User Acceptance Test
Distributed Instrument Cluster

Contents

Items used for the test.

Minimum 2 Computers

The remote device for the test should be a windows pc ideally.

1 Crestron cable

2 Video Capture device (Webcam or Capture card)

Get the latest commit from Github.

https://github.com/Mikael-og-Andre/Distributed-Instrument-Cluster/tree/Master

Visual Studio 2019 – (Used in development)

Web browser - Google Chrome or Firefox (These browsers were used in testing, and support Pointer lock APIs in the browser)

Scenario 1 Guest Login

Precondition: Backend web server is running

Test	Guest Login 001
Test Name	Enter Website
Test Description	Enter the URL into your Browser with /Login, and press enter.
Expected Result	The website page loads with the login fields and buttons in less than 10 seconds.
Actual Result	
Input Data	
Passed/Failed	

Test	Guest Login 002
Test Name	Login as Guest
Test Description	Press the login/enter as guest button on the bottom of the screen.
Expected Result	You are transferred to the device selection page.
Actual Result	
Input Data	
Passed/Failed	

Test	Guest Login 003

Test Name	Check profile Information
Test Description	In the top bar of the device selection page, left click the profile button, it looks like a face/human
Expected Result	A drop-down menu should appear showing your information as guest
Actual Result	
Input Data	
Passed/Failed	

Scenario 2 Select a device

Precondition: Logged in as a guest, on the device selection screen, and a remote device is connected to the server

Test	Select Device 001
Test Name	Refresh Connection List
Test Description	In the upper middle of the screen, there is a button that looks like 2 arrows, left click it to refresh the list of connections.
Expected Result	The page should display a loading animation, the loading should not last longer than 10 seconds.
Actual Result	
Input Data	
Passed/Failed	

Test	Select Device 002
Test Name	Check for a connected device
Test Description	If a device has connected, there should be a list of all connected devices in the middle of the device selection screen. confirm that the device shows up on the screen
Expected Result	A device should show on the screen with, the name, location, and type, and a button that says select, and if the connection has a Crestron, as well as the ping result.
Actual Result	
Input Data	

Passed/Failed	

Scenario 3 View video as guest

Precondition: Video device is outputting frames to the server, selected a Device, logged in as Guest

Test	View video as guest 001
Test Name	Functioning video
Test Description	In the middle of the screen there should now be a video stream
Expected Result	Video is showing on the webpage
Actual Result	
Input Data	
Passed/Failed	

Test	View video as guest 002
Test Name	No admin controls
Test Description	Check if there is a control bar below the video and no button that says Toggle Keyboard
Expected Result	There should not be a control bar when in guest mode.
Actual Result	
Input Data	
Passed/Failed	

Test	View video as guest 003
Test Name	Check delay
Test Description	Either use the direct control if you are capturing video from a pc, or wave your hand in front of the webcam, and then look at how long it takes to update.
Expected Result	The video delay should be less than 15 seconds
Actual Result	
Input Data	
Passed/Failed	

Test	View video as guest 004
Test Name	Swap Video Device
Test Description	In the top left above the video display, there should be a Selector dropdown saying, Device 0, left click it and select device 1.
Expected Result	The video stream should change to another video stream, e.g., another picture.
Actual Result	
Input Data	
Passed/Failed	

Scenario 4 Register account

Precondition: starting at the login page

Test	Register Account 001
Test Name	Go to registration page
Test Description	At the bottom of the screen left click on the button that says Submit

Expected Result	The page should change to the registration page. "/Register"
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 002
Test Name	Check email validation
Test Description	In the email field, write "hello", then left click the submit button
Expected Result	At the top of the screen, below the Register title, there is a red notification saying, "The email field is not a valid e-mail address."
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 003
Test Name	Test notifications
Test Description	In the text field called Email enter an email in the format "word@word.com", and left click the submit button
Expected Result	A red notification appears at the top of the screen with the following text. "the username field is required." "the password field is required." "the Confirm Password field is required"
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 004
Test Name	Fill in a username
Test Description	Enter a username into the username field, left click the submit button
Expected Result	At the top of the screen the notifications read "The password is required" "The confirm password field is required".
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 005
Test Name	Hidden Password
Test Description	Write hello in the password field
Expected Result	The text in the password field is obscured
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 006
Test Name	Test password check
Test Description	In the password field enter a password, now enter a different Password in the confirm password field. Left click the submit button.
Expected Result	A red notification appears at the top of the screen saying "confirm password and password do not match"
Actual Result	

