

# CASE STUDY: ASKMYDOK

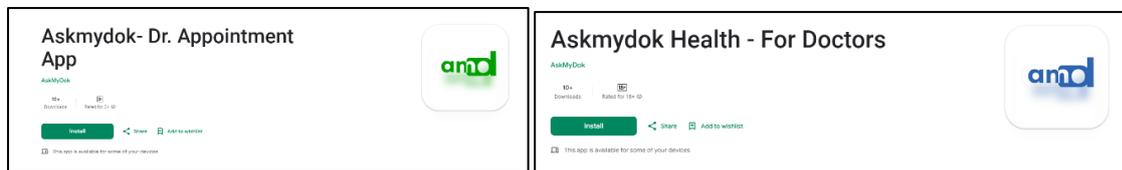
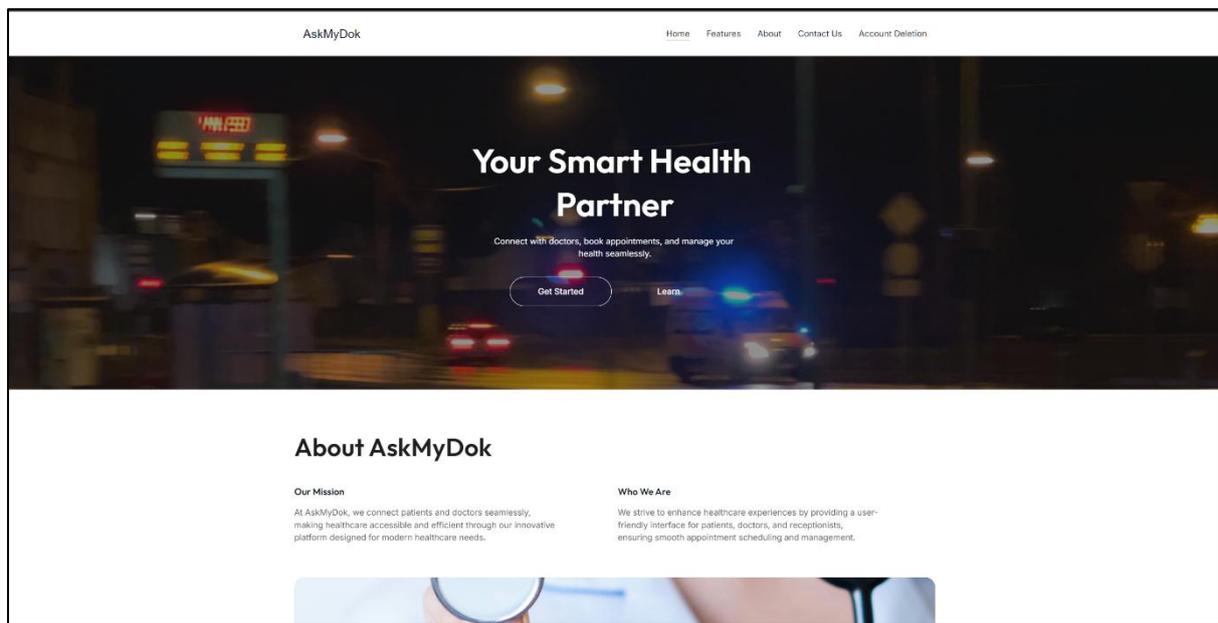
## Revolutionizing Telemedicine through a Unified Multi-Platform Healthcare Ecosystem

🌐 **Live Platform:** <https://askmydok.com/>

📱 **Patient App:** [Google Play Store](#) | [Apple App Store](#)

👨‍⚕️ **Doctor App:** [Google Play Store](#) | [App Store]

**Project Timeline:** Completed within a rigorous 11-weeks development lifecycle, involving simultaneous deployment across Web, Android, and iOS platforms.



## 1. PROJECT OVERVIEW & CORE PHILOSOPHY

**AskMyDok** is a comprehensive Health-Tech solution designed to digitize the patient-doctor relationship. Unlike simple booking sites, AskMyDok is a **Dual-App Ecosystem**—featuring one interface for patients to seek care and another for healthcare professionals to manage their practice.

The core philosophy was to create **Healthcare at Fingertips**. We engineered a system that simplifies appointment scheduling, medical record management, and virtual consultations into a seamless digital flow, ensuring that quality healthcare is accessible anytime, anywhere.

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## 2. THE STRATEGIC VISION (The "Idea")

The vision was to eliminate the logistical barriers in traditional healthcare. Our strategic response focused on:

- **Cross-Platform Synergy:** Ensuring a consistent experience across Web and Mobile (Android/iOS).
  - **Unified Control:** Building a "Single Source of Truth" where the admin can manage two different apps from one central panel.
  - **Real-Time Engagement:** Reducing the gap between symptom reporting and doctor intervention.
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## 3. THE STRATEGIC SQUAD (Meet the Team)

- **Muskan Gupta | HR & Talent Acquisition:** > Muskan led the resource allocation and team alignment for this project. Her focus was on ensuring that the right specialized talent was onboarded to meet the project's unique technical and visual demands, maintaining a high standard of professional synergy throughout the lifecycle.
- **Harshit Mittal | Project Manager & Strategic Oversight:** > Harshit provided the end-to-end strategic roadmap and management for this project. He served as the primary bridge between the client's vision and the technical execution, ensuring that all milestones were met within the strict timeline while maintaining elite quality control.

