

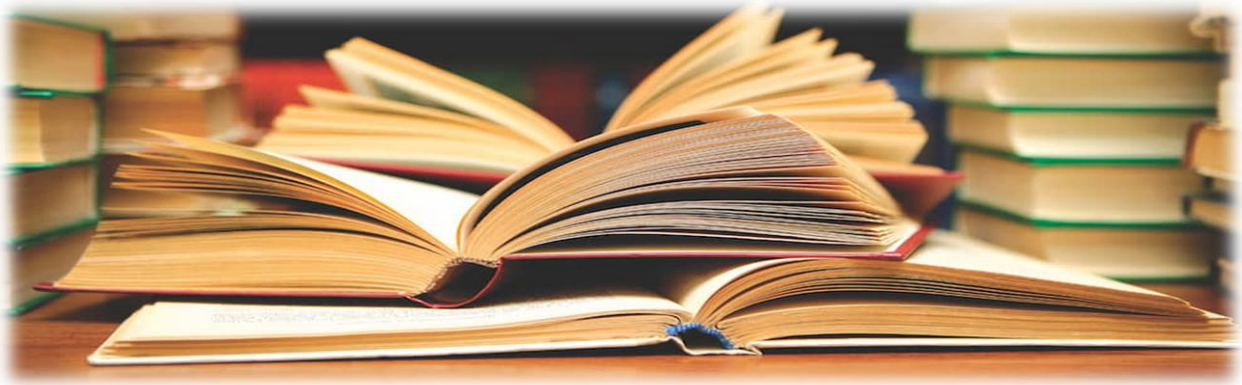
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# BOOK POINTS



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## 💡 Project Idea

**The Book Points Exchange App** is a web/mobile platform for university students to exchange or borrow academic books and software using a points-based system. Students can list resources, earn points by sharing, and spend points to acquire needed items. The app includes messaging for coordination and designated campus locations for physical exchanges, supporting free access to academic resources during wartime.

## Justification: why this idea ?

This idea was selected due to the extreme difficulties students are facing. Access to books is limited because of the lack of printing materials, power outages, and the inability to download resources due to poor internet.

In addition, high book prices put heavy pressure on students without stable incomes. This app provides an alternative way to exchange books and software using a point system and USB flash drives, helping students share knowledge while reducing costs and overcoming the digital gap.

## Problem the project solves

During times of war and economic crises, accessing books becomes a significant challenge due to:

- **Book scarcity** caused by halted printing and difficulties in importing.
- **High book prices** that exceed the financial capacity of students and communities.
- **Lack of organized exchange platforms**, making book sharing dependent solely on personal connections and limiting accessibility.
- **Traditional libraries** often facing resource shortages, limited book availability, and restricted working hours.
- Additionally, **downloading educational software or digital books becomes difficult** due to poor internet connectivity, further limiting access to learning resources.
- Many students cannot rely on online platforms because of **slow or unstable internet connections**, which makes digital learning materials inaccessible.

## Target Users and Use Cases

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### Target Users :

University students in Gaza facing barriers to accessing educational materials due to war, limited internet, and economic hardship.

### Use Cases:

**Book Exchange :**Students who have finished studying a textbook can list it on the app and offer it to other students in need, enabling peer-to-peer academic support and reducing the cost of education.

**Offline Software Sharing via USB :**Many students cannot download large educational programs due unavailable internet. The app allows users who already have these programs saved on a USB drive to offer them for physical exchange. This helps others access essential software by connecting with peers in nearby areas.

## Brief Description of the Core Features

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- **Point-Based Exchange System :** Users earn points by sharing books or software and spend points to access other resources.
- **Offline File Sharing :** Supports exchanging digital resources via USB flash drives, overcoming internet limitations.
- **User-Friendly Interface :** Simple design to make book and resource exchange easy for everyone.

## Comparison with Existing Solutions

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Currently, students in Gaza rely on informal methods such as sending messages in class WhatsApp or Telegram groups to ask who has a specific textbook, software, or file on a USB drive. While this approach is easy and familiar, it has several limitations:

- **Lack of organization** – Messages get buried under unrelated conversations, making it hard to find past requests or files.
- **Inefficient search** – Students must repeatedly ask for the same resources instead of quickly finding them.

Our proposed app solves these issues by providing:

- A centralized, organized library of textbooks, educational software, and materials.
- Search and filtering by subject, course, or year level.
- A points-based system to encourage resource sharing.

## Expected Impact and Benefits for Gaza University Students

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- **Overcoming Limited Access to Academic Resources :** Due to ongoing conflict and blockade, Gaza students face severe difficulties obtaining textbooks and study materials through regular channels.
- **Financial Relief in a Challenging Economy :** Gaza's high unemployment and poverty rates make purchasing new books difficult for most students. The points-based system removes the need for cash transactions, making educational resources more affordable and accessible to low-income students.
- **Strengthening Community Support :** Students sharing books create stronger social bonds and a cooperative spirit necessary for resilience during crises.
- **Offline File Sharing :** Enables fast transfer of large educational files and software via USB, overcoming Gaza's slow and unreliable internet.

## Initial Thoughts on the Technology/Tools that may be used

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### 1. Frontend

HTML & CSS: To create the structure and styling the web pages .

JavaScript: To add interactivity, such as searching for books or updating points dynamically.

Bootstrap: A ready-made CSS framework to quickly design responsive and clean layouts .

### 2. Backend

Firebase: Provides Authentication, a real-time database (Firestore), and file storage (Firebase Storage) without the need for server setup.

### 3. Database Structure

Firestore: Cloud-based NoSQL database to store user profiles, book listings, files, and points.

### 4. Design Tools

Canva: For creating simple app graphics and promotional visuals.

Figma: For designing the app's user interface with free templates before coding

### 5. Hosting & Deployment

Firebase Hosting: For deploying the web version of the app with a single command.

Google Play Store and App Store for publishing the mobile version if developed with frameworks