

# Test Plan

CS 408

ID	Title	Type	Instructions	Expected Result	Severity
1	create a server	Functionality	On Mac 1. Navigate to the Server folder 2. Run start_mac_server.command 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Critical
		Functionality	On Windows 1. Navigate to the Server folder 2. Run start_server.bat 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Critical
		Functionality	On Linux 1. Navigate to the Server folder 2. Run ./RUN_SERVER_LINUX.sh (in Official Release (Buggy)/linux) 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Critical
		Boundary	On any 1. Run the programs in terminal with spaces in front	1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Workaround
		Boundary	On any 1. Run the programs in terminal with any text following the program and a space	1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Workaround
		Equivalence	1. Navigate to server folder in terminal 2. Run './server.js'	1. Server should not start	Workaround
		Equivalence	1. Navigate to server folder in terminal 2. Run 'java server.js'	1. Server should not start	Workaround
2	open a desktop client	Functionality	On Windows 1. Navigate to the Desktop Client folder 2. Run client.exe	1. Client should pop up	Critical
		Functionality	On Mac 1. Navigate to the Desktop Client folder 2. Run client.exe	1. Client should pop up	Critical
		Functionality	On Linux 1. Navigate to "Official Release (Buggy)/linux" 2. Run ./client	1. Client should pop up	Critical
		Equivalence	On Mac 1. Navigate to "Official Release (Buggy)/linux"	1. Client should not pop up	Workaround

			2. Run ./client		
		Equivalence	On Linux 1. Navigate to the Desktop Client folder 2. Run client.exe	1. Client should not pop up	Workaround
		Boundary	On any 1. Run the programs in terminal with any text following the program and a space	1. Client should pop up	Workaround
		Boundary	On any 2. Run the programs in terminal with a '/' in front	1. Client should pop up	Workaround
3	open a web client	Functionality	1. Open a browser 2. Enter the IP address of the server	1. Client should pop up	Critical
		Equivalence	1. Open a browser 2. Enter the IP address with an extra period at the end	1. Client should not pop up	Workaround
		Equivalence	1. Open a browser 2. Enter the IP address with an extra period at the beginning	1. Client should not pop up	Workaround
		Boundary	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix	1. Client should pop up	Workaround
		Boundary	1. Open a browser 2. Enter the IP address with a '/' at the end	1. Client should pop up	Workaround
4	stream video	Functionality	1. Login on the browser or desktop client 2. Click on a video link	1. Video should open in new tab and begin playing	Critical
		Equivalence	1. Login on the browser or desktop client 2. Right click on a video link and select open in new tab	1. Video should open in new tab and begin playing	Important
		Boundary	1. Once watching a video click navigate to end of video	1. Video should end immediately	Workaround
		Boundary	2. Once watching a video click navigate to zero seconds	1. Video should play from that point	Workaround
5	upload files	Functionality	1. Login on the browser or desktop client 2. Click "Choose Files" button 3. Select a .jpg, .png, or other normal image format 4. Click 'open'	1. Image should upload to the server	Critical
		Functionality	1. Login on the browser or desktop client 2. Click "Choose Files" button 3. Select a .mp4, .webm, or other normal video format 4. Click 'open'	1. Video should upload to the server	Critical

		Functionality	1. Login on the browser or desktop client 2. Click “Choose Files” button 3. Select a .mp3 or other normal video format 4. Click ‘open’	1. Audio should upload to the server	Critical
		Equivalence	1. Login on the browser or desktop client 2. Click “Choose Files” button 3. Select a .txt or other non-supported file type 4. Click ‘open’	1. File should not be uploaded to the server	Important
		Boundary	1. Login on the browser or desktop client 2. Click “Choose Files” button 3. Select a 5gb audio, video, or image format 4. Click ‘open’	1. File should be uploaded to the server	Workaround
		Boundary	5. Login on the browser or desktop client 6. Click “Choose Files” button 7. Select an blank audio, video, or image 8. Click ‘open’	1. File should be uploaded to the server	Workaround
6	configure my server	Functionality	On Mac 1. Navigate to the Server folder 2. Run start_mac_server.command	1. Should be prompted to create password	Critical
		Functionality	On Windows 1. Navigate to the Server folder 2. Run start_server.bat	1. Should be prompted to create password	Critical
		Functionality	On Linux 1. Navigate to the Server folder 2. Run ./RUN_SERVER_LINUX.sh (in Official Release (Buggy)/linux)	1. Should be prompted to create password	Critical
7	play an audio file	Functionality	1. Open a browser (example: Crome) 2. Enter the IP address with ‘http://’ as a prefix 3. Click on the title of an audio file	1. Should open new tab to play audio.	important
		Functionality	1. Open a different browser (example: Microsoft Edge) 2. Enter the IP address with ‘http://’ as a prefix 3. Click on the title of an audio file	1. Should open new tab to play audio.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an audio file 3. Click on the title of the audio file	1. Should open new tab to play audio.	important
		Functionality	1. Login on the browser or desktop client 2. Delete an audio file	1. Should not open or work in new tab to play audio.	important

