



ABBA -Abandoned Book Box Application: Smartphone Application provide simple way for students to take benefit from old books in a useful way between them

This project is submitted to the Department of Computer Science at Umm Al-Qura University of the requirements for the degree of Bachelor of Computer Science

Wael Ahmad Alghamdi & Abdulaziz Talaq Alsulami | Dr. Murtaza Ali Khan | UQU | 2021-2022

Abstract

Books, handbooks, and exercise papers are essential to the university student, but if the student finishes the course, He won't need it anymore and maybe throwing it, and don't forget that some students cannot buy some of the most expensive books.

The project will solve the problem mentioned above by developing the App for discarded Books.

The App let the user offer what he no longer needs from his university books, study papers, or handbooks. The student can sell or rent books or give them for free to those who ask for them. In addition, the student can view requests for books or search for what he needs from the offers of other students.

Problems and solutions

After the student finished the course or trying to buy new book for a course there are some problems they face:

After student finished his course:

- Throwing it.
- Forget about it Until publishing newer versions.
- It Takes a lot of space

Buy new book for a course:

- expensive books prices.

Solution:

Using a platform designed for student, gives them a way to make use of their old books or to buy other students books.

Table1. Survey shows people's views about the application

Question	Yes	No
Do you donate your old books to charities?	10%	90%
Do you suffer from buying some expensive books for some courses?	94%	6%
Do you see a useful free application focus on students Provides a platform to let them take advantage of their old books?	14%	86%
Do you have old books and study materials piled up at home and you don't know what to do with them?	70%	30%
Do you want to get back some money you spent on books you no longer need?	97%	3%
Do you know a way other than asking through private messages or in some groups via (WhatsApp or Telegram), to request a book from other students who no longer need it?	18%	82%
If the application is available to you to buy or sell... you might be interested in it?	76%	24%

Introduction

This project aims to develop an Android based application for discarded books. The application will provide an easy interface for adding and monitoring offers. User will be able to add his book in a few screen touches without any complexity. The application will help the user to achieve them in a simple way. This will help the user to sell what he doesn't need or buy what he needs from discarded books. Offers will be shown depending in Your choice of city, university, or type of book. The project will help those who don't have the ability to buy new books and those who have books can benefit from them and sell, rent or give them for free to those who need.

Methods and Materials

The Seller and Customer only must download the application.

First the Seller place an order then it will appear to the Customer in the selling list and the Customer can place an order to take the book.

Application is on android system, and we will use:

- Android studio.
- Java programming language.
- Databases (Firebase).
- Internet connection.

Conclusions

Until this moment, it is difficult for the student to buy some expensive books for their courses or to find a platform provides them the ability to sell their old books they don't need anymore.

Of the most important results expected to be obtained when applying ABBA on the ground are:

- Reducing the phenomenon of throwing and neglecting books and benefiting from them in a longer time.
- Help students save their money and others.
- Help students make use of their old course books and materials.
- Providing a safer platform that focuses on selling books at low prices.
- Giving students the ability to sell their books within the application without taking a percentage of their income within the application.
- The application is free for all users.

What we would like to mention finally that application ABBA to the equivalent of the massive development witnessed by the world in the science of smart devices that operating system running in modern like android system.