

Bachelor / Master Thesis

UX-Design and Development of Apps for Children in Primary School

Course of study: Computer Science
Kind of thesis: Web Development and Didactics
Programming language: Angular, Flutter
Start: Winter term 2020/21

Topic

In this project we develop children-friendly apps. Puzzle games, cooking recipes for children or handicraft instructions shall be made available via a single platform. The goal is to give children the opportunity to access a variety of selected digital content in a self-determined way.

Tasks

The focus of the app will be especially on usability for children. Contents such as recipes or handicraft instructions are supported by animations. The use of a read-aloud function is intended to make the contents understandable even for children who are not yet reading.

The following apps shall be developed:

- Exploring reading and writing. This learning app is mainly for school beginners and refugee.
- Games as memory, four wins, puzzle, and a jump & run (e.g. something like Alto's adventure)
- Cooking recipes for children. One recipe should consist of one JSON. Include special commands as starting a timer (e.g. for the oven), animation of a mixer, symbols for recipes. The recipe shall be as a step-by-step guide. The number persons shall be adjustable. The shopping list shall be send via a messenger.
- Handicraft instructions, step by step along a JSON. Examples are, make a Christmas card, making an invitation for the school start, mother's day gift.

For development please consider the following frame

- Use *Flutter*, such that the Apps can be made available on Android and iOS.
- Consider the key suggestions for developing apps for kids, see this [URL](#).
- All apps should use the same icons and follow the same UX guidelines



At the end of the project the apps will be tested by kids in the kindergarten and primary school from the age of three to ten years.

User Interface for Kids Mobile App



Contact This project is offered by the *Theory of Hybrid Systems (i2)* research group headed by Prof. Dr. Erika Ábrahám and will be co-supervised by Dr. rer. nat. Pascal Richter. For further questions please contact us via email:

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