# Tabib Online

## Online Patient Appointment System

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*"Find, Filter, and Fix Appointments"*

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# 1 Problem Statement

Accessing medical care for non-emergency health concerns is often difficult due to the lack of visibility of available doctors, their specialties, and availability of appointments. Patients often waste time or money by visiting the wrong doctor or face delays in getting timely advice. Meanwhile, doctors struggle to build online visibility and connect with relevant patients.

# 2 Proposed Solution

We propose a web-based platform that acts as a matchmaking service between patients and doctors, similar to Fiverr but focused on healthcare.

### For Patients

- Create a personal profile
- Search for doctors by specialty, availability, and verification
- View schedules and book appointments directly

### For Doctors

- Register and create a professional profile
- Apply for verification to increase credibility
- Manage availability and receive appointment requests

Verified doctors will be awarded a badge and ranked higher in search results. The platform will feature a specialty list managed by the admin for efficient filtering.

# 3 Monetization Strategy

To ensure sustainability, the platform will include multiple revenue streams:

### 1. Doctor Verification Fee

Monthly subscription for verified badges. Verified profiles are highlighted and recommended more frequently.

**2. Appointment Booking Fee**

A small service fee (for example, PKR 50-100) for a successful booking. First-time reservations can be free to encourage new users.

**3. Paid Video Consultations**

Doctors may offer video consultations. The platform takes a 30% share of the consultation fee.

**4. Analytics Dashboard (Premium Doctors)**

Premium doctors will receive insights on:

- Appointment trends
- Patient engagement
- Specialty demand

This feature will be part of a subscription tier.

# 4 Tech Stack

- **Frontend:** Next.js, React.js, TypeScript, Tailwind CSS
- **Backend:** Node.js, Express.js, TypeScript
- **Database:** MongoDB (with Mongoose)
- **DevOps & Deployment:** Docker, Nginx, GitHub Actions, AWS EC2/S3
- **Others:** RESTful APIs, MVC Architecture

# 5 Future Work

To further expand and improve the platform, we plan to add:

**1. AI-Powered Chatbot**

- Symptom input in natural language
- Doctor/specialty recommendation using AI
- Emergency triage and health suggestions

**2. AI-Based Doctor Verification**

- Automated verification of doctors using AI agents via PMDC portal APIs

**3. Health Record Integration**

- Patients can upload basic records
- Verified doctors can view records during consultation (with consent)

**4. In-App Messaging & Video Consultations**

- Secure built-in messaging system
- Built-in video calls for remote consultations

**5. Pharmaceutical and Laboratory Partnerships**

- Order prescribed medicines
- Book diagnostic tests and home sample pickups

**6. Corporate Health Dashboards**

- Dashboards for companies and institutions
- Employee appointment management and reporting

# 6 Conclusion

Our platform simplifies healthcare access by matching patients with the right doctors in a user-friendly, efficient manner. With a solid business model and scalable technology stack, it enhances visibility for doctors and provides patients with timely, trusted care.

*"Every single one of us deserves access to quality, affordable health care."*
*– Sara Gideon*