Input Data	
Passed/Failed	

Test	Register Account 007
Test Name	Reset button
Test Description	Left click the reset button
Expected Result	All the fields have the text you put in removed
Actual Result	
Input Data	
Passed/Failed	

Test	Register Account 008
Test Name	Register an account
Test Description	Write a username in the username field, a valid email in the email field, write a password in the password field, write the same password in the confirm password field. Left click the submit button.
Expected Result	The registration should be successful, and you should be sent to the login page again.
Actual Result	
Input Data	
Passed/Failed	

Scenario 5 Account Login

Precondition: registered an account successfully, starting at the login page

Test	Account Login 001
Test Name	Empty Login
Test Description	Left click the submit button at the bottom of the screen with an empty username and password field
Expected Result	A Red notification appears at the top of the screen. "The username field is required." "The password field is required."
Actual Result	
Input Data	
Passed/Failed	

Test	Account Login 002
Test Name	Empty password
Test Description	Enter the username in the username field
Expected Result	A red notification appears. "The password field is required"
Actual Result	
Input Data	
Passed/Failed	

Test	Account Login 003
Test Name	Wrong password
Test Description	Enter the correct username in the username field, and enter a different password from when you registered
Expected Result	A red notification should appear denying you access

Actual Result	
Input Data	
Passed/Failed	

Test	Account Login 004
Test Name	Test a user
Test Description	Enter the username and password from the registration stage
Expected Result	You should be moved to the device selection page
Actual Result	
Input Data	
Passed/Failed	

Test	Account Login 005
Test Name	Check account information
Test Description	In the top right of your screen, left click the profile icon. Looks like face/human
Expected Result	A dropdown menu should appear below the button, showing that you are logged in with the email from the previous step
Actual Result	
Input Data	
Passed/Failed	

Scenario 6 Control Device

Precondition: Starting after a device is already selected, logged in to an account, remote device selected is a computer with capture card, and Crestron connected

Test	Control Device 001
Test Name	Connect to device
Test Description	Locate the button on the page that has the text "Request Control" and left click it.
Expected Result	After pressing the text "status: none" should update to display "status: Connecting", "status: Requesting device", "status: In queue pos 1" "status: Controlling", You should reach the controlling state in less than 10 seconds is no other device is connected. And the status does not read "Status: Disconnected".
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 002
Test Name	Lock mouse to device
Test Description	Locate the button that has the text "Lock mouse" and left click it
Expected Result	After pressing your mouse should disappear from the screen, and a popup at the top of the screen should read "press escape to unlock"
Actual Result	
Input Data	

Passed/Failed	

Test	Control Device 003
Test Name	Check mouse movement
Test Description	Drag your mouse to the right.
Expected Result	The video should update showing your mouse move to the right after max 3 seconds
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 004
Test Name	Check left click
Test Description	Hover the mouse cursor over desktop icon element and press the right mouse button once.
Expected Result	The element should respond to being clicked, with a highlight.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 005
Test Name	Check right click
Test Description	Hover the mouse on the desktop background and press the right mouse button.
Expected Result	A dropdown menu appears.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 006
Test Name	Open notepad on the remote computer
Test Description	Open a notepad or other application where you can type text and highlight it so you can start writing in the application.
Expected Result	A text application should be open on the remote device.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 007
Test Name	Check normal letters
Test Description	On your keyboard tap the following letters q,w,e,r,t,y,u,I,o,p,a,s,d,f,g,h,j,k,l,z,x,c,v,b,n,m
Expected Result	The letters q,w,e,r,t,y,u,I,o,p,a,s,d,f,g,h,j,k,l,z,x,c,v,b,n,m have been entered in the text document on the remote device.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 008
Test Name	Check shift key
Test Description	Hold down the shift key on your keyboard. Then press the key a. Release the shift key.
Expected Result	The letter A has appeared in the document in uppercase.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 009
Test Name	Check backspace key
Test Description	Press and release the backspace key.
Expected Result	The A letter should be deleted from the text document.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 010
Test Name	Check holding backspace
Test Description	Hold down the backspace key for 4 seconds
Expected Result	The letters will be erased from the text document.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 011
Test Name	Check special keys
Test Description	Press and release the windows button
Expected Result	The windows menu should open.
Actual Result	
Input Data	
Passed/Failed	

