

**Web Development Internship Report**

**Project: YouTube Clone Web Application**

**Intern: Naquib Ansari**

# ✨ Project Overview

This internship project revolved around creating a next-gen YouTube-inspired platform packed with cutting-edge features:  
  
• Adaptive video streaming at various qualities  
• Gesture-based custom video controls for immersive experience  
• Download functionality with premium unlock via Razorpay  
• VoIP integration for modern-day collaboration

# 🎥 Multi-Quality Video Player

To ensure seamless streaming for all users, the player was equipped to switch between:  
➡ 320p, 480p, 720p, and 1080p resolutions.  
This ensured adaptability to users' network speeds and device capabilities.

# 📥 Video Download & Premium Plan

Users enjoy daily downloads with an easy restriction mechanism — 1 video per day.   
Want more? Upgrade to unlimited downloads by opting for the premium plan via Razorpay's payment gateway.   
All downloaded content is neatly shown in the user's profile.

# 🖐️ Custom Gesture-Based Video Player

Created a unique gesture-based interface that feels intuitive:  
- Double Tap Right 👉 Forward 10 seconds  
- Double Tap Left 👈 Rewind 10 seconds  
- Single Tap Center 🔇 Pause  
- Triple Tap Center ⏭️ Next Video  
- Triple Tap Right ❌ Exit App  
- Triple Tap Left 💬 Open Comments

# VoIP + Screen Share & Recording

Enabled real-time communication with screen sharing and call recording:  
• WebRTC and sockets for smooth video calls  
• React Media Recorder for crisp recordings  
• Time-based usage control for optimized experience

# ⚙️ Challenges & Smart Solutions

Challenge: Gesture clashes with browser defaults.  
✅ Solution: Implemented custom gesture handlers and zones.  
  
Challenge: VoIP recording captured blank frames.  
✅ Solution: Synced both audio and video streams.  
  
Challenge: Vercel backend failed for video storage.  
✅ Solution: Switched backend to Render, kept frontend on Vercel.

# 🎯 Key Learnings & Technical Skills

This internship sharpened my expertise in:  
- React development and UI/UX design  
- Razorpay integration and monetization  
- WebRTC for real-time communications  
- Full-stack deployment on Vercel + Render

# 🏁 Conclusion

The project marks a significant milestone in my web development journey.   
From design thinking to real-world deployment — every step added a new dimension to my skills.  
The feedback received highlighted user satisfaction and the futuristic appeal of the application.