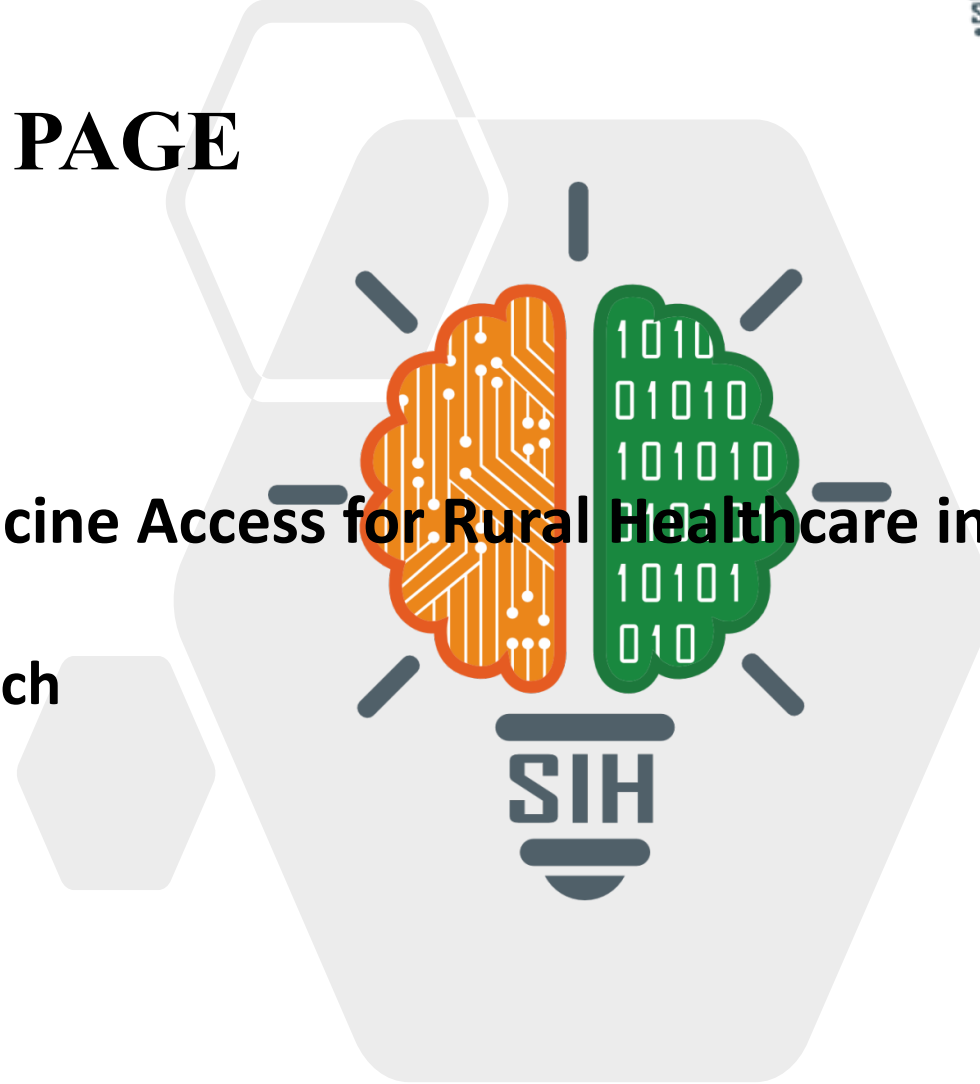


## TITLE PAGE

- Problem Statement ID –25018
- Problem Statement Title -Telemedicine Access for Rural Healthcare in Nabha
- Theme-MedTech / BioTech / HealthTech
- PS Category- Software
- Team ID-
- Team Name (Registered on portal)-Scripting Spartans



## ❖ Proposed Solution (Describe your Idea/Solution/Prototype)

**A Comprehensive telemedicine platform** that provides efficient video consultation and digital health management to **Nabha's rural population** that bridges the urban-rural healthcare gap in the most efficient way.

### How it Addresses the Problem:

- **Remote Consultations** :Offers multilingual Video consultations,removing **Language barriers** and avoiding unnecessary travel.
- **Health record Management**:All of the patient's records would be available to see anytime,anywhere in just **one click** .
- **Medicine Availability**:Provides **Real time** access to **availability of medicines** at local pharmacies ,allowing to check if desired medicine is in stock or not.
- **Ai Integrated Symptom Checker**:Assists users with **initial symptom Analysis** ,so they can check if their health has improved ,using their stats.

### Innovation and Uniqueness:

- it focuses on the unique challenges of rural healthcare, such as limited connectivity and digital illiteracy.
- **Unlike other platforms ,we are available offline,so that you can access data anytime without worrying about INTERNET.**
- The **main aim is to be scalable and so easy to use that it requires only a few minutes to learn.**

