# TSH Platform Manual Testing Notes

The goal of this document is to define the manual testing/verification of the audio video platform and Admin portal.

This document is a good reference as it explains screen by screen functionality.

<https://docs.google.com/document/d/1G2HT_o0_Z64JeThqsWXKU8g5M_RXIZaKrLslbvESISk/edit#>

## Market Share information

* [Handy tool](https://gs.statcounter.com/os-market-share/desktop/united-states-of-america) for determining market share of devices, OSs, browsers, etc.
* Desktop vs Mobile vs Tablet
  + <https://gs.statcounter.com/platform-market-share/desktop-mobile-tablet/united-states-of-america>
* Desktop OS
  + <https://gs.statcounter.com/os-market-share/all/united-states-of-america>
* Browsers
  + <https://gs.statcounter.com/browser-market-share/desktop/united-states-of-america>
* Smartphones
  + <https://www.pewresearch.org/internet/fact-sheet/mobile/?utm_campaign=Healthcare%20Nurture&utm_source=email&utm_medium=healthcarenurture&utm_content=Healthcare%20Nurture>
* Tablet
  + <https://gs.statcounter.com/os-market-share/tablet/united-states-of-america>
  + Version 14.4
* Wireless Carrier Market share Stats
  + <https://www.statista.com/statistics/199359/market-share-of-wireless-carriers-in-the-us-by-subscriptions/>
  + <https://www.pewresearch.org/internet/fact-sheet/mobile/#ownership-of-other-devices>
  + <https://www.lightreading.com/financial/the-us-wireless-market-in-10-charts/d/d-id/752180>

## Platforms, operating systems, browser support:

<https://fortunly.com/blog/lap-top-market-share/#gref>

Desktop/Laptop Market Share in the US

* HP – 30%
  + Have dedicated test HP laptop
* Dell – 24%
* Lenovo – 14%
  + Have dedicated test Chromebook
* Apple – 12%
  + Have dedicated test Macbook Air
* Acer – 8%
* ASUS – 4%

Operating Systems

* Windows market share is strong. Redmond’s flagship operating system commands more than [78%](https://gs.statcounter.com/os-market-share/desktop/worldwide) of all desktop/laptop computer market share around the world. This puts Microsoft in a huge lead, with Apple’s macOS garnering just above [14%](https://gs.statcounter.com/os-market-share/desktop/worldwide) of the world market. Marginal operating systems like Google’s ChromeOS and Linux rate even lower with a desktop/laptop market share of around [2%](https://gs.statcounter.com/os-market-share/desktop/worldwide) each. In 2018, Microsoft made $[110.36 billion](https://www.macrotrends.net/stocks/charts/MSFT/microsoft/revenue), an increase of [14.28%](https://www.macrotrends.net/stocks/charts/MSFT/microsoft/revenue) compared to 2017.
* Windows 10 remains the most popular OS in the world, accounting for [39.22%](https://www.theinquirer.net/inquirer/news/3068698/windows-10-is-now-the-worlds-most-used-operating-system) of the Windows laptop market share in 2019. Windows 7 comes second, with a share of [33.38%](https://gs.statcounter.com/os-version-market-share/windows/desktop/worldwide).
* Apple’s most popular operating system is macOS Mojave, with a market share of [42.5%](https://gs.statcounter.com/os-version-market-share/macos/desktop/worldwide) among Mac users. The second most popular OS hailing from Cupertino, California, is High Sierra, responsible for almost [24%](https://gs.statcounter.com/os-version-market-share/macos/desktop/worldwide) of the desktop/laptop market among Mac users.

