
4:34 PM
MY APPS
Barkpark
Barkpark
Snapcat
IONIC

# 2

## AGENDA

- About ShareBook
- App Demo
- Backend Demo
  - Swagger
  - Node
- Poster
- Conclusio

# 3

## About ShareBook

- App to reuse books
  - Trade old unused ones, get new books in exchange
  - Further usage of ‘knowledge’
- Trade within your area of living
- Motivation to make bookshelfs ‘dynamic’

4

App Demo

# App Demo

Improvements:

- Communication with the REST Api
- Rewriting views
- Frontend routing logic
- Error handling

5

Backend Demo

# Backend Demo

- RESTful API
  in form of a NodeJS Server
- generated with Swagger

6

Poster

# ShareBook

Daniel Brunner, Daniel Huber, Michael Troger

## About

ShareBook is a smartphone app for Android & iOS which enables an easy trading of books.

Have you ever wondered how many books you own and do not need anymore? With ShareBook users are able to easily trade books with other users! Therefore the user simply enters or scans the ISBN of a book and the app takes care of further information like the title, author, abstract, etc. and puts the book on the app's market.

Users can send trade requests to other users and then meet to finally exchange their books. Books are made to be read - with our app we carry this mentality to our users.

## Technology Stack

The app is built with the Ionic-Framework, which integrates other popular frameworks like Apache Cordova and Google's AngularJS 2.

With usage of these established libraries the app can be deployed both on Android and iOS. Furthermore, Ionic serves different predefined designs like Google's Material Design so users can stick to known user interfaces which are optimized for Usability and User Experience so the user is able interact with the app in an intuitive way (Nielsen und Budiu, 2013).

To retrieve detailed book information (based on the ISBN), ShareBook uses the Google Books API.

## Backend

The backend of ShareBook provides a RESTful API for querying the books to display. The data is exchanged via JSON.

The RESTful API is implemented in form of a NodeJS-Server. It handles the clients requests and offers an easy processing of the data structure in different kind of clients (desktop apps, native mobile apps, etc.).

The NodeJS part was generated was generated by the SWAGGER API Generator which offers ShareBook the flexibility to change backend technology to Java or PHP based server in a quick way.

## Motivation

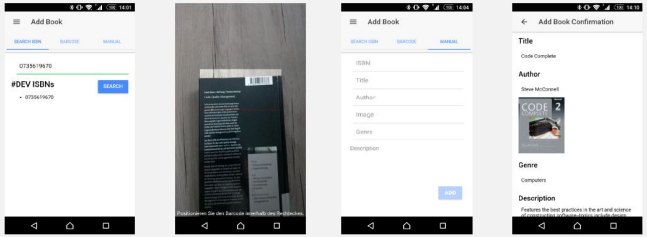
The motivation behind this app is to enable an exchange of knowledge, in consequence reduce wastage and to carry our interpreted spirit behind books, which are made to be read, on. In addition, we pursue or idea to enliven bookshelves to be more dynamic instead of serving just as a nice decoration.

Our users are able to give away their old books and get another one in return from another user. As a enormous positive side effect this also tackles the wastage problem, as more and more books are simply thrown away (Morgan, 2009).

## Adding Books

Adding books for trading can be done with:

- Entering the ISBN of a book
- Scanning the barcode of a book
- Entering the book details manually




(1) (2) (3) (4)

*Fig. 1-4: Process for adding books with three different options (1-3) and resulting confirmation page (4)*

## References

Morgan, S. (2009). *Waste, Recycling and Reuse*. Evans.

Nielsen, J. & Budiu, R. (2013). *Mobile Usability*. MITP-Verlags GmbH & Co. KG

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7

Conclusio

# Conclusio

- Ionic Creator sadly only A1 Output =(
- Generall good structure of the project (components, providers, etc → Angular 4)
- Native components (Barcode scanner) VERY EASILY accessible: 4 lines of code
- Time consuming (new technologies, frontend stuff, divinig into Angular 4)

# 8

```
npm thank-you
          :)
```