Performance Analysis – TinyFlix

# 1. Application Overview

• Name: TinyFlix

• Type: Video-based learning website

• Functionality: Users can browse, filter, and watch educational videos.

# 2. Performance Testing Scope

• Pages Tested:

- Home Page: Includes search, filters, and sort options.

- Video Playback Page: Includes video player, comments, bookmark, and other user interactions.

• Tools Used: Windsurf, Selenium (Python)

# 3. Identified Performance Issues

• Home page load time: ~3 seconds

• Video playback page load time: ~3 seconds

• Comment posting time: ~1 second

• Bookmark action time: ~1 second

• No major issues like large image sizes, unused JavaScript, or uncompressed files were found.

# 4. Metrics and Benchmarks

• Average Page Load Time: ~2 seconds

• Time to First Byte (TTFB): ~2 seconds

• Largest Contentful Paint (LCP): Between 1 to 4 seconds

• Test Tools: Windsurf and Selenium

# 5. Optimization Recommendations

• Enable browser caching for static assets to speed up repeat visits.

• Implement lazy loading for video thumbnails and images.

• Optimize server response time to enhance actions like commenting and bookmarking.

• Use a Content Delivery Network (CDN) to serve media files more efficiently.