OS & browser combinations

* Mac
  + Version 10.13 (High Sierra) and greater
  + Chrome
  + Firefox TBD
  + Safari TBD
* Windows
  + Windows 10 and greater
  + Chrome
  + Firefox TBD
* iPad > TBD
  + Chrome (not officially supported by Apple or WebRTC on iPad)
  + Safari TBD
  + Firefox TBD

## Audio Video devices:

* Microphone - computer or TV (via HDMI connection)
* Speakers - computer or TV (via HDMI connection)
* Bluetooth headsets - N/A
* Built in cameras

## Browsers to be tested (in order of priority):

* Chrome (primary must have)
  + Mac version 84.0.4147.105 (64-bit) and greater
  + Windows version X and greater
* Firefox (nice to have)
  + Mac version 79.0 (64-bit) and greater
  + Windows version X and greater
* Chrome or Safari (for iPad only?)
  + Chrome is not supported by Apple on the iPad

## TSH Environments

* TSH Environments
  + <https://docs.google.com/spreadsheets/d/1dGv0-K4x_x8NbdGY30HLm9kyy9NifLnq7Fox5d-mAds/edit#gid=0>

## Test Logins and Sessions

### Logins

* password for all accounts is togethernow

### Sessions

* Test Environment Users
  + <https://docs.google.com/spreadsheets/d/130xwXi1y-zsGiO_N-T9zvONtSZ9lw1tiEFP1UUSABjo/edit#gid=1377798911>
* Test Environment Sessions
  + <https://docs.google.com/spreadsheets/d/1D3Yo8oNHWtY3qCpRryKT0nwVvUSM-WTCx3GzjEkuCsw/edit#gid=628498857>

# Admin Portal Testing

* Need Access and url on the Admin portal test environment
* Click on url and log into Admin portal
* Admin Menus and functions
  + Dashboard - TBD
  + Auth0 Users
    - What needs to be tested here?
    - Functionality to add to scheduled ad hoc session
  + Users
    - Create, Edit, Delete Prospect
    - Screened Participants
    - Active Participants
  + Ad hoc Sessions
    - Create, Edit, Delete
    - Schedule, Reschedule, Reassign
  + Schedule Prospect Ad hoc Sessions
    - Create, Edit, Delete
    - Schedule session, Reschedule session, Reassign instructor/organizer
  + Scheduled Sessions
    - All Sessions
    - My Sessions
  + Curriculum
    - * Courses
      * Classes
      * Class Sessions

## Dashboard - TBD

## Auth0 Users

* What needs to be tested here?
* 3 different type of users to test
  + Prospect > created in Admin portal (ticket only)
  + Google email > tsh email, Auth0
  + Auth0 > Auth0 Google account
  + Database user > create user in DB (for dev purposes)

## Create and Edit Prospect

* Create Prospect
  + Click on the “+” icon
  + Enter information for the following fields (character limit?)
    - SID (Screener ID) > required
    - PIDN (Participant identification number) > added after qualified for study
    - Prospect first name
    - Prospect last name
    - Prospect email address
    - Prospect primary phone number
    - Prospect mobile phone number
    - Caregiver first name
    - Caregiver last name
    - Caregiver email address
    - Caregiver primary phone number
    - Caregiver mobile phone number
    - Copy Meeting/landing page Link
  + Click “Save” button
  + Prospect appears in the Prospect table and can now be searched, filtered and sorted by first, last name, phone number, SID, PIDN (if participant is eligible for study)
* Edit Prospect
  + Click on the “Pencil” icon
  + Edit information for any of the above fields
  + Click “Save” button
  + Prospect information is updated based upon information edited
  + Prospect appears in the Prospect table and can now be searched, filtered and sorted by first, last name, phone number, SID, PIDN (if participant is eligible for study) based upon edited information
* Delete
  + Click on “Trash can” icon
  + Confirmation pop up dialog appears so user can confirm to delete or cancel
* Search by:
  + SID
  + Prospect First / Last Name
  + Caregiver First / Last Name
  + PIDN
* Filter by:
* Sort by:

## Schedule Prospect Ad hoc Sessions

* Find Prospect by SID
* Expand Accordion UI
* Edit Prospect Contact Information
  + Click on the “Pencil” icon
  + Edit information for any of the above fields
  + Click “Save” button
  + Prospect information is updated based upon information edited
  + Prospect appears in the Prospect table and can now be searched, filtered and sorted by first, last name, phone number, SID, PIDN (if participant is eligible for study) based upon edited information
* Edit Caregiver Contact Information
  + Click on the “Pencil” icon
  + Edit information for any of the above fields
  + Click “Save” button
  + Caregiver information is updated based upon information edited
  + Caregiver appears in the Prospect table and can now be searched, filtered and sorted by first, last name, phone number, SID, PIDN (if participant is eligible for study) based upon edited information
* Schedule New Session, specify the following information:
  + Start Date
  + Start Time
  + Timezone
  + Facilitator
  + Session Type
  + Additional Participants (person scheduling meeting will also be included)
  + Add Notes for changes made
* Upcoming Sessions section is populated with scheduled session
  + Validate Session type, Facilitator, Start time, Duration information displayed based upon selections made
* Copy Link to join classroom
  + Validate the participant names in the session
  + Continue to [AV Platform testing section](#_ilcv4a1mie8)

