Change Request Log

1. Concept Location

Step #	Description	Rationale
1	After installation, we ran the code to identify and understand what changes were to be made.	
2	After logging in, we played around with the different selections present.	This was carried out to see what changes occur in the user interface to find any clue to identify when the notification goes on.
3	We inspected the web page to find the component/div in which the sound component was located. This was done using inspect feature of chrome.	If we identify the component, we can easily locate the associated code.
4	After going through different div tags on the page we were able to pinpoint the exact component.	
5	Analyzing the inspection window further we found the exact resource being used on the webpage.	From the GUI it was clear that an image was used and once we have the name of the image it would be easy to locate the resource and associated methods in the code.
6	We searched the entire code for the image by its name (sound_none, sound_mute) using the search feature of VSCode Ide.	
7	We ended up with locating the JavaScript file with two functions using these images.	As the toggle in the GUI displays mute, we chose the setUser muted function.
8	The function used the mute function which on investigation took us to the User.java file.	
9	We looked up the user class.	When we came across the set muted function, we assumed it would be the one we needed to alter in order to fulfill the necessary prerequisite.
10	By changing the muted value to true.	We confirmed this variable had to be changed as the changes were seen after deployment.

Time spent (in minutes): 35

Classes and Methods inspected

1. mangoSource/build/resources/header.js
2. mangoSource/build/resources/common.js
    - setUserMuted(muted)
3. mangoSource/src/com/serotonin/mango/vo/User.java
    - setMuted()
    - boolean muted(variable)
4. mangoSource/src/com/serotonin/mango/web/dwr/MiscDwr.java
    - toggleUserMuted()
    - toggleSilence()

2. Impact Analysis

Step #	Description	Rationale
1	Using the search all files feature in VSCode IDE, we searched where User.muted variable is being used.	We listed all the functions in order to see if there is any function that affects the change we made.
2	We analyzed each of the functions to understand the effect of our change.	We came to the conclusion that the change did not affect any other part of the code and there was no need to change the source code any further as a result of our change

Time spent (in minutes): 25

1. mangoSource/src/com/serotonin/mango/web/dwr/MiscDwr.java
    - toggleUserMuted()
2. mangoSource/src/com/serotonin/mango/vo/User.java
    - setMuted()
    - isMuted()

3. Actualization

Step #	Description	Rationale
1	We changed the value of the User class variable muted to true.	As the usage of this variable is very limited and in very few places, the value of the variable could be changed without affecting other functionalities.
2	After our change, we ran the code and made manual few manual tests.	Made sure the changes we made did not affect other functionalities.
3	Our changed code was pushed into the respective branch.	We thought it was a good idea to push the code to a separate branch just in case.

Time spent (in minutes): 15

1. mangoSource/src/com/serotonin/mango/vo/User.java
    - setMuted()
    - boolean muted(variable)

4. Validation

Step #	Description	Rationale
1	Inspection Case: After the change, we inspected if the changes were in place for all users Logged in using as a different user. Expected Output: Mute button was set.	The idea behind this is to check if the change is reflected all over the system. The test passed.
2	Inspection case: verifying if the toggle functionality is unaffected by our change. Expected output: the user must be able to toggle on and off by clicking on the image/button.	This test case is more like checking if the existing functionality is still in place. The test case passed

Time spent (in minutes): 15

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 location	35	4	-	5	-
Impact Analysis	25	2	-	3	1
Actualization	15	1	1	1	-
Verification	15	-	-	-	-
Total	90	7	1	9	1

6. Conclusions

The change request was easy when compared to the first one and the fact that we were familiar with the code organization helped us during concept location. As this was a simple change and related to only one variable impact analysis, actualization and testing were easier. Concept location, impact analysis and actualization were done using VSCode followed by manual testing.