Project Testing Phase

# Test Plan Document – Video Conferencing App

Date: 26-06-2025

Team ID:

Project Name: Video Conferencing App

Maximum Marks:

## 1. Objective

The objective of this test plan is to validate that the core functionality of the Video Conferencing App works as expected. The goal is to ensure stability, usability, and reliability of all main features including room management, peer-to-peer communication, screen sharing, chat, and recording.

## 2. Scope

* - Room creation and joining with unique URLs
* - Peer-to-peer video and audio communication
* - Chat messaging within the video room
* - Screen sharing between participants
* - Session recording and download
* - User interface interactions and responsiveness

## 3. Testing Environment

Frontend: HTML, CSS, JavaScript (Vanilla JS / Optional React)

Backend: Node.js, Express.js

Libraries: PeerJS, Socket.IO, WebRTC

Browsers: Google Chrome, Mozilla Firefox, Microsoft Edge (latest versions)

Operating Systems: Windows 10/11, macOS Monterey+, Ubuntu 22.04+

## 4. Types of Testing to be Performed

* - Functional Testing
* - UI/UX Testing
* - Performance Testing (basic)
* - Compatibility Testing (browser-based)
* - Regression Testing
* - User Acceptance Testing

## 5. Roles and Responsibilities

Tester: Executes test cases, logs bugs, and provides feedback.

Developer: Fixes defects and provides build updates.

Project Manager: Reviews progress and approves sign-off.

## 6. Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | Feature | Test Steps | Expected Result | Actual Result | Status |
| TC-001 | Create Room | Click 'Create Room' | New room with link is created |  |  |
| TC-002 | Join Room | Enter room link and allow camera/mic | User joins successfully |  |  |
| TC-003 | Audio Toggle | Click microphone icon | Audio toggles on/off |  |  |
| TC-004 | Video Toggle | Click camera icon | Video toggles on/off |  |  |
| TC-005 | Screen Sharing | Click share screen, select window | Screen is broadcast to peers |  |  |
| TC-006 | Chat Messaging | Send message in chat input | Message displays in room chat |  |  |
| TC-007 | Recording | Click record, stop, then download | Downloadable .webm file saved |  |  |

## 7. Exit Criteria

- All critical test cases pass without failure

- Major bugs resolved or workaround in place

- Stakeholders review and approve sign-off