## Reschedule Prospect Ad hoc Sessions

* Reschedule Session (Start Date and Time)
  + Find Prospect by Prospect Last Name
  + Expand Accordion UI
  + Click on “Reschedule” icon in Upcoming Sessions section, change:
    - Start Date
    - Start Time
    - Add Notes for changes made
  + Upcoming Sessions section is populated with updated date and time
    - Validate Session type, Facilitator, Start time, Duration information displayed based upon selections changed
  + Copy Link to join classroom
    - Validate the participant names in the session
    - Continue to [AV Platform testing section](#_ilcv4a1mie8)

## Reassign Facilitator for Prospect Ad hoc Sessions

* Reassign Facilitator to Session
  + Find Prospect by Caregiver last name
  + Expand Accordion UI
  + Click on “Reschedule” icon in Upcoming Sessions section, change:
    - Facilitator
    - Add Notes for changes made
  + Upcoming Sessions section is populated with reassigned facilitator
    - Validate Session type, Facilitator, Start time, Duration information displayed based upon selections changed
  + Copy Link to join classroom
    - Validate the participant names in the session
    - Continue to [AV Platform testing section](#_ilcv4a1mie8)

## Delete Prospect Ad hoc Sessions

* Delete Session
  + Click on “Trash can” icon in Upcoming Sessions section
  + Observe Confirmation pop up dialog
  + Click cancel > should cancel
  + Click on “Trash can” icon again
  + Observe Confirmation pop up dialog
  + Click Delete > Session should be deleted from Upcoming Sessions section

## All Sessions

* Create, Edit, Delete
* Schedule session, Reschedule session, Reassign instructor/organizer

## My Sessions

* Create, Edit, Delete
* Schedule session, Reschedule session, Reassign instructor/organizer

## Curriculum - TBD

* Define, Schedule, Courses, Classes, Class Sessions
* Assign instructor and participants to classes