			3. Click on the title of the audio file		
		Functionality	1. Login on the browser or desktop client 2. Upload an existing audio file 3. Click on the title of the first audio file	1. Should open new tab to play audio.	important
		Functionality	1. Login on the browser or desktop client 2. Delete existing audio file 3. re-upload audio file 4. Click on the title of the audio file	1. Should open new tab to play audio.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an unsupported file 3. Upload a supported audio file 4. Click on the title of the audio file	1. Should open new tab to play audio.	important
		Functionality	1. Login on the browser or desktop client 2. Click on the title of multiple audio files	1. Should open new a tab to play each audio file.	important
		Functionality	1. Login on the browser or desktop client 2. Click on the title of the same audio file multiple times	1. Should open a new tab for each click to play the same audio.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an existing audio file 3. Click on the title of the second audio file	1. Should open new tab to play audio.	important
8	view photos	Functionality	1. Open a browser (example: Crome) 2. Enter the IP address with 'http:/' as a prefix 3. Click on the title of an image file	1. Should open new tab to view image.	important
		Functionality	1. Open a different browser (example: Microsoft Edge) 2. Enter the IP address with 'http:/' as a prefix 3. Click on the title of an image file	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an image file 3. Click on the title of the image file	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Click on the title of multiple image files	1. Should open new a tab to view each image file.	important
		Functionality	1. Login on the browser or desktop client	1. Should open a new tab for each click to view the same image.	workaround

			2. Click on the title of the same audio file multiple times		
		Functionality	1. Login on the browser or desktop client 2. Delete an image file 3. Click on the title of the image file	1. Should not open or work in new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Delete existing image file 3. re-upload image file 4. Click on the title of the image file	1. Should open new tab to play image.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an unsupported file 3. Upload a supported image file 4. Click on the title of the image file	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Click on .jpg file type	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Click on .png file type	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an existing image file 3. Click on the title of the first image file	1. Should open new tab to view image.	important
		Functionality	1. Login on the browser or desktop client 2. Upload an existing image file 3. Click on the title of the second image file	1. Should open new tab to view image.	important
	restrict access to those I trust	Functionality	On Mac 1. Navigate to the Server folder 2. Run start_mac_server.command 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be granted access using same password.	Critical
		Functionality	On Windows 1. Navigate to the Server folder 2. Run start_server.bat 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be granted access using same password.	Critical
		Functionality	On Linux 1. Navigate to the Server folder 2. Run ./RUN_SERVER_LINUX.sh (in Official Release (Buggy)/linux) 3. When prompted for a password enter 'password'	1. Terminal prompt should say "Password set." 2. Client should be granted access using same password.	Critical

10	download files	Functionality	<ol style="list-style-type: none"><li>1. Login on the browser or desktop client</li><li>2. Click on the download button next to the file.</li></ol>	<ol style="list-style-type: none"><li>1. The file is downloaded.</li></ol>	Important
		Functionality	<ol style="list-style-type: none"><li>1. Login on the browser or desktop client</li><li>2. Upload a file</li><li>3. Click on the download button next to the file.</li></ol>	<ol style="list-style-type: none"><li>1. The file is downloaded.</li></ol>	Important
		Functionality	<ol style="list-style-type: none"><li>1. Login on the browser or desktop client</li><li>2. delete a file</li><li>3. Click on the download button next to the file.</li></ol>	<ol style="list-style-type: none"><li>1. The file is not downloaded.</li></ol>	Important
		Functionality	<ol style="list-style-type: none"><li>1. Login on the browser or desktop client</li><li>2. Click on the download button next to a already downloaded file.</li></ol>	<ol style="list-style-type: none"><li>1. The file is downloaded a second time.</li></ol>	workaround
11	see my viewing history	Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Look at the bottom of the page and see if the history header exists</li></ol>	A header tab should exist. The first time you do this there should be nothing under the header.	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Try to download an audio file</li><li>4. See if the history has updated</li></ol>	Under the header there should be a comment/note that, the file that was downloaded has been downloaded.	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Try to download a .jpeg file</li><li>4. See if the history has updated</li></ol>	The jpeg file should show up in the history list	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Try to download an webm file</li><li>4. See if the history has updated</li></ol>	The webm file should show up in the history list	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Try to upload an audio file</li><li>4. See if the history has updated</li></ol>	The audio file should show up in the history list	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Try to upload a .jpeg file</li><li>4. See if the history has updated</li></ol>	The jpeg file should show up in the history list	workaround
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li></ol>	The webm file should show up in the history list	workaround

