Problem 3: Advanced Campus Resource Sharing Platform

Background

Students often struggle to access study materials, lab kits, devices, or other campus resources efficiently. Many buy expensive items they rarely use, while others have extra resources but no organized platform to lend or share them safely.

Current solutions are informal — WhatsApp, emails, or notice boards — leading to:

- Missed sharing opportunities
- Confusion about availability
- Lack of trust between students
- No tracking of borrowed items

A smarter, digital platform can solve these problems, reduce costs, save time, and foster collaboration and accountability on campus.

The Problem

There is no centralized, intelligent system for sharing resources within a campus. The platform should:

- Allow posting, searching, and borrowing resources.
- Include availability management and notifications.
- Track items, borrowing history, and deadlines.
- Support trust-building mechanisms between users.
- Provide analytics and dashboards to show popular resources, lending trends, and student engagement.

Your Task

Design and build a working prototype of an Advanced Campus Resource Sharing Platform that:

Core Features (Must-Have):

- Student profiles with preferences and resource history.
- Resource posting with name, category, description, image, and availability.
- Search, filter, and sort functionalities for borrowers.
- Request & approval system with notifications for both parties.
- Borrowing history and dashboard for students.

Advanced Features (Extra Marks):

Do your own research and use your creative mind to implement extra features as this carries extra marks in creativity section

Constraints

- Use low-cost/free tools .
- Must ensure data privacy, role-based access, and secure communication.
- UI must be easy to navigate for non technical users.

Expected Outcomes

At the end of the hackathon, your team should present:

- Working prototype demonstrating:
  - Resource posting & search
  - Borrowing request/approval flow
  - Notifications for requests & deadlines
  - Borrowing history dashboard

- Advanced features for extra marks:
- Presentation showing:
  - Design choices
  - Tech stack
  - Benefits for students and campus collaboration

Stakeholders

- Students who borrow resources.
- Students who lend/share resources.
- Campus authorities or student councils .

Note for Participants: This is a prototype-focused hackathon. While a fully production-ready product is not expected, your solution should be a well-architected, demonstrable proof-of-concept that convincingly showcases its potential for real-world impact