



UMS
UNIVERSITI MALAYSIA SABAH

KK14203

OBJECT ORIENTED PROGRAMMING

REPORT
PROJECT 2 (INDIVIDUAL)

LECTURER: DR. SAMRY@MOHD SHAMRIE SAININ

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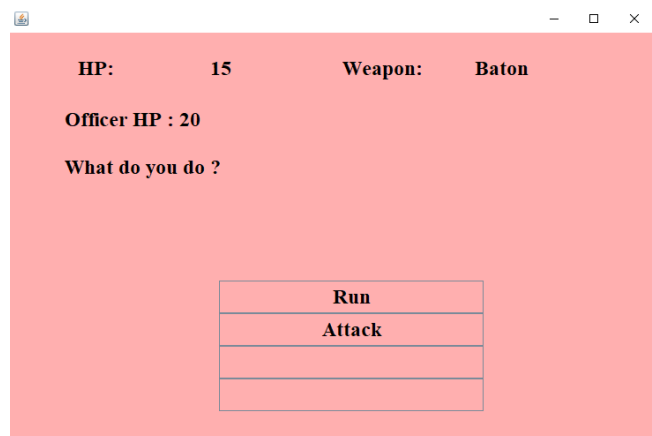
GUI DESIGNS



Front page (Interface)

- This page shows the name of the game.
- There is a button, when user clicked it, the game will start.

- This is some of the story page

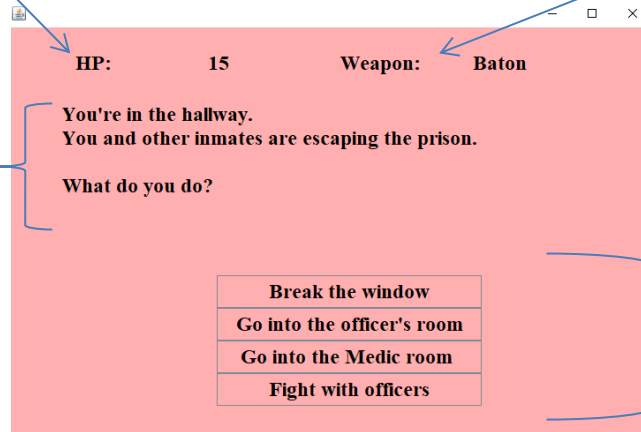


USER MANUAL

This is where player's HP is shown.

This is where player's current weapon is shown. When player obtain a new weapon, the weapon will change name.

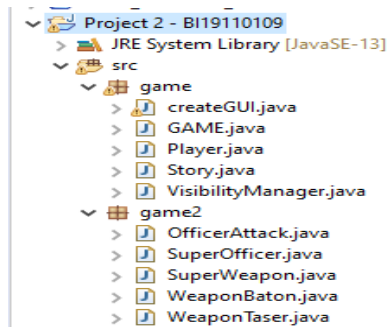
This is where the story or dialogues are shown.



This is where player can decide how the story goes, by choosing 1 of these 4 buttons. Each button will bring player to different places.

CODING

In this project I decided to use packages and do multiples class separately so other people can see the coding clearly.



There are 2 packages, which are game and game2.