Test	Control Device 012
Test Name	Check special key combos
Test Description	Press ctrl, alt, delete, at the same time
Expected Result	The device should enter a menu allowing you to logout or enter task manager, if you are on windows.
Actual Result	
Input Data	
Passed/Failed	

Scenario 7 Website keyboard

Precondition: Starting after a device is already selected, logged in to an account, remote device selected is a computer with capture card, and Crestron connected

Test	Website keyboard 001
Test Name	Connect to device
Test Description	Locate the button on the page that has the text "Request Control" and left click it.
Expected Result	After pressing the text "status: none" should update to display "status: Connecting", "status: Requesting device", "status: In quue pos 1" and after less than 5 seconds it should display "status: controlling"
Actual Result	
Input Data	
Passed/Failed	

Test	Website keyboard 002
Test Name	Open website keyboard
Test Description	Locate the button that has the text "Keyboard" and left click it
Expected Result	After pressing your mouse should disappear from the screen, and a popup at the top of the screen should read "press escape to unlock"
Actual Result	
Input Data	

Passed/Failed	

Test	Website keyboard 003
Test Name	Open notepad on remote computer
Test Description	Open a notepad or other application where you can type text and highlight it so you can start writing in the application.
Expected Result	A text application should be open on the remote device.
Actual Result	
Input Data	
Passed/Failed	

Test	Website keyboard 004
Test Name	Check normal letters
Test Description	On the website keyboard tap the following letters q,w,e,r,t,y,u,I,o,p,a,s,d,f,g,h,j,k,l,z,x,c,v,b,n,m
Expected Result	The letters q,w,e,r,t,y,u,I,o,p,a,s,d,f,g,h,j,k,l,z,x,c,v,b,n,m have been entered in the text document on the remote device, and in the google chrome console as "a" followed by "a break". If they appeared in uppercase, press the caps lock key, and repeat the step.
Actual Result	
Input Data	

Passed/Failed	

Test	Website keyboard 005
Test Name	Check shift key, with hold down key support
Test Description	Hold down the shift key on the website keyboard, you "hold down a key" by right clicking it with your mouse, the button should get a darker shade to show it as clicked. Then press the key a. Release the shift key.
Expected Result	The letter A has appeared in the document in uppercase. In the google chrome console, there is a log saying "shift" and "shift break"
Actual Result	
Input Data	
Passed/Failed	

Test	Website keyboard 006
Test Name	Check backspace key
Test Description	Press and release the backspace key on the website keyboard.
Expected Result	The A letter should be deleted from the text document. In the google chrome console there is a backspace log
Actual Result	
Input Data	

Passed/Failed	

Test	Website keyboard 007
Test Name	Check holding down backspace
Test Description	Hold down the backspace key for 4 seconds on the website keyboard
Expected Result	The letters will be erased from the text document. In the google chrome console, A "backspace" log appears when you press the key down, and a "backspace break" appears when you release the key
Actual Result	
Input Data	
Passed/Failed	

Test	Website keyboard 008
Test Name	Check special key combos
Test Description	Right click ctrl and alt, then left click delete, by using the right click functionality specified earlier.
Expected Result	The device should enter a menu allowing you to logout or enter task manager, if you are on windows.
Actual Result	
Input Data	

Passed/Failed	

Tests performed:

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Tests passed:

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Signature:

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Date:

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