

### 1. Introduction

The Acadexa Student App was developed as the student-facing side of the Acadexa web platform. While many institutions already use learning management systems (LMS), this project focuses on creating a lightweight, mobile-first solution tailored for students. The originality of this work lies in combining multiple academic features—attendance, fees, assignments, exams, chat, and study material—into a single mobile application that is simple to use and directly connected to the existing web system.

# 2. Novel Approach

The innovative aspect of this project is the **integration of academic and communication features in one mobile app**. Instead of students relying on separate tools (one for attendance, another for assignments, and another for communication), Acadexa brings them together in a unified interface. Key points of novelty:

- **Mobile-first design**: Many LMS platforms are web-heavy; this app prioritizes mobile usability for students.
- **Batch-based chat system**: Unlike generic messaging apps, the chat is restricted to batch groups, ensuring focused academic discussions.
- **Direct link to admin-controlled web system**: Students only see verified data (attendance, fees, faculty details) without manual entry, reducing errors.
- Assignment and exam submission inside the app: Students don't need to switch to email or third-party platforms.

#### 3. Comparison with Existing Solutions

Existing platforms like Moodle or Google Classroom provide similar features but often require heavy setup, multiple logins, or external integrations.

- **Moodle**: Powerful but complex; requires training and customization.
- Google Classroom: Good for assignments but lacks integrated fee records or attendance tracking.
- Acadexa Student App: Lightweight, mobile-friendly, and directly tied to the institution's admin system.

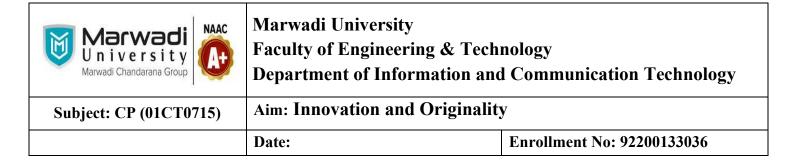
This makes Acadexa more **practical for small to mid-sized institutions** that need a simple, ready-to-use solution without high costs or technical overhead.

#### 4. Contribution to the ICT Field

The project contributes to the ICT domain by showing how **mobile-first integration** can improve student engagement and reduce administrative overhead.

- For students: A single app for all academic needs improves accessibility and reduces confusion.
- For institutions: Centralized data management ensures accuracy and saves time.
- For the ICT field: Demonstrates how combining existing technologies (Flutter, PHP, MySQL) in a novel way can create a cost-effective alternative to large LMS platforms.

This approach can inspire future work in **lightweight**, **domain-specific mobile applications** that bridge gaps between complex enterprise systems and end-users.



# 5. Conclusion

The originality of the Acadexa Student App lies not in inventing new algorithms but in **reimagining how students interact with academic systems**. By combining multiple features into a single, mobile-first platform, it addresses gaps in existing solutions and provides a practical, scalable model for institutions.