Package = game

class createGUI

```
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package game;
import java.awt.Color; //package for color

public class createGUI {

    JFrame window; //for window
    Container con;
    JPanel titleNamePanel, journeyButtonPanel, mainTextPanel, choiceButtonPanel, playerInfoPanel;
    JLabel titleLabel, titleLabel2, hpLabel, hpLabelNum, weaponLabel, weaponLabelName;
    Font titleFont = new Font("Times New Roman", Font.CENTER_BASELINE, 70); // set the font styles and font size
    Font titleFont2 = new Font("Times New Roman", Font.CENTER_BASELINE, 30);
    Font titleFont3 = new Font("Times New Roman", Font.CENTER_BASELINE, 23);
    JButton startButton, choice1, choice2, choice3, choice4;
    JTextArea mainTextArea;

    public void createGUI(ChoiceHandler cHandler) {

        //FOR WINDOW
        window = new JFrame(); //initialization
        window.setSize(750, 500); //width,height
        window.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE); // so the window can close "X" button yg merah 2
        window.getContentPane().setBackground(Color.PINK);
        window.setLayout(null); // using no layout managers or can customize the layout
        con = window.getContentPane();

        //FOR TITLE SCREEN
        titleNamePanel = new JPanel();
        titleNamePanel.setBounds(70, 80, 600, 200);
        titleNamePanel.setBackground(Color.PINK);
        titleLabel = new JLabel("PRISON BREAK");
        titleLabel2 = new JLabel("- CHOOSE YOUR PATH -");
        titleLabel2.setForeground(Color.BLACK); // set the font color
        titleLabel2.setFont(titleFont); // call the title font
        titleNamePanel.add(titleLabel);
        titleNamePanel.add(titleLabel2);

        journeyButtonPanel = new JPanel();
        journeyButtonPanel.setBounds(250, 300, 200, 60);
        journeyButtonPanel.setBackground(Color.PINK);

        startButton = new JButton("LET'S GO");

        titleNamePanel.add(titleLabel);
        titleNamePanel.add(titleLabel2);
        journeyButtonPanel.add(startButton);

        con.add(titleNamePanel); // add title name in the container
        con.add(journeyButtonPanel); // add the button panel

        //FOR GAME SCREEN
        titleNamePanel.setVisible(false);
        journeyButtonPanel.setVisible(false);

        mainTextPanel = new JPanel();
        mainTextPanel.setBounds(40, 80, 550, 200);
        mainTextPanel.setBackground(Color.PINK);
        con.add(mainTextPanel);

        mainTextArea = new JTextArea("these is the main test area");
        mainTextArea.setBounds(40, 80, 550, 200);
        mainTextArea.setBackground(Color.PINK);
        mainTextArea.setForeground(Color.BLACK);
        mainTextArea.setFont(titleFont3);
        mainTextArea.setLineWrap(true); // convenient function to have( automatically lock text if write too much)
        mainTextPanel.add(mainTextArea);

        choiceButtonPanel = new JPanel();
        choiceButtonPanel.setBounds(240, 280, 300, 150);
        choiceButtonPanel.setBackground(Color.PINK);
        choiceButtonPanel.setLayout(new GridLayout(4,1)); // to set the choice buttons horizontally
        con.add(choiceButtonPanel);

        choice1 = new JButton("CHOICE 1");
        choice1.setBackground(Color.PINK);
        choice1.setForeground(Color.BLACK);
    }
}
```

```
Java Eclipse - Project 2 - BI19110109/src/game/createGUI.java - Eclipse IDE
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startButton = new JButton("LET'S GO");
startButton.setBackground(Color.PINK);
startButton.setBounds(40, 80, 550, 200);
startButton.setForeground(Color.BLACK);
startButton.setFont(titleFont3);
startButton.addActionListener(cHandler); // if we click the start button, than this function will react = the TitleScreenHandler will activated
startButton.setActionCommand("start");
startButton.setFocusPainted(false); // supaya tidak lagi nampak line time click button

titleNamePanel.add(titleLabel);
titleNamePanel.add(titleLabel2);
journeyButtonPanel.add(startButton);

con.add(titleNamePanel); // add title name in the container
con.add(journeyButtonPanel); // add the button panel

//FOR GAME SCREEN
titleNamePanel.setVisible(false);
journeyButtonPanel.setVisible(false);

mainTextPanel = new JPanel();
mainTextPanel.setBounds(40, 80, 550, 200);
mainTextPanel.setBackground(Color.PINK);
con.add(mainTextPanel);

mainTextArea = new JTextArea("these is the main test area");
mainTextArea.setBounds(40, 80, 550, 200);
mainTextArea.setBackground(Color.PINK);
mainTextArea.setForeground(Color.BLACK);
mainTextArea.setFont(titleFont3);
mainTextArea.setLineWrap(true); // convenient function to have( automatically lock text if write too much)
mainTextPanel.add(mainTextArea);

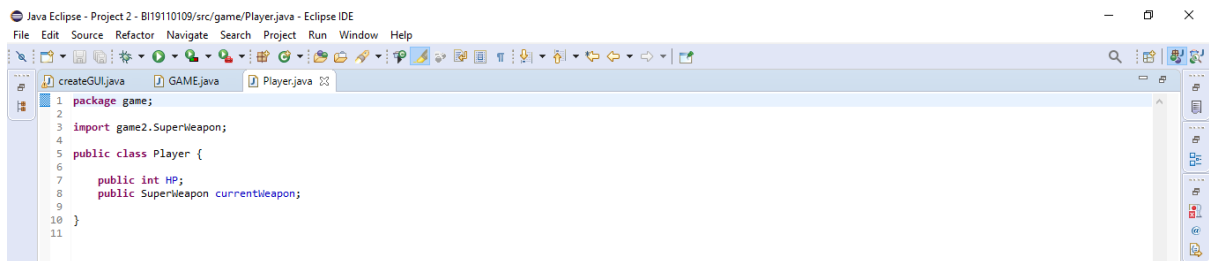
choiceButtonPanel = new JPanel();
choiceButtonPanel.setBounds(240, 280, 300, 150);
choiceButtonPanel.setBackground(Color.PINK);
choiceButtonPanel.setLayout(new GridLayout(4,1)); // to set the choice buttons horizontally
con.add(choiceButtonPanel);

choice1 = new JButton("CHOICE 1");
choice1.setBackground(Color.PINK);
choice1.setForeground(Color.BLACK);
}
```

```
Java Eclipse - Project 2 - B19110109/src/game/createGUI.java - Eclipse IDE
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createGUI.java
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92 choice1 = new JButton("CHOICE 1");
93 choice1.setBackground(Color.PINK);
94 choice1.setForeground(Color.BLACK);
95 choice1.setFont(titleFont3);
96 choice1.setFocusPainted(false);
97 choice1.addActionListener(cHandler);
98 choice1.setActionCommand("c1");//to differentiate between the title button and these 4 choice buttons
99 choiceButtonPanel.add(choice1);
100
101 choice2 = new JButton("CHOICE 2");
102 choice2.setBackground(Color.PINK);
103 choice2.setForeground(Color.BLACK);
104 choice2.setFont(titleFont3);
105 choice2.setFocusPainted(false);
106 choice2.addActionListener(cHandler);
107 choice2.setActionCommand("c2");//to differentiate between the title button and these 4 choice buttons
108 choiceButtonPanel.add(choice2);
109
110 choice3 = new JButton("CHOICE 3");
111 choice3.setBackground(Color.PINK);
112 choice3.setForeground(Color.BLACK);
113 choice3.setFont(titleFont3);
114 choice3.setFocusPainted(false);
115 choice3.addActionListener(cHandler);
116 choice3.setActionCommand("c3");//to differentiate between the title button and these 4 choice buttons
117 choiceButtonPanel.add(choice3);
118
119 choice4 = new JButton("CHOICE 4");
120 choice4.setBackground(Color.PINK);
121 choice4.setForeground(Color.BLACK);
122 choice4.setFont(titleFont3);
123 choice4.setFocusPainted(false);
124 choice4.addActionListener(cHandler);
125 choice4.setActionCommand("c4");//to differentiate between the title button and these 4 choice buttons
126 choiceButtonPanel.add(choice4);
127
128
129 playerInfoPanel = new JPanel();
130 playerInfoPanel.setBounds(80, 15, 600, 50);
131 playerInfoPanel.setBackground(Color.PINK);
132 playerInfoPanel.setLayout(new GridLayout(1,4)); //custom layout
133 con.add(playerInfoPanel);
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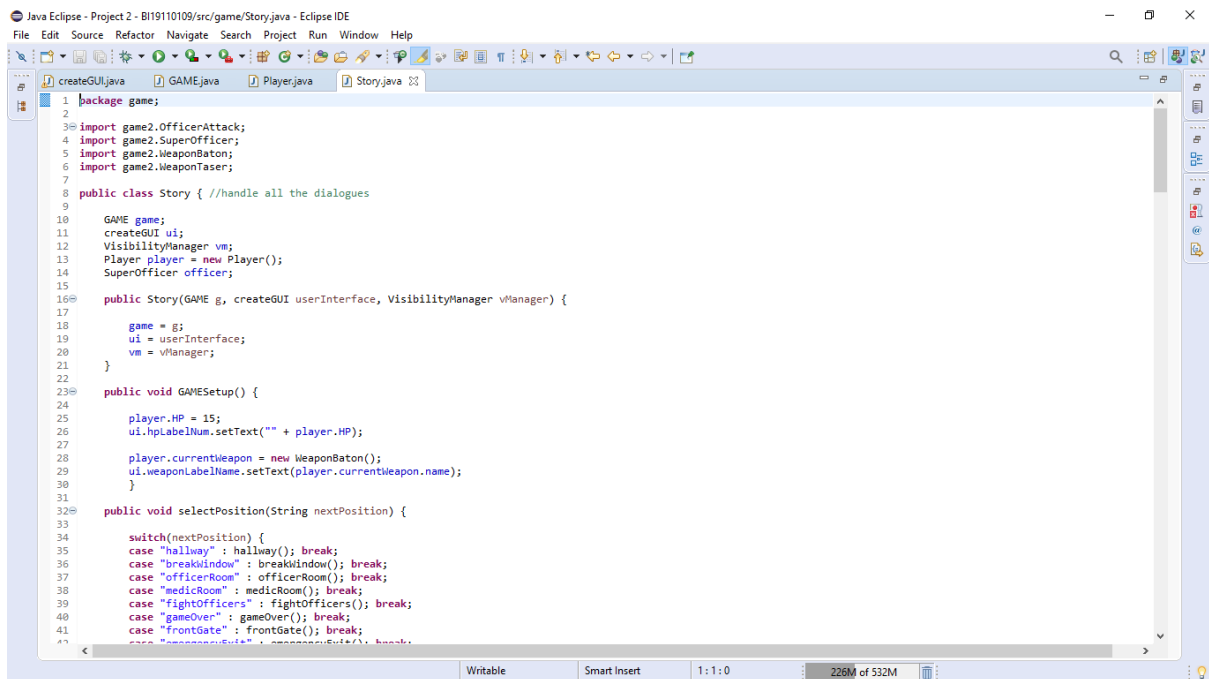
class Player



The screenshot shows the Eclipse IDE with the 'Player.java' file open. The code defines a package 'game', imports 'game2.SuperWeapon', and defines a public class 'Player' with attributes 'HP' and 'currentWeapon'.

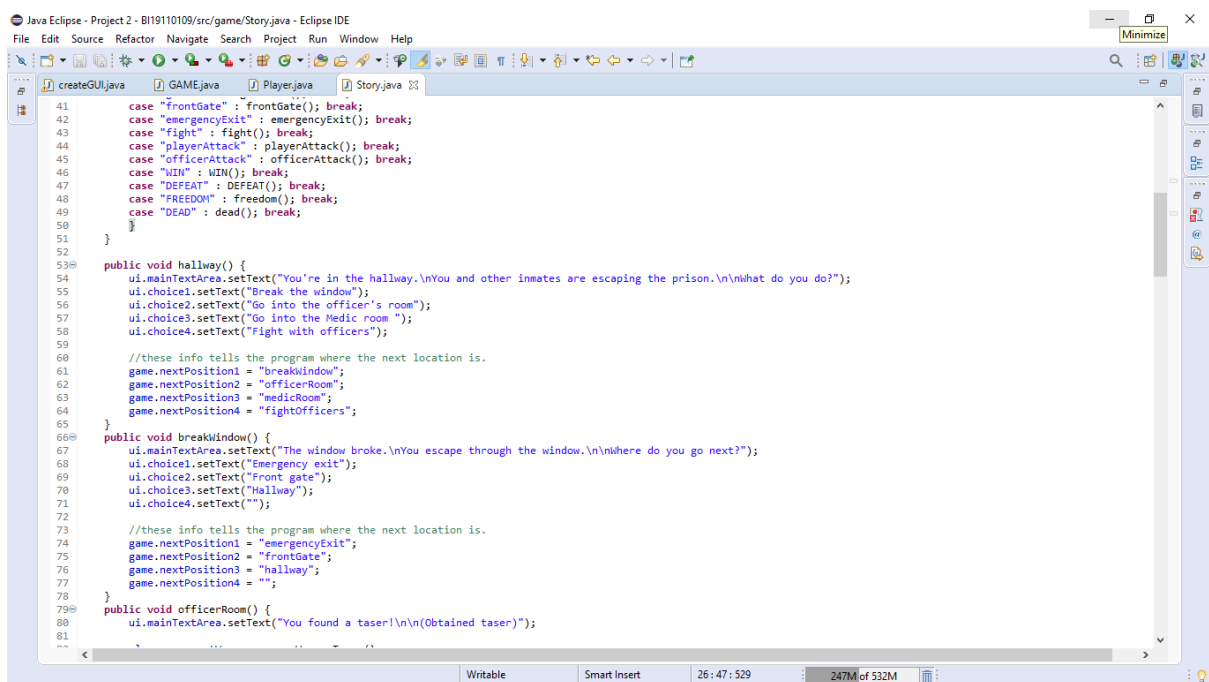
```
1 package game;
2
3 import game2.SuperWeapon;
4
5 public class Player {
6
7     public int HP;
8     public SuperWeapon currentWeapon;
9
10 }
11
```

class Story



The screenshot shows the Eclipse IDE with the 'Story.java' file open. The code defines a package 'game', imports several classes from 'game2', and defines a public class 'Story' with a constructor and several methods including 'GAMESetup()' and 'selectPosition()'.

