



Team Summit

Competitive Minesweeper *Black Box* Defects

Defect #	Description	Correction	Module	Severity
1	Only shows the first five users that attempt to login to the chat	All connected clients are now appended to end of userList in handleMessageFromClient()	ClientMain	3
2	Moving focus from the chat windows erases the message log	Delete line 133	ClientMain	2/3
3	Connect to player and new game functions are switched	Switch action listeners of newGame and connectToPlayer	MainGUI	2
4	Closing the window does not exit the program	Uncommented line 99	MainGUI	3
5	Sometimes creating a new game starts with a board that has tiles cleared already	Removed double loop that has a chance of causing all the tiles to be uncovered in Board() constructor	Board	1

6	Spawns less than 15 bombs which is how many the Bombs Left counter says are left	Removed unnecessary random check in setupBoardRandom()	Board	2
7	Users in chat do not show up	Add a conditional block to handle token "UsernameLogon" in method handleMessageFromClient()	ClientMain	2
8	Can click on a tile that has been marked as a mine	Moved check to see if it is flagged to then make setClickable(false) earlier in leftClick()	Board	3
9	Password is displayed in the clear	Use a custom JPanel with a JPasswordField in the JOptionPane following line 189	ClientMain	2/3
10	Bombs left counter can become negative	Add check for negative in updateImage() method, before line 155	MineApplet	3
11	The colors of the mines constantly change in a glitched fashion	Removed Math.random() checks that change the color of uncovered bombs at lines 116-122	MineApplet	2
12	Windows can be resized causing elements to appear out of place	Add "setResizable(false)" to createUI() and initGUI() methods, respectively	ClientMain and MainGUI	3
13	Win message for clearing the board is displayed as the window title	Switch lines 226 with 227 and lines 233 and 234	MainGUI	3
14	Board size cannot be changed nor can boards be saved, loaded, traded, or named, as described in product backlog	Add a variable for board size which can be set at runtime. Additional fixes in MainGUI for saving and naming boards.	MainGUI	1/2
15	Clicking on buttons is randomly unresponsive	Removed the "&& rnd >= .15" condition in the mousePressed() at ~line 233	MineApplet	2

	and requires a few more clicks to recognize input			
16	Chat messages are not displayed correctly as it only sends characters before spaces	Chat text in msgArea is now send all at once instead of split along spaces	ClientMain	2
17	Chat windows do not receive the messages from the opponent that are sent	Remove random conditional in handleMessageFromClient()	Server	1/2
18	Chat messages do not display	Remove random conditional in handleMessageFromClient()	Server	1
19	Chat does not function correctly until the fifth user tries to login	Removes the counter in server code that prevents more clients connecting past count of 5	ServerMain	2
20	Numbers around mines do not show up correctly or sometimes at all	Fixed setAdjNums() to populate non-bomb spaces with proper adjacency values. Switched i and j array values to also fix this bug.	Board	1
21	Clicking on a space will uncover a cluster elsewhere on the board	Changed ~line 216 where it now adds the correct int[] first = { x, y }; to the Queue data structure	Board	1
22	Winning a multiplayer game displays a "you lose" message	Remove lines 217 to 223	MainGUI	2
23	Bombs left can be permanently decreased as "!" tiles can be eliminated when mass sections of tiles are eliminated	Decrement numBombs counter correctly in all class functions	Board	2
24	Empty and null strings are accepted as usernames	Add check for null and empty spaces when username is input in enterCredentials()	ClientMain	2

25	Adds the exact same user name multiple times if logged in over and over	Added check in enterCredentials() for duplicate entries when adding a new user	ClientMain	2/3
26	Games between players have Bombs Left start at 0	Adjusted the num_rem value so it displays correctly in JFrame	MineApplet	2/3
27	The same user can connect from the same Minesweeper session but only the most recently connected session can send and receive messages	enterCredentials() now removes previous user session when the same user connects again	ClientMain	2
28	Win messages are displayed randomly	Removed " rnd < .15" at ~line 255 in mousePressed()	MineApplet	2
29	Losing a multiplayer game displays a "you won" message	Remove lines 217 to 223	MainGUI	2
30	Opponent's screen does not update or show up	Second player applet is never set to visible in initSecondPlayer()	MainGUI	1
31	Sometimes the first click after a new game clears the board in an impossible grid-like fashion	Fixed setAdjNums() to generate proper diagonals. Switched i and j array values.	Board	1
32	The game is randomly unclickable	Delete lines 193-195 in isClickable() method	MineApplet	1/2

Competitive Minesweeper *White Box* Defects

Defect #	Description	Correction	Module	Severity
1	Superclass method is not invoked when server is started. Nothing occurs.	Add "super.serverStarted()" in method serverStarted()	Server	1/2
2	Superclass method is not invoked when server is stopped. Nothing occurs.	Add "super.serverStopped()" in method serverStopped()	Server	1/2
3	Chat window is hidden if a random number generator returns 13	Remove lines 298 to 301	ClientMain	1/2
4	Chat area is cleared when window is deiconified (changed from minimized to normal state)	Remove line 139	ClientMain	2/3
5	Applet becomes unresponsive after a bomb is found when left-clicking a tile	Removed myapplet.setClickable(false) in leftClick()	Board	1/2
6	Creates a board with less than the specified amount of bombs (15)	Remove Math.random() > .2 check in setupBoardRandom()	Board	2
7	Game timer doesn't update secondsPassed properly in Runnable	Changed condition from startTime + 1000 to startTime in timeTread	MineApplet	3
8	Randomly fails to uncover a cluster of bombs in adjacent cells upon clicking	Remove " Math.random() < .15" condition in uncoverCluster()	Board	3
9	serialVersionUID differs across classes	Set serialVersionUID to the same value across all classes	ClientMain, MineApplet	1/2

10	Bombs are being added to the wrong cell	Change spaces[y][x] to spaces [x][y]	Board	1
11	Value retrieved for specified space is incorrect	Change spaces[y][x] to spaces[x][y]	Board	1
12	Value retrieved for hidden cells is incorrect	Change hidden[y][x] to hidden[x][y]	Board	1
13	Returns incorrect percentage cleared	Return statement changed	Board	3
14	Board swapping <i>randomly</i> does not occur	Remove random conditional statements when pairing players in handleMessageFromClient()	Server	1/2
15	Port number is erroneously read from args[] when there are no arguments supplied	Change < to > in main method when checking for arguments	ServerMain	1/2
16	Left click being activated incorrectly and getting another cell instead	Change hidden[y][x] to hidden[x][y] in leftClick	Board	1/2
17	Right click being activated incorrectly and getting another cell instead	Change hidden[y][x] to hidden[x][y] in rightClick	Board	1/2
18	Gridlines are not drawn properly	Switch getHeight() with getWidth() and vice versa in each paint loop	MineApplet	3