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public void changeButtons(int x, int y, int size, boolean change){
    size--;
    for (int i = 0; i < playground.getPlayground().length; i++){
        for (int j = 0; j < playground.getPlayground()[i].length; j++){
            if(change){

if(!playground.getPlayground()[i][j].getBackground().equals(shipColor) &&
!hasNeighbor(i,j) && isPlaceable(i,j,size)) {

playground.getPlayground()[i][j].setBackground(waterColor);
                playground.getPlayground()[i][j].setEnabled(true);
            }
            if(hasNeighbor(i,j) &&
!playground.getPlayground()[i][j].getBackground().equals(shipColor)){
playground.getPlayground()[i][j].setBackground(Color.GRAY);
                playground.getPlayground()[i][j].setEnabled(false);
            }
        }
        else{
            if(!((i==x+size && j==y) || (i==x-size && j==y) || (i==x &&
j==y+size) || (i==x && j==y-size))) {

if(!playground.getPlayground()[i][j].getBackground().equals(shipColor)){
playground.getPlayground()[i][j].setBackground(Color.GRAY);

playground.getPlayground()[i][j].setEnabled(false);
                }
            }
        }
    }
}
}

```

```

public boolean hasNeighbor(int x, int y){
    boolean hasNeighbor = false;
    try{
        if
(playground.getPlayground()[x+1][y].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if
(playground.getPlayground()[x+1][y+1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if (playground.getPlayground()[x+1][y-
1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if
(playground.getPlayground()[x][y+1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if (playground.getPlayground()[x][y-
1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if (playground.getPlayground()[x-
1][y].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if (playground.getPlayground()[x-
1][y+1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    try{
        if (playground.getPlayground()[x-1][y-
1].getBackground().equals(shipColor)){
            hasNeighbor = true;
        }
    }
    catch (ArrayIndexOutOfBoundsException ignored){}
    return hasNeighbor;
}

```