# 

MT Platform Testing Notes

## AV Platform Testing

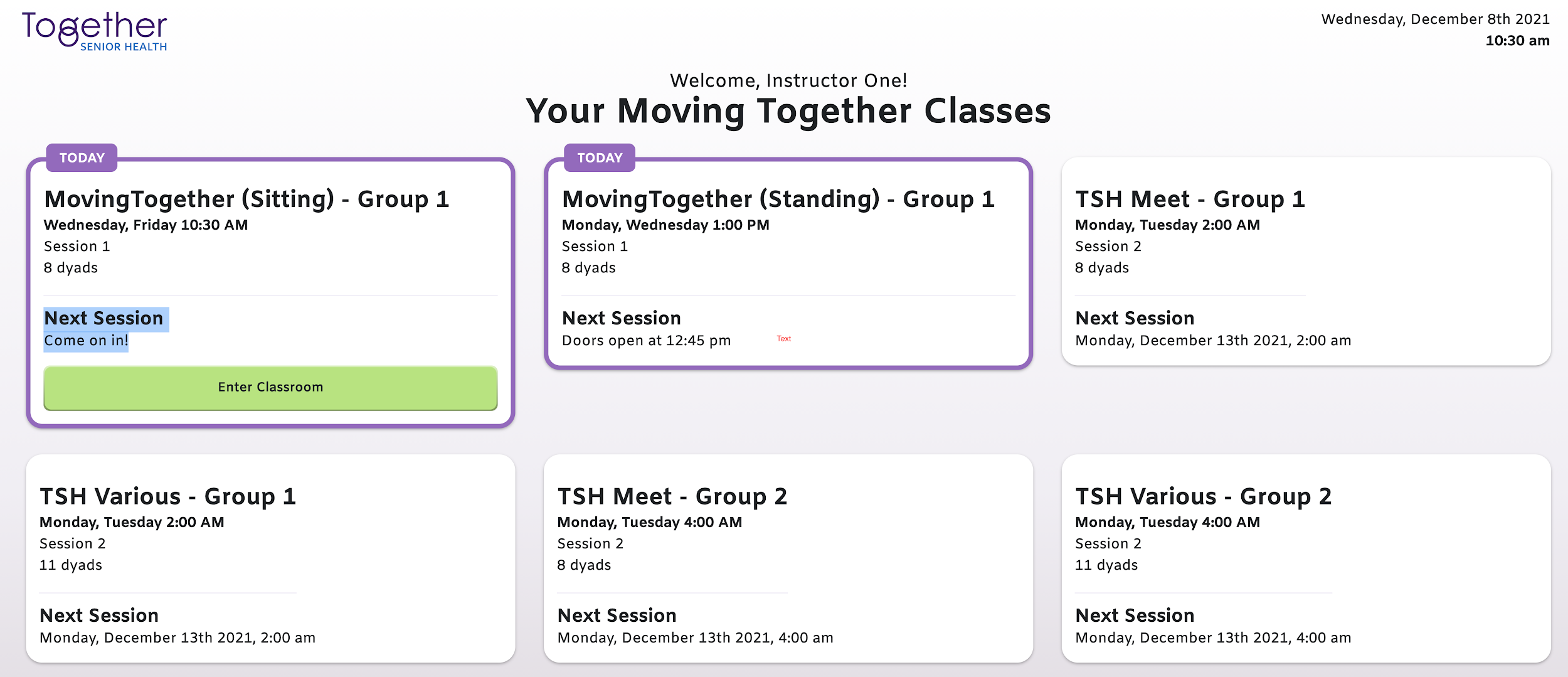
### Pre Requisites and Setup:

* Chrome Browser is the only browser supported for initial MVP launch
* Need Access and test data on AV Platform test environment
* Need url to enter / join classroom
  + Setup in Admin portal: [schedule prospect session](#_we51z96zz3zn)
* Minimal Applications running on computer (i.e. Web Browser using only)
* Ideally only 1 browser running although may need two browsers to add more video streams (up to 4 streams including incognito windows)
* No more than 5 browser tabs can be opened when testing
* Reset browser (or use new incognito window) so the audio and video device prompt is displayed to allow (configure) audio (mic) and video (camera) devices.
  + <https://www.howtogeek.com/411117/how-to-change-a-sites-camera-and-microphone-permissions-in-chrome/>
  + Resetting the default camera on your browser
    - Open Chrome
    - At the top right, click More. Settings.
    - At the bottom, click Advanced.
    - Under "Privacy and security," click Content settings.
    - Click Camera or Microphone.
    - Turn Ask before accessing on or off or reset permissions for site
    - chrome://settings/content/siteDetails?site=https%3A%2F%2Ftogether1.togetherseniorlife.com%3A443
* Must always use the same baseline audio (microphone/headset/speaker) and video devices (camera) when testing for consistent results.
* Run speed test <https://www.speedtest.net/>
  + Record upload / download (in Mbps) and ping (in ms) results
  + Example: Upload: 16.71 Download 88.99 Ping: 14
* Turn on Dev Console tools (cmd+option+I on Mac) and keep track of error messages if an issue is found.
  + Create bug in Jira with exact steps to reproduce, url, console error message and logs (if available). Include system platform, OS, browser version and link Jira bug to applicable user story or sub task.

### Landing Page

Instructors and participants have slightly different landing pages, otherwise their functionality is identical. The differences are as follows:

* The Instructor landing page displays the current upcoming class and 2 other classes scheduled for the current day/date.
* The Participants landing page shows upcoming classes for the day including class name, instructor name and photo.
* Click on url or copy and paste url into new Chrome browser tab (or incognito window)
  + Setup in Admin portal: [schedule prospect session](#_we51z96zz3zn)
  + Future enhancement: detect default browser being used, if not Chrome, then prompt with message for optimal experience, download chrome
* Landing page with available MT classes displays (includes today’s date and time)
* Different Session States to be tested via the Landing page
  + See Test Environment Users for forced time format example in url
    - <https://docs.google.com/spreadsheets/d/130xwXi1y-zsGiO_N-T9zvONtSZ9lw1tiEFP1UUSABjo/edit#gid=1377798911>
  + See Test Environment Sessions for Lobby Open Time, Class ScheduledStartTime, Class ScheduledEndTime, LobbyCloseTime
    - <https://docs.google.com/spreadsheets/d/1D3Yo8oNHWtY3qCpRryKT0nwVvUSM-WTCx3GzjEkuCsw/edit#gid=628498857>
  + Change forced time in url to simulate the following states:
    - Upcoming Classes - shows list of upcoming classes and instructs to come back in X minutes based upon class start time (no Join Classroom button is displayed)
    - Message: Upcoming Class is in X minutes, Come back later!
  + LobbyOpenTime - lobby opens 15 minutes before Class ScheduledStartTime (class duration is 60 minutes)
    - Message: Movement has begun, Come on in!
    - Class ScheduledStartTime - Class usually starts on the hour with duration of 60 minutes
    - Message: Movement has begun, Come on in!
    - Class ScheduledEndTime had ended but is still open for discussion
    - LobbyCloseTime - lobby closes 15 minutes after class start time (class duration is 60 minutes)
    - Message: Movement is over, discussion is still on, Come on in!
  + Sample landing page screen for different states



* AV Sessions Regression Testing Notes:
  + Correct Instructor vs Participant Landing Pages
  + Verify class name, day, date, time, instructor for instructor vs. participant view (Facilitator Google Pic)
  + Users: Auth0, Google, Prospect
  + Verify Correct screen name on landing, AV check pages and in grid view
  + Test forced times for 5 different class times/states - verify correct messaging for instructor and ppt (Doors open, Movement starts, come back in x minutes)
  + Verify current time matches forced time in url (test state) url is UTC time vs. local time
  + Exit Landing page
* Buttons:
  + Enter Classroom CTA
    - Click on “Join Classroom” CTA button takes user to AV check page
  + Ask for Help
    - If clicked, pop up appears to “wait for call”
    - User must click on button again to dismiss pop up message

### Landing Page Test Script

* <https://mt1.test.tsh.care/session/upcoming?forceTime=2021-12-08T18:30:00.000Z>
* Log in as instructor 1 / pwd
* Users in test environment:
  + Instructor One
  + Test User Two
  + Server 1, Stream 3
  + Server 2, Stream 2

### AV Check Page

Happy successful path

* First time (or if using new incognito window), user should be prompted by browser via a pop up to allow microphone and camera
* User must grant “Allow” permissions to properly use the MT AV platform
* If mic and camera permissions are allowed, the user should see video preview and can adjust position in camera or camera angle
* Buttons:
  + Enter Classroom CTA
    - Click on “Join Classroom” CTA button takes user to classroom
  + Ask for Help
    - If clicked, pop up appears to “wait for call”
    - User must click on button again to dismiss pop up message

Failure

* If user “Blocks” permissions for microphone and camera, an error message will display that “Video is not working”
* Buttons
  + “Start over” button allows the user to refresh the browser today
    - In the future, this button might reset browser permissions to prompt for allow permissions
    - If user clicks on “Start over” button and fails again, an error message will display that “Video is not working with sad emoji”
  + “Join classroom anyways” button allows participants to join and can hear audio if video preview fails
  + Ask for Help
    - If clicked, pop up appears to “wait for call”
    - User must click on button again to dismiss pop up message

### Testing Steps and Roles

### Instructor (Chrome Browser)

* Log into test environments as “Instructor” / password: togethernow using Chrome browser
* Select Group view
  + Verify that self video is displayed and microphone is muted by default
  + Verify that instructor controls (4 A/V and “end” buttons) are displayed by default
  + Verify that audio can be muted/unmuted
  + Verify that self video can be turned off and on
* Resize browser window
  + Verify that instructor controls are visible and aligned
  + Verify that audio and video controls can be turned off/on

