MedGuru - (PRD)

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1. Objective

Develop an Android application, **MedGuru**, to help users locate affordable, government-authorized medicine alternatives during emergencies like the COVID-19 pandemic. The app aims to reduce medicine discovery time and increase accessibility to essential medicines.

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2. Target Audience

- **Primary Users:** College students, families, and residents in Delhi-NCR seeking affordable medicines.
- **Secondary Users:** Healthcare professionals and pharmacists who want quick reference to medicine availability and pricing.

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3. Core Features

- **Medicine Search:** Users can search for government-authorized medicines and view availability in nearby pharmacies.
- **Price Comparison:** Provides pricing information to help users choose affordable options.
- **Real-time Data Integration:** Syncs with open-source government pharmacy data for accurate availability and prices.
- **User Profile Management:** Tracks searches and preferences for faster recommendations.
- **Educational Content:** Tips on safe medicine usage and alternatives.

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4. Technical Requirements

- **Platform:** Android (Kotlin/XML)
- **Architecture:** MVVM for scalable code structure
- **Database:** Firebase Realtime Database for backend storage
- **Networking:** APIs to fetch open-source pharmacy data
- **Authentication:** Firebase Authentication for secure login
- **Push Notifications:** Firebase Cloud Messaging for updates on availability

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5. Design and User Experience

- **User Interface:** Clean and intuitive interface suitable for quick searches.
- **Accessibility:** Designed for easy use under stressful situations like health emergencies.
- **Localization:** Hindi and English support to reach wider user base in Delhi-NCR.

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6. Security and Privacy

- **Data Privacy:** Ensures user search history and personal information are securely stored.
- **Compliance:** Adheres to basic data protection guidelines.
- **User Consent:** Users must consent to data collection for personalized experience.

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7. Scope & Limitations

- **Geographic Scope:** Delhi-NCR region
- **Beta Testing:** Tested only within college users
- **Data Source:** Open-source government pharmacy database

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8. Milestones and Timeline

Milestone	Completion Date
Project Planning	April 2020
Design Phase	May 2020
Development Phase	June 2020
Beta Testing	July 2020
Launch Preparation	August 2020
Post-Beta Updates	September 2020

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9. Success Metrics

- **User Impact:** Reduced medicine discovery time by **40%** during beta testing
- **Technical Performance:** Achieved **98% uptime** with Firebase backend
- **User Reach:** Primarily Delhi-NCR area during initial launch
- **Data Accuracy:** Leveraged official open-source pharmacy data

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10. Risks and Mitigations

Risk	Mitigation Strategy
Data Accuracy	Regular updates from government pharmacy datasets
Limited User Base	Beta testing with college users before wider rollout
Technical Bugs	Iterative testing and Firebase monitoring
Accessibility Challenges	Simple UI/UX for easy adoption under stress