# ABSTRACT - TELEMEDICINE SYSTEM

The Telemedicine System is a Java-based solution designed to provide remote healthcare services through virtual consultations. The system enables patients to schedule appointments, consult with doctors via video conferencing, receive prescriptions, and manage their medical records online. By integrating a secure communication platform, the system ensures real-time interaction between patients and healthcare providers, thereby improving access to medical services, especially for remote or underserved areas. The system is designed to streamline healthcare delivery, reduce hospital visits, and provide timely medical intervention.

**Software Requirements:**

JAVA
IDE: IntelliJ IDEA, Eclipse, or NetBeans
Healthcare Technology
Subdomains: Telemedicine, Remote Consultation, Patient Record Management

**Key Features:**

1. **User Registration and Authentication**:
   - Secure registration for patients and doctors using OAuth 2.0 or JWT (JSON Web Tokens).
   - Role-based access control for patients, doctors, and administrators.
2. **Appointment Scheduling**:
   - Patients can book appointments with available doctors based on specialization and availability.
   - Automatic appointment reminders and notifications via email or SMS.
3. **Video Consultation**:
   - Integration with WebRTC API to enable real-time video conferencing for virtual consultations.

- In-call chat and file sharing for prescriptions, lab reports, and medical advice.
4. **Electronic Medical Records (EMR)**:
    - Doctors can view, update, and manage patient medical records securely.
    - Patients can access their medical history, diagnoses, prescriptions, and treatment plans.
    - All records are securely stored and can be shared with other healthcare providers as needed.
5. **Prescription Management**:
    - Doctors can generate e-prescriptions after consultations.
    - Patients can download or share prescriptions directly with pharmacies.

**Team Size**: 3 members

**Team Members:**

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Tests the system to ensure proper functionality, security, and a seamless user experience.
This Telemedicine System improves healthcare accessibility and efficiency by utilizing technology to bridge the gap between patients and doctors, ensuring safe, convenient, and effective medical consultations remotely.