```
1 package game;
2
3 import game2.OfficerAttack;
4 import game2.SuperOfficer;
5 import game2.WeaponBaton;
6 import game2.WeaponTaser;
7
8 public class Story { //handle all the dialogues
9
10     GAME game;
11     createGUI ui;
12     VisibilityManager vm;
13     Player player = new Player();
14     SuperOfficer officer;
15
16     public Story(GAME g, createGUI userInterface, VisibilityManager vManager) {
17
18         game = g;
19         ui = userInterface;
20         vm = vManager;
21     }
22
23     public void GAMESetup() {
24
25         player.HP = 15;
26         ui.hLabelNum.setText("" + player.HP);
27
28         player.currentWeapon = new WeaponBaton();
29         ui.weaponLabelName.setText(player.currentWeapon.name);
30     }
31
32     public void selectPosition(String nextPosition) {
33
34         switch(nextPosition) {
35             case "hallway" : hallway(); break;
36             case "breakWindow" : breakWindow(); break;
37             case "officerRoom" : officerRoom(); break;
38             case "medicRoom" : medicRoom(); break;
39             case "fightOfficers" : fightOfficers(); break;
40             case "gameOver" : gameOver(); break;
41             case "frontGate" : frontGate(); break;
42             case "emergencyExit" : emergencyExit(); break;
43             case "WIN" : WIN(); break;
44             case "DEFEAT" : DEFEAT(); break;
45             case "FREEDOM" : freedom(); break;
46             case "DEAD" : dead(); break;
47         }
48     }
49
50     public void hallway() {
51
52         ui.mainTextArea.setText("You're in the hallway.\nYou and other inmates are escaping the prison.\nWhat do you do?");
53         ui.choice1.setText("Break the window");
54         ui.choice2.setText("Go into the officer's room");
55         ui.choice3.setText("Go into the Medic room ");
56         ui.choice4.setText("Fight with officers");
57
58         //these info tells the program where the next location is.
59         game.nextPosition1 = "breakWindow";
60         game.nextPosition2 = "officerRoom";
61         game.nextPosition3 = "medicRoom";
62         game.nextPosition4 = "fightOfficers";
63     }
64
65     public void breakWindow() {
66
67         ui.mainTextArea.setText("The window broke.\nYou escape through the window.\nWhere do you go next?");
68         ui.choice1.setText("Emergency exit");
69         ui.choice2.setText("Front gate");
70         ui.choice3.setText("Hallway");
71         ui.choice4.setText("");
72
73         //these info tells the program where the next location is.
74         game.nextPosition1 = "emergencyExit";
75         game.nextPosition2 = "frontGate";
76         game.nextPosition3 = "hallway";
77         game.nextPosition4 = "";
78     }
79
80     public void officerRoom() {
81
82         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
83     }
84
85     public void medicRoom() {
86
87         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
88     }
89
90     public void fightOfficers() {
91
92         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
93     }
94
95     public void gameOver() {
96
97         ui.mainTextArea.setText("Game Over");
98     }
99
100     public void frontGate() {
101
102         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
103     }
104
105     public void emergencyExit() {
106
107         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
108     }
109
110     public void WIN() {
111
112         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
113     }
114
115     public void DEFEAT() {
116
117         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
118     }
119
120     public void freedom() {
121
122         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
123     }
124
125     public void dead() {
126
127         ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
128     }
129
130 }
```



The screenshot shows the Eclipse IDE with the 'Story.java' file open. The code continues from the previous screenshot, defining methods for 'hallway()', 'breakWindow()', 'officerRoom()', 'medicRoom()', 'fightOfficers()', 'gameOver()', 'frontGate()', 'emergencyExit()', 'WIN()', 'DEFEAT()', 'freedom()', and 'dead()'.

```
41     case "frontGate" : frontGate(); break;
42     case "emergencyExit" : emergencyExit(); break;
43     case "fight" : fight(); break;
44     case "playerAttack" : playerAttack(); break;
45     case "officerAttack" : officerAttack(); break;
46     case "WIN" : WIN(); break;
47     case "DEFEAT" : DEFEAT(); break;
48     case "FREEDOM" : freedom(); break;
49     case "DEAD" : dead(); break;
50 }
51
52 public void hallway() {
53
54     ui.mainTextArea.setText("You're in the hallway.\nYou and other inmates are escaping the prison.\nWhat do you do?");
55     ui.choice1.setText("Break the window");
56     ui.choice2.setText("Go into the officer's room");
57     ui.choice3.setText("Go into the Medic room ");
58     ui.choice4.setText("Fight with officers");
59
60     //these info tells the program where the next location is.
61     game.nextPosition1 = "breakWindow";
62     game.nextPosition2 = "officerRoom";
63     game.nextPosition3 = "medicRoom";
64     game.nextPosition4 = "fightOfficers";
65 }
66
67 public void breakWindow() {
68
69     ui.mainTextArea.setText("The window broke.\nYou escape through the window.\nWhere do you go next?");
70     ui.choice1.setText("Emergency exit");
71     ui.choice2.setText("Front gate");
72     ui.choice3.setText("Hallway");
73     ui.choice4.setText("");
74
75     //these info tells the program where the next location is.
76     game.nextPosition1 = "emergencyExit";
77     game.nextPosition2 = "frontGate";
78     game.nextPosition3 = "hallway";
79     game.nextPosition4 = "";
80 }
81
82 public void officerRoom() {
83
84     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
85 }
86
87 public void medicRoom() {
88
89     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
90 }
91
92 public void fightOfficers() {
93
94     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
95 }
96
97 public void gameOver() {
98
99     ui.mainTextArea.setText("Game Over");
100 }
101
102 public void frontGate() {
103
104     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
105 }
106
107 public void emergencyExit() {
108
109     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
110 }
111
112 public void WIN() {
113
114     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
115 }
116
117 public void DEFEAT() {
118
119     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
120 }
121
122 public void freedom() {
123
124     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
125 }
126
127 public void dead() {
128
129     ui.mainTextArea.setText("You found a taser!\n(Obtained taser)");
130 }
131
132 }
```

