the app prototype and tested with the first-year students. Two user tests were conducted, each with 16 students. The tests were conducted on the introduction day of the winter semester 2022/23 to survey the students under real conditions. The timely iterations allowed for quick implementation of improvements and retesting. In each case, an A/B test was conducted in which 8 students were asked to complete tasks in the app using the original version and 8 students were asked to complete the gamified version. A High-fidelity prototype was used in both app versions to trigger the emotions of the students through the detailed visualization. Emotions and reactions as well as student feedback were considered. By using the Lean Startup Canvas, iterations could be summarized and evaluated.

Example screen of the gamification version

Result and Future Work

The results of the research show that using consistency theory and selected gamification elements, it was possible to understand why gamification works in practice. The effect on the emotional state of the students was confirmed when applying these findings in the START app.
The observations and interviews reveal that the majority of students acted more positively in the gamified version.
In summary, gamification elements in the onboarding process of studying can be supportive, increasing student enjoyment and motivation while facilitating networking.
It is important to consider the use of gamification in conjunction with the features to avoid frustration or limitation.

During the writing of the thesis, some points of consideration were identified that could not be examined in this master's thesis. On the one hand, the app features "navigation" and "AR tours" were not examined due to time constraints, and on the other hand, the tests were conducted exclusively at the university, so home use was not considered. These points also need to be investigated. Finally, the gamified app must be tested again as a whole to ensure proper functionality.

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