Change request log

1. Concept Location

Step #	Description	Rationale		
1	We ran the system			
2	We interacted with the system by logging in and visiting different pages.	To get familiar with some of the features of the system and identify the screens or graphical elements we had to change.		
3	We searched for "mute" using the IDE's search feature and got 22 files.	Because we identified the keyword from the change request.		
4	We inspected the top 3 files from the search result	To get familiar with how the mute functionality was being used.		
5	We narrowed down the search result by removing files from unnecessary directories (likes: built directory)	To find where the "muted" variable is first defined.		
6	Reviewed header.js file	It had isMute() and setMute() function		
7	Reviewed user.java file	By reviewing header.js, we concluded that "muted" is a Boolean type variable and its value is predefined, PROBABLY when a session is initiated. User.java file had the description that it contained session-based information.		
8	We marked the class user as "located"	After reviewing, we found the "muted" variable in the class whose default value was true and needs to be changed. We confirmed that this class needs to be modified.		

Time spent (in minutes): 25

Classes and methods inspected:

- /mangoSource/war/resources/sound-manager2.js
- /mangoSource/war/resources/common.js
 - o setUserMuted()
- /mangoSource/war/resources/header.js
 - o setMute()
 - o isMute()
 - o soundPlayer()
- /mangoSource/src/com/serotonin/mango/web/dwr/MiscDwr.java
 - o toggleUserMuted()
- /mangoSource/src/com/serotonin/mango/vo/User.java
 - User Class
 - isMuted()
 - setMuted()

2. Impact Analysis

Step #	Description	Rationale
1	We made a list where "muted" variable from the "User" class was being used	To track the impact of changing the default value of "muted" variable
2	We got multiple matching files. We started going through the potential of that might need to be changed	
3	Concluded that there would be no impact on other functions and methods.	All the methods and functions were only used for toggling the "muted" variable and wouldn't be impacted if the default value is changed.

Time spent (in minutes): 10

- /mangoSource/war/resources/common.js
 - o setUserMuted()
- /mangoSource/src/com/serotonin/mango/vo/User.java
 - o isMuted()
 - o setMuted()
- /mangoSource/src/com/serotonin/mango/web/dwr/MiscDwr.java
 - o toggleUserMuted()
- /mangoSource/war/resources/header.js
 - o setMute()
 - o isMute()
 - soundPlayer()
- /mangoSource/src/com/serotonin/mango/web/dwr/MangoContextListener.java

3. Actualization

Step #	Description	Rationale
1	Changed the default value of "muted" variable in the "User" class (where the variable was declared)	The value of "muted" was changed from "false" (not mute) to "true" (mute) as per the change request
3	Restarted the server and performed manual tests.	To make sure everything works.

Time spent (in minutes): 10

Inspected:

- /mangoSource/src/com/serotonin/mango/vo/User.java
 - isMuted()
 - o setMuted()

Changed:

- /mangoSource/src/com/serotonin/mango/vo/User.java
 - o Class User

4. Validation

Step #	Description	Rationale
1	Test case defined: Default behavior should be muted. (after logging in) Expected output: Default behavior was muted.	This is the regular expected behavior. The test passed.
2	Test case defined: Toggling between mute and unmute. Expected output: Able to toggle between mute and unmute.	This is the regular expected behavior. The test passed.

Time spent (in minutes): 5

5. Summary of the change request

Phase	Time (minutes)	No. of classes inspected	No. of classes changed	No. of methods inspected	No. of methods changes
Concept	25	5	0	8	0
location					
Impact Analysis	10	5	0	7	0
Actualization	10	1	1	2	0
Verification	5	1	0	2	0
Total	50	12	1	19	0

6. Conclusions

For this change, finding concept location took the most time because there were multiple JavaScript files and methods that were using "muted" variable. However, none of the methods were changing the value by hardcoding it. After then looking for the default value became easier. The impact analysis was easy because the methods were only used to toggle the "mute" functionality. The manual testing was also carried in order to confirm if the behavior of system was not changed.