

## **Feasibility Study Overview: BookMyDoc**

The BookMyDoc Online Doctor Appointment Booking System is a web-based platform built using PHP to simplify and automate the process of booking doctor appointments. This system allows patients to easily schedule appointments with doctors without the need for phone calls or long waits. Patients can browse doctor profiles, check real-time availability, and book appointments at their convenience. Additional features include appointment reminders, patient feedback, and secure online payment options.

This feasibility study evaluates the system's viability across three critical dimensions: technical, economic, and operational. The analysis ensures the platform can be successfully developed, implemented, and maintained while meeting the demands of users in a competitive and evolving healthcare

### **1. Technical Feasibility**

Technical feasibility focuses on the technological tools, resources, and infrastructure required to build and maintain the system.

- **Proposed Technology :**
  - Front-end: HTML, CSS, and JavaScript for an intuitive and responsive user interface.
  - Back-end: PHP for handling server-side logic and MySQL for Efficient data handling, including user profiles, appointments, and medical records.
  - Additional Features: Integration of secure payment gateways (PayPal)
- **Scalability:**

The system is designed to handle an increasing number of users, including patients, doctors, and staff, ensuring long-term scalability. It can support future enhancements, such as telemedicine modules or advanced analytics.
- **Security and Compliance:**

The platform will employ encryption protocols and ensuring data privacy and security for sensitive medical and personal information.

From a technical standpoint, the system is achievable with the proposed tools and frameworks, and it ensures high performance and security.

### **2. Economic Feasibility**

Economic feasibility evaluates the financial aspects, including development costs, operational expenses, and revenue potential.

- **Development and Maintenance Costs:**
  - Development: Estimated at RS 50,000 to RS 55,000, covering design, coding, testing, and deployment.
  - Maintenance: Annual costs ranging from RS 7,000 to RS 10,000 for hosting, updates, and support services.
- **Revenue Streams:**

- Subscription fees from doctors based on practice size or features used.
- Transaction fees for online payments processed through the system.
- Advertising revenue from healthcare-related products and services.

The financial analysis indicates that the system is a cost-effective investment with significant potential for profitability.

### 3. Operational Feasibility

Operational feasibility examines how the system fits into existing workflows and its ability to meet user needs effectively.

- **Patient Experience:**  
Patients will benefit from easy account registration, streamlined appointment booking, and real-time updates. Features like secure payments and reminders enhance convenience and engagement.
- **Doctor Efficiency:**  
Doctors can manage schedules, access patient medical records, and share consultation notes easily. This reduces administrative burdens and improves focus on patient care.
- **Staff and Admin Roles:**  
Administrative staff can handle scheduling conflicts, assist patients, and manage financial transactions through user-friendly dashboards. Administrators will oversee operations, generate analytics, and ensure compliance.
- **Ease of Use:**  
The system's intuitive interface minimizes the need for extensive training, and its mobile-responsive design ensures accessibility across devices.

The platform enhances healthcare workflows by reducing inefficiencies, improving accessibility, and providing a smooth user experience for all stakeholders.

### Conclusion

The **BookMyDoc Online Doctor Appointment Booking System** is a feasible and promising project that addresses critical challenges in the healthcare sector. Its ability to integrate seamlessly with existing workflows, deliver excellent user experience, and generate sustainable revenue makes it a viable and valuable solution. By utilizing modern technologies and adhering to industry regulations, the system can redefine appointment management and contribute to a more accessible, efficient, and patient-centric healthcare experience.