```
Java Eclipse - Project 2 - B19110109/src/game/Story.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

createGUI.java GAME.java Player.java Story.java
82 player.currentWeapon = new WeaponTaser();
83 ui.weaponLabelName.setText(player.currentWeapon.name);
84
85 ui.choice1.setText("Go back to the hallway");
86 ui.choice2.setText("");
87 ui.choice3.setText("");
88 ui.choice4.setText("");
89
90 //these info tells the program where the next location is.
91 game.nextPosition1 = "hallway";
92 game.nextPosition2 = "";
93 game.nextPosition3 = "";
94 game.nextPosition4 = "";
95
96 }
97 public void medicRoom() {
98     ui.mainTextArea.setText("You found an emergency kit!\nYou quickly dress your wounds.\n\n(HP recovered by 3)");
99     player.HP = player.HP + 3;
100     ui.hLabelNum.setText("" + player.HP);
101     ui.choice1.setText("Go back to the hallway");
102     ui.choice2.setText("");
103     ui.choice3.setText("");
104     ui.choice4.setText("");
105
106 //these info tells the program where the next location is.
107 game.nextPosition1 = "hallway";
108 game.nextPosition2 = "";
109 game.nextPosition3 = "";
110 game.nextPosition4 = "";
111
112 }
113 public void fightOfficers() {
114     ui.mainTextArea.setText("Officer 1 : Do you think you can fight us!\nOfficer 2 : Stop being delusional.\nOfficer 3 : Catch him!\n\nYou've been caught!");
115     player.HP = player.HP - player.HP ;
116     ui.hLabelNum.setText("" + player.HP);
117     ui.choice1.setText("");
118     ui.choice2.setText("");
119     ui.choice3.setText("");
120     ui.choice4.setText("");
121
122 //these info tells the program where the next location is.
123 game.nextPosition1 = "gameOver";
124 game.nextPosition2 = "";
125 game.nextPosition3 = "";
126 game.nextPosition4 = "";
127
128 }
```

```
Java Eclipse - Project 2 - B19110109/src/game/Story.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

createGUI.java GAME.java Player.java Story.java
123 game.nextPosition3 = "";
124 game.nextPosition4 = "";
125
126 }
127 public void gameOver() {
128     ui.mainTextArea.setText("PLEASE CLOSE THE WINDOW AND TRY AGAIN .\n\nGOODLUCK! ^-^ ");
129 }
130 public void frontGate() {
131     ui.mainTextArea.setText("Officer 1 : Well, what do we have here.\nOfficer 2 : It's our lucky day huh.\nOfficer 3 : Catch him!\n\nThey shot your arm.You've been caught");
132     player.HP = player.HP - player.HP ;
133     ui.hLabelNum.setText("" + player.HP);
134     ui.choice1.setText("");
135     ui.choice2.setText("");
136     ui.choice3.setText("");
137     ui.choice4.setText("");
138
139 //these info tells the program where the next location is.
140 game.nextPosition1 = "gameOver";
141 game.nextPosition2 = "";
142 game.nextPosition3 = "";
143 game.nextPosition4 = "";
144
145 }
146 public void emergencyExit() {
147     officer = new OfficerAttack(); //officer is a super class, so we put the "OfficerAttack" class in the super class
148     ui.mainTextArea.setText("You run into an " + officer.name + "!");
149     ui.choice1.setText("Run");
150     ui.choice2.setText("Fight");
151     ui.choice3.setText("");
152     ui.choice4.setText("");
153
154 //these info tells the program where the next location is.
155 game.nextPosition1 = "breakWindow";
156 game.nextPosition2 = "fight";
157 game.nextPosition3 = "";
158 game.nextPosition4 = "";
159
160 }
161 public void fight() {
162     ui.mainTextArea.setText(officer.name + " HP : " + officer.HP + "\n\nWhat do you do ?");
163     ui.choice1.setText("Run");
164     ui.choice2.setText("Attack");
165 }
```

```
Java Eclipse - Project 2 - BI19110109/src/game/Story.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

createGUI.java GAME.java Player.java Story.java

164 ui.choice2.setText("Attack");
165 ui.choice3.setText("");
166 ui.choice4.setText("");
167
168 //these info tells the program where the next location is.
169 game.nextPosition1 = "hallway";
170 game.nextPosition2 = "playerAttack";
171 game.nextPosition3 = "";
172 game.nextPosition4 = "";
173 }
174 public void playerAttack() {
175     int playerDamage = 0 ;
176
177     //to differentiate the damage based on what weapon you own
178     if(player.currentWeapon.name.equals("Baton")) {
179         playerDamage = player.currentWeapon.damage;
180     }
181     else if (player.currentWeapon.name.equals("Taser")) {
182         playerDamage = player.currentWeapon.damage;
183     }
184 }
185
186 ui.mainTextArea.setText("You attack the officer and gave " + playerDamage + " damage!");
187
188 officer.HP = officer.HP - playerDamage;
189
190 ui.choice1.setText(">");
191 ui.choice2.setText("");
192 ui.choice3.setText("");
193 ui.choice4.setText("");
194
195 //need to make if-else statement to know if the officer is still alive or not
196 if(officer.HP>0) {
197     game.nextPosition1 = "officerAttack";
198     game.nextPosition2 = "";
199     game.nextPosition3 = "";
200     game.nextPosition4 = "";
201 }
202 else if(officer.HP<1) {
203     game.nextPosition1 = "WIN";
204     game.nextPosition2 = "";
205 }
```

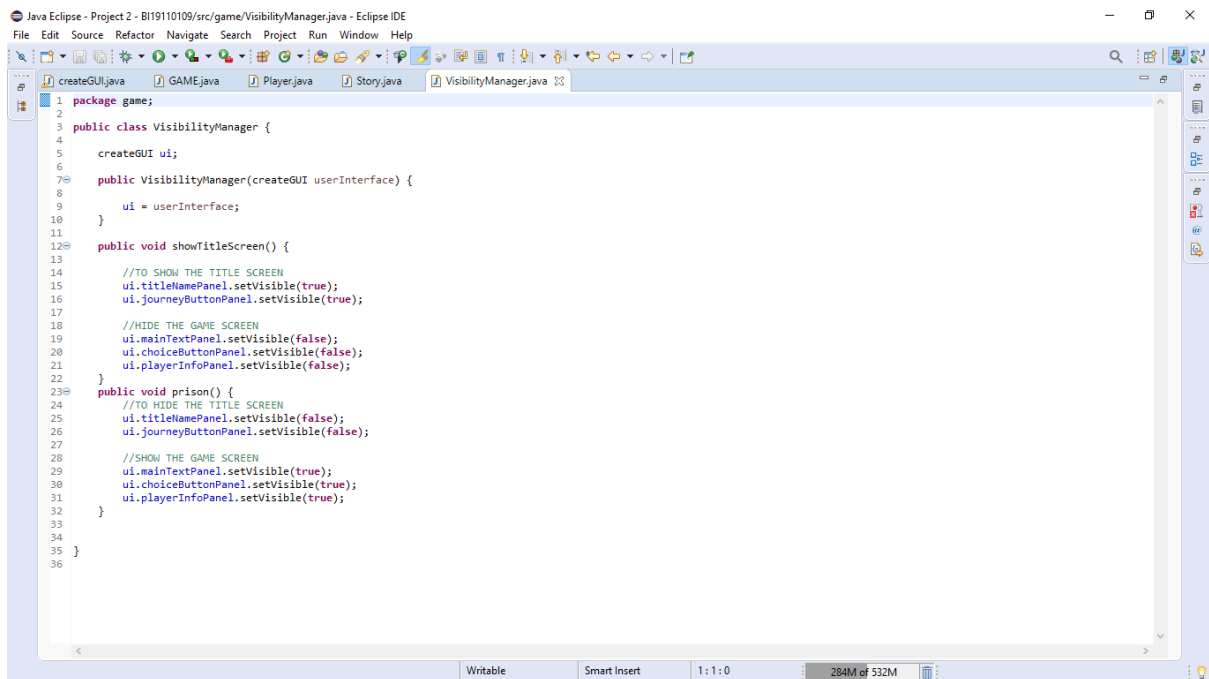
```
Java Eclipse - Project 2 - BI19110109/src/game/Story.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