			<div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Try to upload a .webm file</div> <div>4. See if the history has updated</div>		
12	mark movies I enjoy as favorites	Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Mark a movie as a favorite</div>	The star next to the link should become highlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Upload a movie to the client</div> <div>4. Mark a movie as a favorite</div>	The star next to the link should become highlighted	Workaround
15	support for multiple clients at once	Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Open a new browser</div> <div>4. Enter the IP address with 'http://' as a prefix</div>	Both of the clients should work normally	Important
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Open a new browser</div> <div>4. Enter the IP address with 'http://' as a prefix</div> <div>5. Open a new browser</div> <div>6. Enter the IP address with 'http://' as a prefix</div>	Both of the clients should work normally	Important
16	clear my history	Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Download a jpeg file</div> <div>4. Clear history</div>	The history should be cleared	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Download an audio file</div> <div>4. Clear history</div> <div>5. Upload a file</div>	The history should be cleared	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a prefix</div> <div>3. Download a webm file</div> <div>4. Clear history</div> <div>5. download a webm file</div>	The history should only contain the newly downloaded file	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http://' as a</div>	The history should only contain the newly downloaded file	Workaround

			<div>prefix</div> <div>3. Upload a jpeg file</div> <div>4. Clear history</div> <div>5. Upload a jpeg file</div>		
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Upload an audio file file</div> <div>4. Clear history</div> <div>5. download an audio file</div>	The history should only contain the newly downloaded file	Workaround
17	able to unmark favorites	Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Mark a movie as a favorite</div> <div>4. Unmark the movie as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Mark a .jpep as a favorite</div> <div>4. Unmark the .jpeg as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Mark a audio as a favorite</div> <div>4. Unmark the audio as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Upload a movie</div> <div>4. Mark a movie as a favorite</div> <div>5. Unmark the movie as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Upload a jpeg</div> <div>4. Mark a .jpep as a favorite</div> <div>5. Unmark the .jpeg as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
		Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Upload an audio file</div> <div>4. Mark a audio as a favorite</div> <div>5. Unmark the audio as favorite</div>	The star next to the movie's link should become unhighlighted	Workaround
18	delete media off the server to make room	Functionality	<div>1. Open a browser</div> <div>2. Enter the IP address with 'http:/' as a prefix</div> <div>3. Delete a jpeg file</div>	The file's link should disappear from the web browser and the desktop client	Important



		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Delete an audio file</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Delete movie file</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Upload a jpeg</li><li>4. Delete a jpeg file</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Upload an audio file</li><li>4. Delete an audio file</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Upload a movie file</li><li>4. Delete movie file</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Open the desktop app</li><li>4. Enter the IP and password</li><li>5. Delete a jpeg file in the browser</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Open the desktop app</li><li>4. Enter the IP and password</li><li>5. Delete an audio file in a desktop app</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Open the desktop app</li><li>4. Enter the IP and password</li><li>5. Delete movie file in the desktop app</li></ol>	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	<ol style="list-style-type: none"><li>1. Open a browser</li><li>2. Enter the IP address with 'http:/' as a prefix</li><li>3. Open the desktop app</li><li>4. Enter the IP and password</li><li>5. Upload a jpeg in the browser</li></ol>	The file's link should disappear from the web browser and the desktop client	Important