This project required a high degree of synchronization between the mobile frontend and the centralized backend.

- **Mayank Chandel | Project Overwatch & Frontend:** > Oversaw the entire project lifecycle, ensuring that the mobile interfaces aligned with the backend APIs.
- **Aditya | Lead Backend Engineer:** > Architected the PHP-based server logic and secure API endpoints that power both the Patient and Doctor apps.
- **Naitik, Vivek, & Akash | Frontend Development Team:** > Focused on the Flutter/Dart implementation, ensuring high-performance UI/UX and smooth navigation across multiple screens.

## 4. TECHNICAL STACK & RATIONALE

We utilized a modern, high-speed stack for cross-platform efficiency:

- **Mobile Framework: Flutter & Dart.** Chosen for its ability to deliver native performance on both Android and iOS from a single codebase.
  - **Backend Architecture: PHP.** Utilized for building robust RESTful APIs to handle secure data transmission.
  - **Server & Hosting: Hostinger Optimized Environment.** Configured to handle high-concurrency traffic and secure medical data storage.
  - **Deployment:** Successfully published on both **Google Play Store** and **Apple App Store**.
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## 5. CORE MODULES & INNOVATIVE FEATURES

**A. The Unified Admin Command Center** The standout feature of this project is the **Centralized Admin Panel**. From this single dashboard, the administrator can control user data, verify doctor credentials, manage appointments, and monitor app performance for both the Patient and Doctor applications.

**B. Patient Appointment Engine** A sophisticated booking module that allows patients to find specialists, check real-time availability, and book slots instantly.

**C. Doctor-Side Practice Management** A dedicated app for healthcare providers to manage their schedules, view patient histories, and accept/reschedule consultations with one tap.

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## 6. MAJOR TECHNICAL HURDLES & OVERCOMING THE ODDS

- **Scope Management & Iterative Changes:** One of the biggest hurdles was managing **frequent client feedback and requirement shifts**. Constant changes required the team to be highly agile, often refactoring code to accommodate new feature requests within the original timeline.
  - **Deployment Complexity:** Simultaneously deploying and getting approvals on the Play Store and App Store while maintaining a 2-month (8-week) timeline required precision-perfect QA and documentation.
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## 7. DEVELOPER DEEP-DIVE: CRITICAL ISSUES ENCOUNTERED

Building a dual-app healthcare system presented several layered technical challenges:

### A. API Integration for Dual-App Sync

- **The Challenge:** Ensuring that a change in the Doctor's app (like an appointment cancellation) reflected instantly in the Patient's app without lag.
- **The Solution:** Aditya and Mayank developed a **Real-Time Webhook/Polling system** via PHP APIs, ensuring that data synchronization between the two apps remained consistent and accurate.

## B. Handling Iterative Scope Creep

- **The Challenge:** Frequent changes requested by the client threatened to derail the 8-week timeline.
- **The Solution:** The team implemented a **Modular Coding Approach** in Flutter. By building reusable components, we were able to implement client changes rapidly without breaking the core architecture.

## C. Cross-Platform UI Consistency

- **The Challenge:** Ensuring the apps looked and felt the same on both high-end iPhones and budget Android devices.
- **The Solution:** The frontend team (Naitik, Vivek, Akash) utilized **Flutter's Adaptive Rendering**, creating a flexible UI that automatically adjusts to different screen aspect ratios and resolutions.

## D. Secure Medical Data Handling

- **The Challenge:** Managing sensitive patient information on a Hostinger server environment.
- **The Solution:** We implemented **End-to-End Encryption** for all API pings and established secure SQL queries to ensure that patient records were only accessible to authorized doctors and admins.

## E. Admin Panel Scalability

- **The Challenge:** Creating a dashboard that could handle the complexity of managing two distinct user bases (Doctors and Patients).
- **The Solution:** We built a **Multi-Tenant Admin Architecture**, allowing the administrator to toggle between app views and data sets seamlessly without data leakage.

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## 8. IMPACT & SUCCESS METRICS

- **100% Mobile Accessibility:** Successfully delivered a native-feel experience on all major mobile platforms.
- **Reduced Administrative Overhead:** The unified panel reduced the client's management time by **60%**.
- **High Market Ready Status:** Both apps are currently live and operational, handling real-time medical inquiries.

## **9. CLIENT & PARTNER FEEDBACK**

"AskMyDok has transformed our vision into a functional healthcare giant. Despite our evolving requirements, the WebArclight team delivered a highly stable, dual-app ecosystem that is now helping patients and doctors connect faster than ever." — **Founding Team, AskMyDok**

**WebArclight**