Change request #3 log

1. Concept Location

Step #	Description	Rationale
1	We ran the system and navigated to Users and then to the "admin"	
2	Initially we tried to set a new password and saw the exception message.	We did this so that we could pick any keywords (such as "username=?" or "password=?"), to make our search easy using ctrl+f.
3	Using ctrl+f we were navigated to UserDao.java	
4	We spent a lot of time assuming that the password is returning the null value and were trying the related changes.	Our tries were not successful.
5	Later we ran the print statement to find the user details in the UserDao.java	This was important to try to determine what variable was causing the issue with saving the password.
6	Since we ran a print function, we saw the output in the terminal as well. We saw that HomeUrl was returning null.	This meant that homeUrl was the issue and we had to find its location.
7	So, then we navigated to User.java to determine where the getHomeUrl() was defined.	This location had the set and get homeUrl functions.

Time spent (in minutes): 180

- UserDao.java (src/com/serotonin/mango/db/dao)
    - Methods: updateUser, insertUser
- User.java (src/com/serotonin/mango/vo)
    - Functions: set and get homeUrl , set and get password

2. Impact Analysis

Step #	Description	Rationale
1	We ran the try catch blocks to check if the setPassword() and getPassword() were returning any values.	They were returning the values correctly.
2	After finding the that the homeUrl was returning null, we ran some try catch blocks to write the set and get homeUrl to a text file.	By doing this, we could further see the issue that homeUrl was returning null
3	In the setHomeUrl function, we made an if statement to where if the homeUrl was null, then the homeUrl would redirect to the watch_list.shtm	This solution was helpful since the homeUrl kept returning null so this would fix the issue when changing the password.

Time spent (in minutes): 120

- User.java (src/com/serotonin/mango/vo)
  - Functions: setPassword(), getPassword(), getHomeUrl(), setHomeUrl()
- UserDao.java (src/com/serotonin/mango/db/dao)
  - Methods: updateUser, insertUser

3. Actualization

Step #	Description	Rationale
1	Adding in the if statement for the setHomeUrl fixed the issue since we were getting the null value and now when we changed the password, it was successful	

Time spent (in minutes): 10

- User.java (src/com/serotonin/mango/vo)
  - Functions: setHomeUrl()

4. Validation

Step #	Description	Rationale
1	We tested this by going and changing the password. This time, everything was successful. The homeUrl was set to the watch_list.shtm which is correct instead of being null.	This is the regular expected behavior. The test passed.

Time spent (in minutes): 10

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	180	2	0	6	0
Impact Analysis	120	2	0	4	0
Actualization	10	1	1	2	1
Verification	10	1	0	2	0
Total	320	6	1	14	1

6. Conclusions

This change was more complex as we had to spend more time trying to locate the issue. We determined which files were needed to make the changes, but we were not sure where exactly to do it in the files. This led to various attempts at debugging such as the try catch blocks or printing the output of the USER_UPDATE. We were able to solve it by using the if statement and got the desired result.