**Technical Approach (Frontend):** Web app development with React js and Node js.

**Backend:** Node.js for robust server management.

**Testing:** Postman

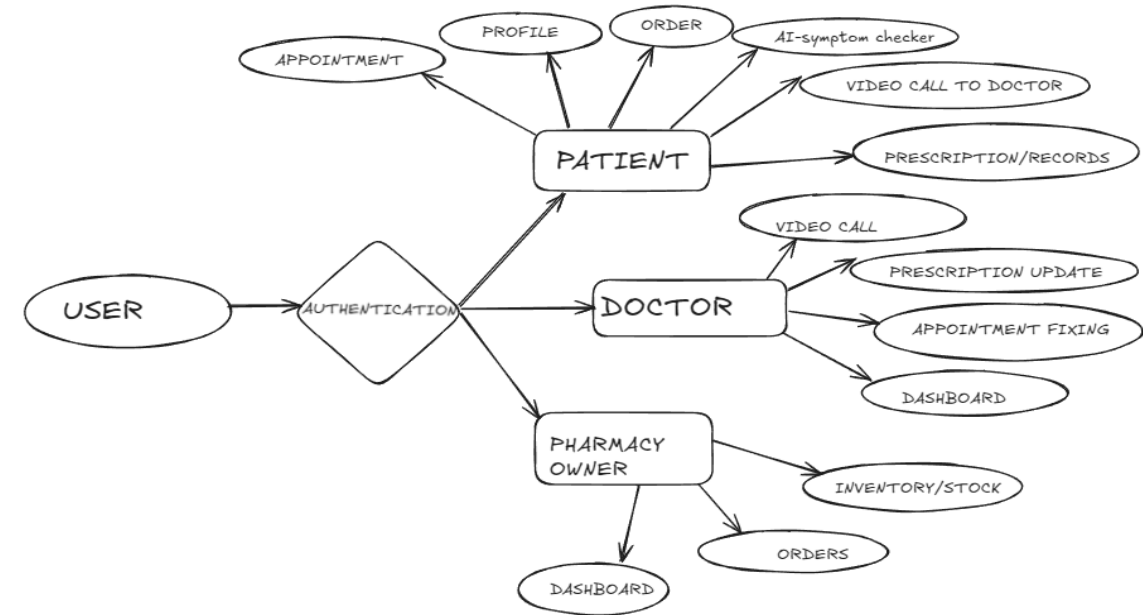
**Database:** MongoDB, MySQL for DBMS.

**Core Technologies:**

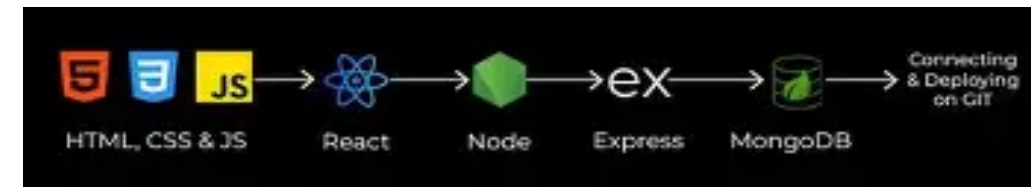
**WebRTC:** For secure video consultations.

**AI :** For the symptom checker.

**Local Storage:** For offline digital health records.



Technologies used:



## Analysis of the feasibility of the idea :-

- **Technical Feasibility:** it uses well established technologies, frameworks, and programming languages,
- **Operational Feasibility:** Design includes multilingual and offline capabilities, addressing the operational challenges of low connectivity, literacy and language barrier.
- **Economic Feasibility:** With a compound Annual Growth Rate (**CAGR**) of 31 % in telemedicine sector in India between 2020 to 2025 there is a strong economic Justification.

## Potential challenges and risks:-

- **Limited Connectivity:** Only 31% of the rural households in Punjab have Internet access.
- **Digital Literacy:** The target audience may have limited familiarity with technology,
- **Data Privacy:** Handling sensitive patient data requires robust security measures.

## Strategies for overcoming these challenges:-

- **Limited Connectivity:** The solution's design would be prioritizing the offline functionality because of connectivity issues.
- **User Centric Design :** Easy to use, Simple to learn.
- **ROBUST security Protocol:** Implementing the Strongest data encryption and access control.

## Potential Impact:

- **Patients:** Improved health outcomes and reduced financial strain.
- **Healthcare Providers:** Alleviates the burden on understaffed hospital personnel.
- **Community:** Enhances the overall quality of life and well-being of the rural population
- **Self Assessment:** if they can track they can cure..

## Social and Economic Benefits:

- **Social:** Increases healthcare accessibility and equity in rural areas improving overall public Health.
- **Economic:** Reduces travel costs and lost wages for daily-wage workers and farmers they can access Healthcare
- **Environmental Impact:** As fewer patients would be travelling less carbon emissions.

- Details / Links of the reference and research work

## **Problem Statement & Powerpoint presentation format:**

SIH official website(<https://sih.gov.in/sih2025PS>)

## **Market and Technology Research:**

- Reports about hospital in Punjab from News Articles of Times of India, India Times, Amar Ujala.
- Reports about Rural life of Punjab from Official portal of Punjab Govt.
- Reports about Economic growth in Telemedicine from blog channels.

### **•Sources:**

- [Rural Development of Punjab](#)
- <https://www.bing.com/news/search?q=Rural+Punjab+News+Toi&qpvrt=rural+punjab+news+toi&FORM=EWRE>
- [https://www.academia.edu/82604314/A\\_Study\\_of\\_Telemedicine\\_in\\_Punjab\\_Scope\\_and\\_Challenges\\_in\\_Implementation](https://www.academia.edu/82604314/A_Study_of_Telemedicine_in_Punjab_Scope_and_Challenges_in_Implementation)