			6. Delete a jpeg file in the desktop client		
		Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix 3. Open the desktop app 4. Enter the IP and password 5. Upload an audio file in the browser 6. Delete an audio file from the client	The file's link should disappear from the web browser and the desktop client	Important
		Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix 3. Open the desktop app 4. Enter the IP and password 5. Upload a movie file in the browser 6. Delete movie file in the client	The file's link should disappear from the web browser and the desktop client	Important
19	see the progress of my uploads and video transcoding	Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix 3. Upload a large movie file	An download box should appear on the screen display how much of the file has been downloaded	Workaround
		Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix 3. Upload a large file	An download box should appear on the screen display how much of the file has been downloaded	Workaround
		Functionality	1. Open the desktop app 2. Enter the IP and password 3. Download a large file	An download box should appear on the screen display how much of the file has been downloaded	Workaround
NF 1	Server and client should run on Linux/OSX/Windows	Functionality	1. Run the server on windows (refer to ID1) 2. Open a client in windows (refer to ID2+3)	Server and client should run.	Critical
		Functionality	1. Run the server on Linux (refer to ID1) 2. Open a client in Linux (refer to ID2+3)	Server and client should run.	Critical
		Functionality	1. Run the server on OSX (refer to ID1) 2. Open a client in OSX (refer to ID2+3)	Server and client should run	Critical
NF 2	A user should not be able to access any files/directories that are not shared from the server.	Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix	User should not have access to files/directories not shared from server	Important
		Functionality	1. Open the desktop app 2. Enter the IP and password	User should not have access to files/directories not shared from server	Important
NF 3	Security: Secure transmission of movies using SSL	Functionality	1. Open a browser 2. Enter the IP address with 'http:/' as a prefix 3. View SSL certificate through browser settings	Site should have SSL certificate	Important
NF 4	Security: Password should not be blank	Functionality	Enter 'test123' as the password	The server should accept the password	Critical

		Boundary	Enter " as the password	The server should reject the password with a helpful error	Critical
NF 5	Security: The password should not allow weird characters that are difficult to type or could potentially break the program (tab, newline, etc...)	Functionality	Enter 'test123' as the password	The server should accept the password	Critical
		Equivalence	Enter 'test     123' as the password	The server should error saying that that is not an appropriate password	Critical
		Equivalence	Enter 'test 123' as the password	The server should error saying that that is not an appropriate password	Critical
		Boundary	n/a (this nonfunctional requirement is a boundary case inherently)		n/a
NF 6	Security: Password should be safe from prying eyes in the room	Functionality	Start typing the password on the web UI	The password field should be masked (i.e. show •••• instead of the plain text password)	Important
		Functionality	Start typing the password on the desktop UI	The password field should be masked (i.e. show •••• instead of the plain text password)	Important
NF 7	Usability: The server should be able to be started with no additional work done by the user besides specifying configuration parameters	Functionality	1. Run server on any platform (refer to ID1)	Server should run without asking for anything more than a password. 1. Terminal prompt should say "Password set." 2. Client should be able to view server at http://localhost:8080/	Workaround
NF 8	Usability: The clients should be easy to use with clear usage patterns and UI elements.	Functionality	1. Run server on any platform (refer to ID1) 2. Open desktop client (refer to ID2)	User should easily be able to figure out how to use the client.	Important
		Functionality	1. Run server on any platform (refer to ID1) 2. Open web client (refer to ID3)	User should easily be able to figure out how to use the client.	Important
NF 9	Performance: A maximum of 5 clients at once should be supported.	Functionality	1. Connect to the server with 2 different 2. Connect to the server with a 3rd client	The 3rd client should be able to connect.	Workaround
		Equivalence	1. Connect to the server with 3 different clients 2. Connect to the server with a 4th client	The 4th client should be able to connect.	Workaround
		Boundary	1. Connect to the server with 4 different clients 2. Connect to the server with a 5th client	The 5th client should <i>not</i> be able to connect.	Workaround
NF 10	Performance: Web pages should load without timing out, and videos should not buffer for more than 1 minute.	Functionality	1. Play a 3gb video on the web client	Buffering should last under 60s	Workaround
		Equivalence	1. Play a 3gb video on the web client	Buffering should last under 60s	Workaround
		Boundary	1. Play a 5gb video on the web client	Buffering should last under 60s	Workaround
NF 11	Performance: A maximum file size of 5GB should be supported for playing on the desktop client and 1GB for playing on the web client. Larger files may work, but performance may vary.	Functionality	1. Play a 500mb file on the web client	Performance should seem nominal (no stuttering, lag)	Workaround
		Functionality	1. Play a 2.5gb file on the desktop client	Performance should seem nominal (no stuttering, lag)	Workaround
		Equivalence	1. Play a 8GB file on the desktop client	Performance <i>might</i> be poor (but not necessarily)	Workaround
		Equivalence	2. Play a 3GB file on the web client	Performance <i>might</i> be poor (but not necessarily)	Workaround
		Boundary	2. Play a 1GB file on the web client	Performance should seem nominal (no stuttering, lag)	Workaround

		Boundary	2. Play a 5GB file on the desktop client	Performance should seem nominal (no stuttering, lag)	Workaround
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