### Participant 1 (Incognito Chrome browser)

* Participant to use incognito window in Chrome and log in as a participant/test account (different from previous login)
  + Verify that group view is the default view
  + Verify that self video is visible and I can see myself
  + Verify that self video is visible with audio and video controls
  + Verify that participant audio is muted by default (to avoid echo)
  + Verify that participant video is turned on by default
  + Instructor to verify that participant/test X is muted and visible by default
* Participant to unmute/mute audio
  + Instructor to verify this behavior
* Participant to turn on/off video
  + Instructor to verify this behavior
* Instructor Controls
  + Instructor to mute audio in group view
    - Verify in participant browser view that they are muted
  + Instructor to unmute audio in group view
    - Verify in participant browser view that they are unmuted
  + Instructor toggles **from group to instructor view**
    - Instructor verifies that they can see all participants in instructor view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in Instructor view
      * Verify in participant browser view that they are unmuted
    - Participant to verify that they can only view instructor
* Participant to resize browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Participant to click “Start Over” button to browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Instructor Controls
  + Instructor toggles **from instructor to group view**
    - Instructor verifies that they can see all participants in group view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in instructor view
      * Verify in participant browser view that they are unmuted

### Participant 2 (Firefox browser)

* Participant to use Firefox and log in as a participant/test account (different from previous login)
  + Verify that group view is the default view
  + Verify that self video is visible and I can see myself
  + Verify that self video is visible with audio and video controls
  + Verify that participant audio is muted by default (to avoid echo)
  + Verify that participant video is turned on by default
  + Instructor to verify that participant/test X is muted and visible by default
* Participant to unmute/mute audio
  + Instructor and other participants to verify this behavior
* Participant to turn on/off video
  + Instructor and other participants to verify this behavior
* Instructor Controls
  + Instructor to mute audio in group view
    - Verify in participant browser view that they are muted
  + Instructor to unmute audio in group view
    - Verify in participant browser view that they are unmuted
  + Instructor toggles **from group to instructor view**
    - Instructor verifies that they can see all participants in instructor view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in Instructor view
      * Verify in participant browser view that they are unmuted
    - Participant to verify that they can only view instructor
* Participant to resize browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Participant to click “Start Over” button to refresh browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Instructor Controls
  + Instructor toggles **from instructor to group view**
    - Instructor verifies that they can see all participants in group view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in instructor view
      * Verify in participant browser view that they are unmuted

### Participant 3 (Incognito Firefox browser) - Optional?

* Participant to use incognito window in Firefox and log in as a participant/test account (different from previous login)
  + Verify that group view is the default view
  + Verify that self video is visible and I can see myself
  + Verify that self video is visible with audio and video controls
  + Verify that participant audio is muted by default (to avoid echo)
  + Verify that participant video is turned on by default
  + Instructor to verify that participant/test X is muted and visible by default
* Participant to unmute/mute audio
  + Instructor and other participants to verify this behavior
* Participant to turn on/off video
  + Instructor and other participants to verify this behavior
* Instructor Controls
  + Instructor to mute audio in group view
    - Verify in participant browser view that they are muted
  + Instructor to unmute audio in group view
    - Verify in participant browser view that they are unmuted
  + Instructor toggles **from group to instructor view**
    - Instructor verifies that they can see all participants in instructor view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in Instructor view
      * Verify in participant browser view that they are unmuted
    - Participant to verify that they can only view instructor
* Participant to resize browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Participant to click “Start Over” button to refresh browser window
  + Verify that all videos are visible and controls are visible
  + Instructor to verify that participant’s video and controls are visible and aligned
* Instructor Controls
  + Instructor toggles **from instructor to group view**
    - Instructor verifies that they can see all participants in group view
    - Instructor to mute audio in Instructor view
      * Verify in participant browser view that they are muted
    - Instructor to unmute audio in instructor view
      * Verify in participant browser view that they are unmuted

Additional Instructor Controls

* Instructor “leaves” meeting
* Instructor “ends” meeting
  + Verifies that participants are disconnected from meeting with X amount of time.

Once these test cases are agreed upon, a spreadsheet will be created to mark pass or fail. If fail, will log bug number.

* Use this [matrix](https://drive.google.com/a/togetherseniorhealth.com/open?id=1xuvdFX2970fEUYYCqvjs25rlz-y-ElfxQywM0gRM4D0) to record test results