

Project Proposal: FAST.Connect

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Abstract

FAST.Connect is a cross-platform mobile application designed to enhance networking and campus trading within FAST-NUCES for both students and teachers. The app provides two core functionalities: Friends & Peers Connection, which allows users to find and connect with classmates and colleagues based on shared interests and academic backgrounds, and Marketplace, an integrated feature from FASTTrade that enables users to buy and sell books, electronics, and other essentials securely. Built using React Native and Firebase, FAST.Connect aims to streamline interactions and provide a trusted campus-exclusive trading environment. It helps students connect and collaborate while allowing teachers to share insights and engage meaningfully.

Project Proposal Requirements

1. Functional Requirements

1. **User Authentication & Profiles:** Users sign up using their FAST email and create personalized profiles.
2. **Friends & Peers Connection:** Users can search and connect with others based on course enrollment, interests, and common connections. Users can send connection requests, which must be accepted by the recipient before they become friends and can chat.
3. **Marketplace:** Users can post listings, browse items, negotiate prices, and chat with buyers/sellers. (Optional: Listings must be approved by an admin before they appear on the marketplace wall.)
4. **Chat System:** Secure messaging for peer interactions and marketplace negotiations.
5. **Search & Filters:** Advanced search for users (friends) and categorized listings in the marketplace.
6. **Push Notifications:** Alerts for new messages, friend requests, and marketplace updates.

2. Non-Functional Requirements

1. **Cross-Platform Compatibility:** Single codebase for both Android and iOS using React Native.
2. **Security & Authentication:** FAST email verification ensures only university students and teachers can join.
3. **Scalability:** The system will be designed to handle large numbers of users and listings.
4. **User-Friendly Interface:** A simple and intuitive UI for seamless navigation.
5. **Performance & Speed:** Optimized queries for fast response times.
6. **Data Privacy:** Secure storage and protection of user information.