



Video Call Application Overview

This project enables real-time video communication over the internet.

It supports remote meetings and integrates with Hospital Quick for healthcare.



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Key Features for Users

Real-Time Video Calls

Instant audio and video communication between users.

User-Friendly Interface

Simple design for easy navigation.

Secure Communication

Ensures privacy of conversations.

Cross-Platform

Works on computers, smartphones, and tablets.

How It Works

1 Create Session

User generates a unique call link.

2 Join Call

Participants click the link to join via browser.

3 Stream Media

Audio and video are streamed seamlessly.



Technical Overview

Frontend

HTML, CSS, JavaScript, React.js or vanilla JS.

Backend

Node.js with Express.js for signaling server.

WebRTC & Socket.io

Peer-to-peer streaming and real-time signaling.

Project Structure & Setup

1

Client Folder

Contains frontend code: index.html, styles.css, script.js.

2

Server Folder

Node.js signaling server with Socket.io setup.

3

Setup

Clone repo, drop index.html in browser to run.

Integration with Hospital Quick

Remote Consultations

Patients consult specialists without travel.

Emergency Triage

Visual assessment before hospital arrival.

Doctor Collaboration

Specialists communicate for treatment plans.

Family Interaction

Connect patients with family during restricted visits.

Benefits of Integration

Improved Access

Healthcare reaches isolated patients.

Reduced Load

Less hospital congestion from remote visits.

Patient Empowerment

More flexible care options.

Cost-Effective

Minimizes travel and time lost.





Future Enhancements

Group Video Calls

Using SFU architecture for multi-user calls.

Screen Sharing

Additional WebRTC data channels.

End-to-End Encryption

Enhanced security for privacy.

AI & Multilingual Support

Symptom assessment and diverse language options.



Conclusion & Impact

The Video Call Application is a standalone innovation for real-time communication.

Its integration with Hospital Quick revolutionizes healthcare delivery, improving access and efficiency.