createGUI.java GAME.java Player.java Story.java

204 game.nextPosition2 = "";
205 game.nextPosition3 = "";
206 game.nextPosition4 = "";
207 }
208 }
209 public void officerAttack() {
210     ui.mainTextArea.setText("The officer attack you back.\n\n(Recieved " + officer.attack + " damage)");
211     player.HP = player.HP - officer.attack;
212     ui.hLabelNum.setText("" + player.HP);
213
214     ui.choice1.setText(">");
215     ui.choice2.setText("");
216     ui.choice3.setText("");
217     ui.choice4.setText("");
218
219 //need to make if-else statement to know if the player is still alive or not
220 if(player.HP>0) {
221     game.nextPosition1 = "fight";
222     game.nextPosition2 = "";
223     game.nextPosition3 = "";
224     game.nextPosition4 = "";
225 }
226 else if(player.HP<1) {
227     game.nextPosition1 = "DEFEAT";
228     game.nextPosition2 = "";
229     game.nextPosition3 = "";
230     game.nextPosition4 = "";
231 }
232 }
233 }
234 }
235 public void WIN() {
236     ui.mainTextArea.setText("You defeated the officer!\n\nThe officer dropped the key for the Emergency exit.\n\n(Obtained Key)");
237     game.nextPosition1 = "FREEDOM";
238     ui.choice1.setText("freedom");
239 }
240 }
241 public void DEFEAT() {
242     ui.mainTextArea.setText("You're dead!\n");
243 }
```

```
244 ui.mainTextArea.setText("You're dead!\n");
245
246 game.nextPosition1 = "DEAD";
247
248 ui.choice1.setText("dead");
249 }
250 public void freedom() {
251     ui.mainTextArea.setText("\nTHE DOOR UNLOCKED!\nCONGRATULATIONS! YOU'VE MADE YOUR WAY TO FREEDOM (^-^)/.\n\nPLEASE CLOSE THE WINDOW TO EXIT");
252 }
253 public void dead() {
254     ui.mainTextArea.setText("YOU'VE BEEN KILLED!\nPLEASE CLOSE THE WINDOW AND TRY AGAIN .\n\nGOODLUCK! ^-^ ");
255 }
256 }
257 }
258 }
```


Class VisibilityManager




The screenshot shows the Eclipse IDE with the file `VisibilityManager.java` open. The code is as follows:

```
1 package game;  
2  
3 public class VisibilityManager {  
4     createGUI ui;  
5  
6     public VisibilityManager(createGUI userInterface) {  
7  
8         ui = userInterface;  
9     }  
10  
11  
12     public void showTitleScreen() {  
13  
14         //TO SHOW THE TITLE SCREEN  
15         ui.titleNamePanel.setVisible(true);  
16         ui.journeyButtonPanel.setVisible(true);  
17  
18         //HIDE THE GAME SCREEN  
19         ui.mainTextPanel.setVisible(false);  
20         ui.choiceButtonPanel.setVisible(false);  
21         ui.playerInfoPanel.setVisible(false);  
22     }  
23  
24     public void prison() {  
25         //TO HIDE THE TITLE SCREEN  
26         ui.titleNamePanel.setVisible(false);  
27         ui.journeyButtonPanel.setVisible(false);  
28  
29         //SHOW THE GAME SCREEN  
30         ui.mainTextPanel.setVisible(true);  
31         ui.choiceButtonPanel.setVisible(true);  
32         ui.playerInfoPanel.setVisible(true);  
33     }  
34  
35 }  
36
```

Package = game2

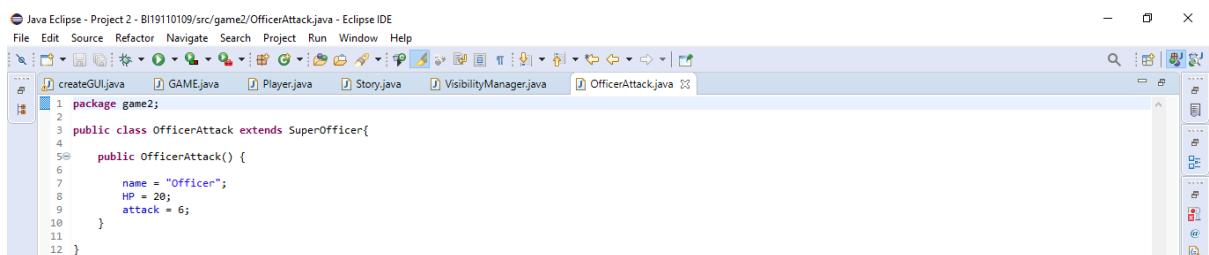
class SuperOfficer



The screenshot shows the Eclipse IDE with the file `SuperOfficer.java` open. The code is as follows:

```
1 package game2;  
2  
3 public class SuperOfficer {  
4  
5     //constructors  
6     public String name;  
7     public int HP;  
8     public int attack;  
9  
10 }  
11  
12
```

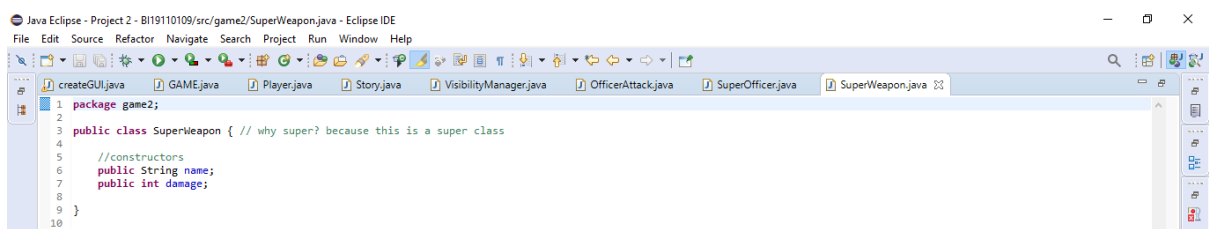
class OfficerAttack



The screenshot shows the Eclipse IDE with the file `OfficerAttack.java` open. The code is as follows:

```
1 package game2;  
2  
3 public class OfficerAttack extends SuperOfficer{  
4  
5     public OfficerAttack() {  
6  
7         name = "Officer";  
8         HP = 20;  
9         attack = 6;  
10     }  
11  
12 }  
13
```

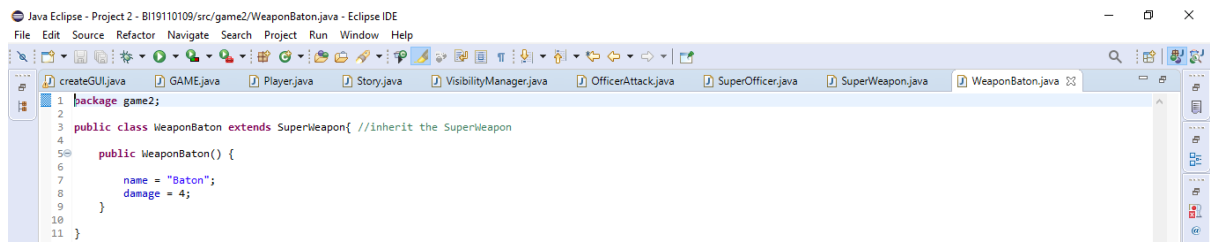
class SuperWeapon



The screenshot shows the Eclipse IDE with the file `SuperWeapon.java` open. The code is as follows:

```
1 package game2;  
2  
3 public class SuperWeapon { // why super? because this is a super class  
4  
5     //constructors  
6     public String name;  
7     public int damage;  
8  
9 }  
10
```

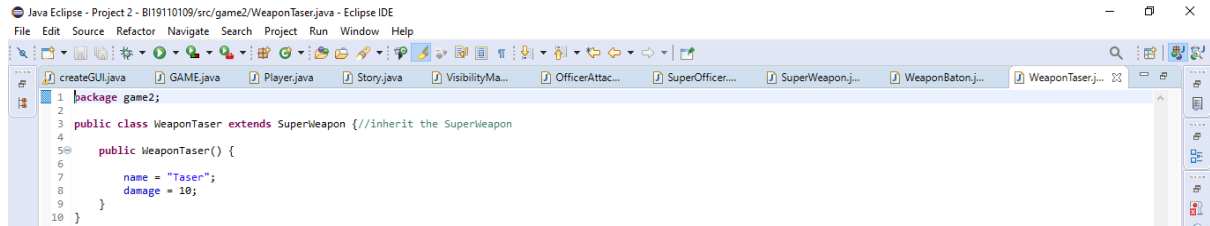
class WeaponBaton



The screenshot shows the Eclipse IDE interface with the 'WeaponBaton.java' file open. The title bar indicates the project is 'Project 2 - B119110109/src/game2/WeaponBaton.java - Eclipse IDE'. The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The package explorer on the left shows a project structure with files like createGUI.java, GAME.java, Player.java, Story.java, VisibilityManager.java, OfficerAttack.java, SuperOfficer.java, SuperWeapon.java, and WeaponBaton.java. The editor window displays the following Java code:

```
1 package game2;
2
3 public class WeaponBaton extends SuperWeapon{ //inherit the SuperWeapon
4
5     public WeaponBaton() {
6
7         name = "Baton";
8         damage = 4;
9     }
10
11 }
```

Class WeaponTaser

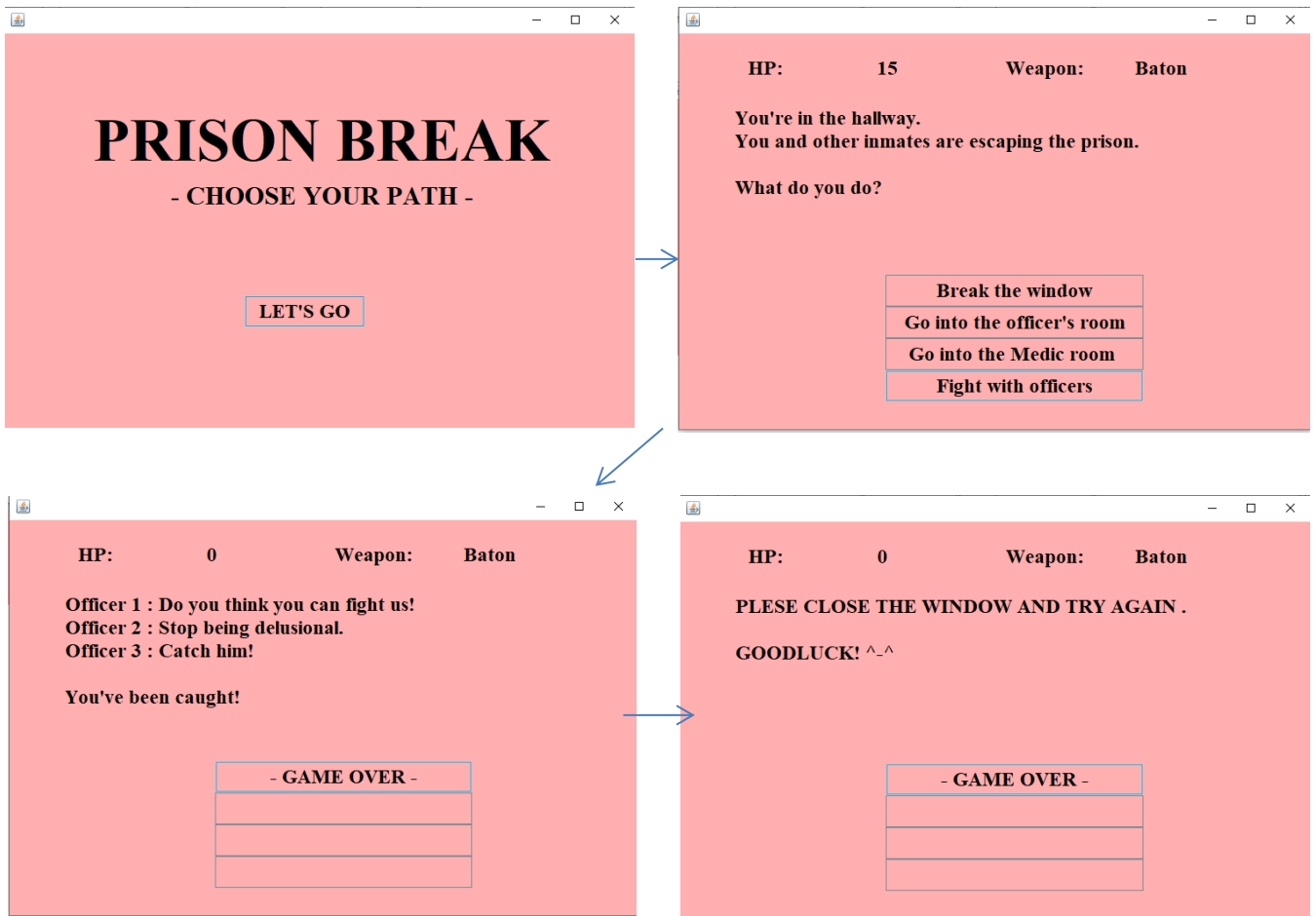


The screenshot shows the Eclipse IDE interface with the 'WeaponTaser.java' file open. The title bar indicates the project is 'Project 2 - B119110109/src/game2/WeaponTaser.java - Eclipse IDE'. The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The package explorer on the left shows a project structure with files like createGUI.java, GAME.java, Player.java, Story.java, VisibilityMa..., OfficerAttac..., SuperOfficer..., SuperWeapon.j..., WeaponBaton.j..., and WeaponTaser.j.... The editor window displays the following Java code:

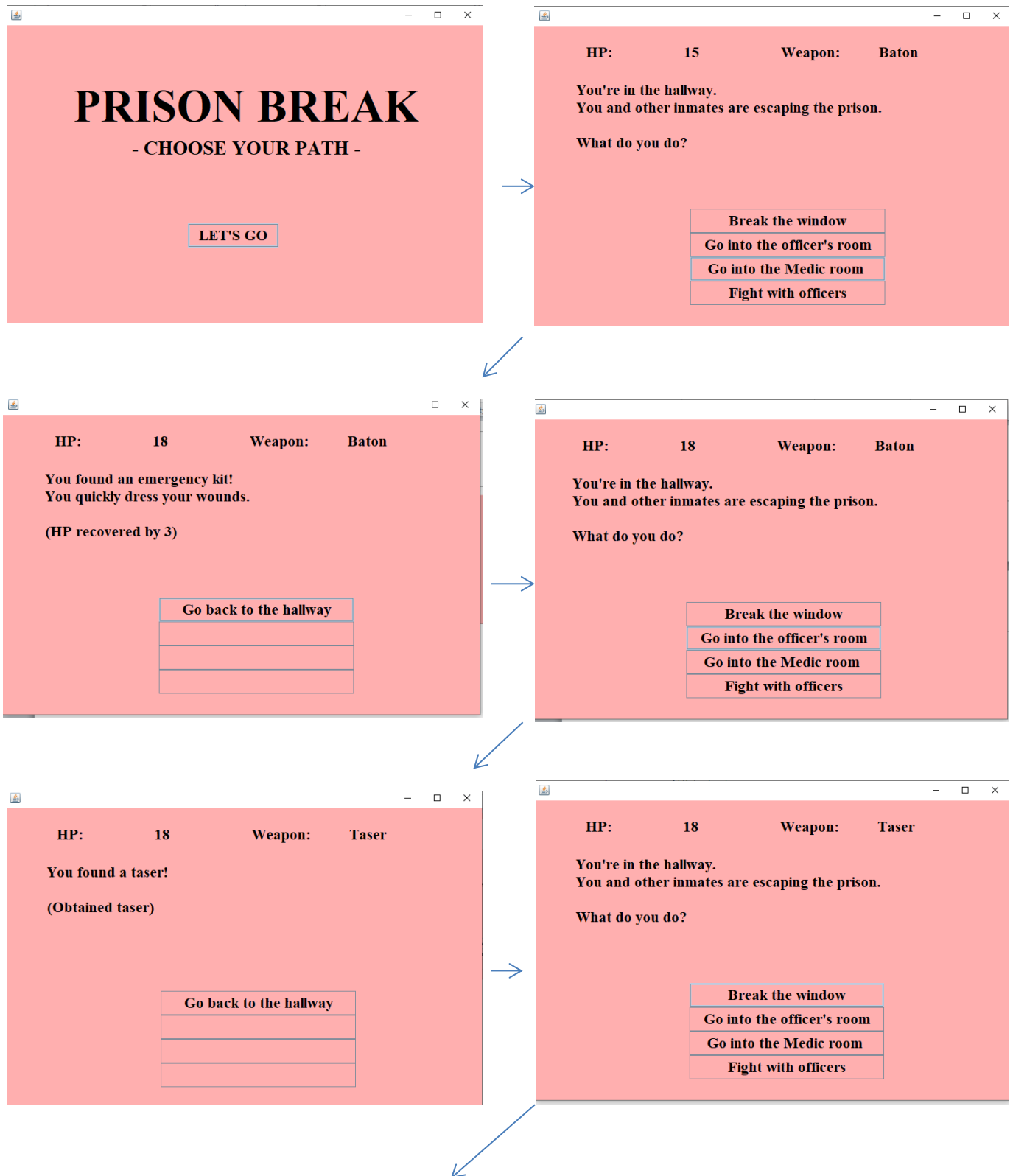
```
1 package game2;
2
3 public class WeaponTaser extends SuperWeapon { //inherit the SuperWeapon
4
5     public WeaponTaser() {
6
7         name = "Taser";
8         damage = 10;
9     }
10 }
```

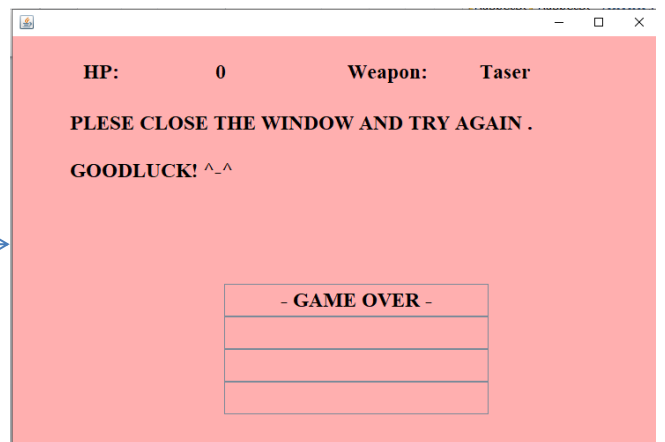
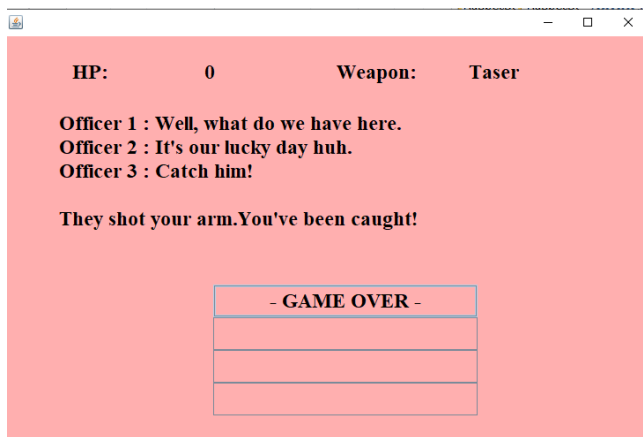
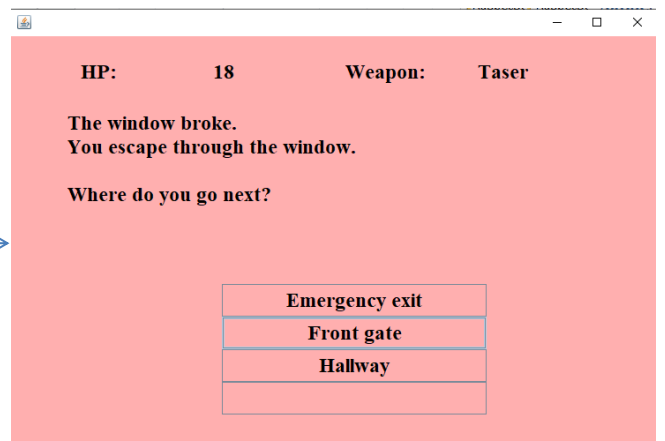
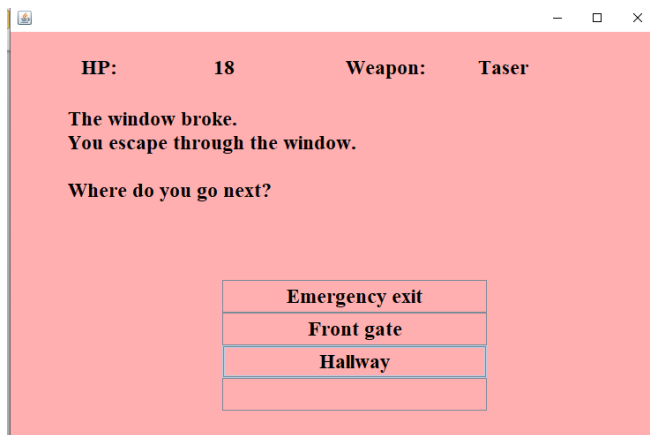
OUTPUT

WAY 1:

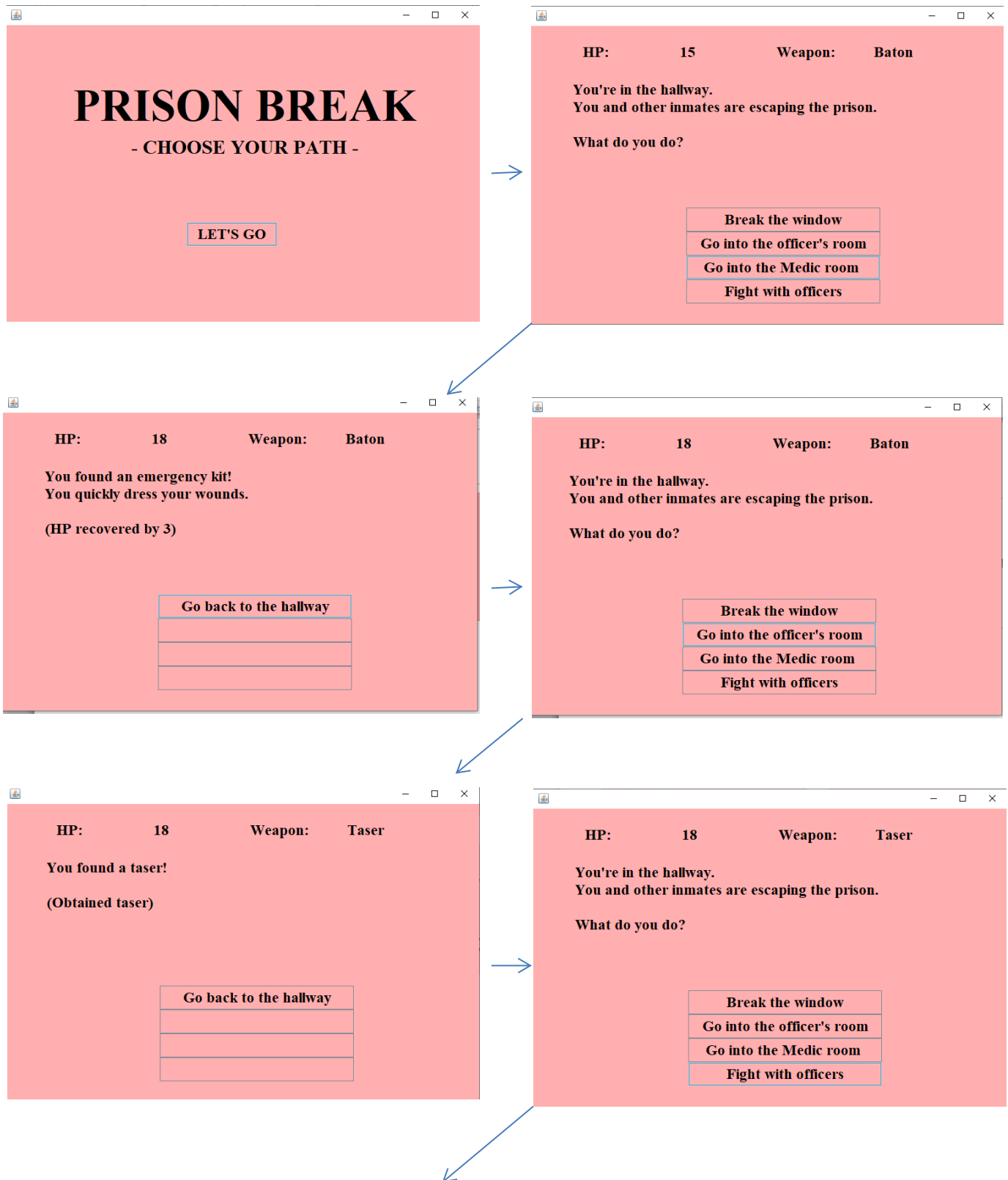


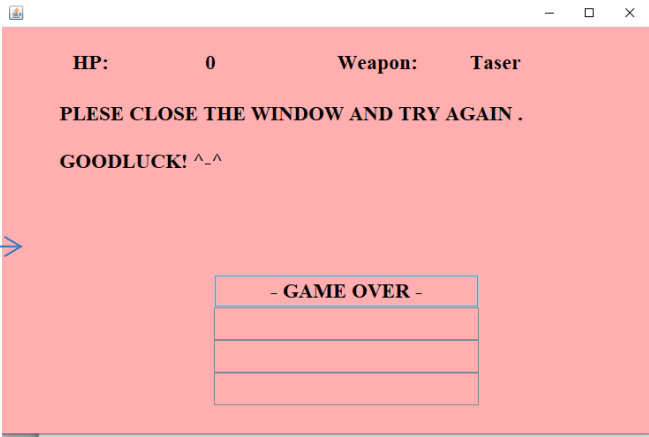
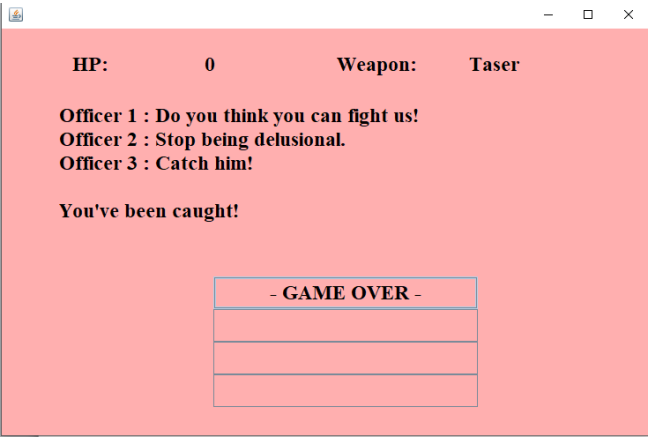
WAY 2:



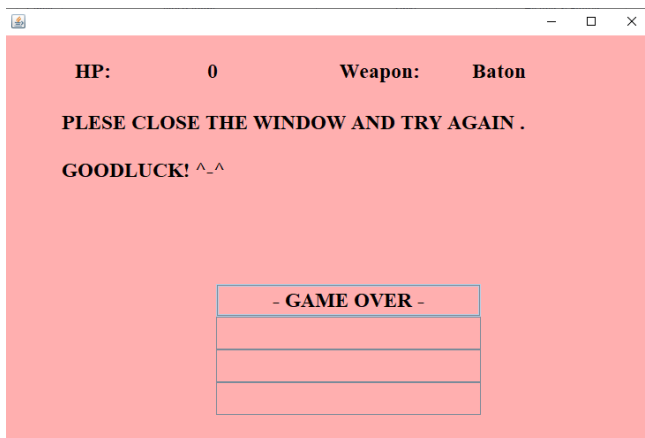
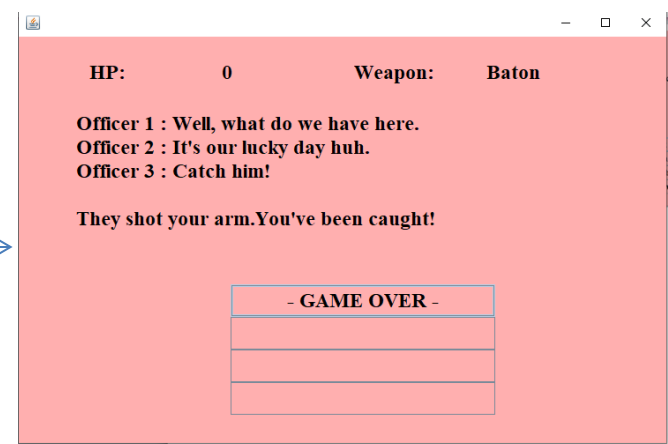
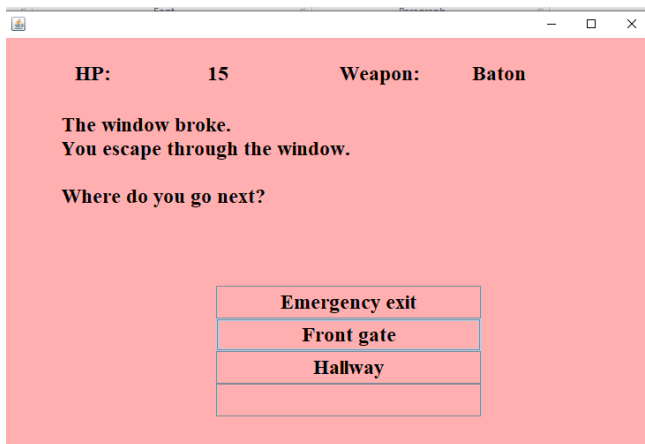
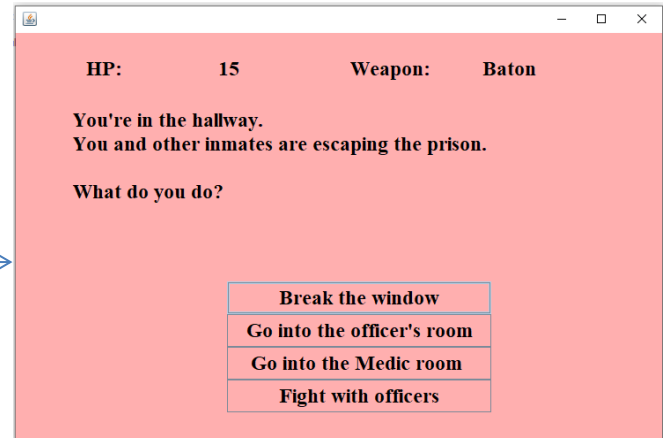


WAY 3:

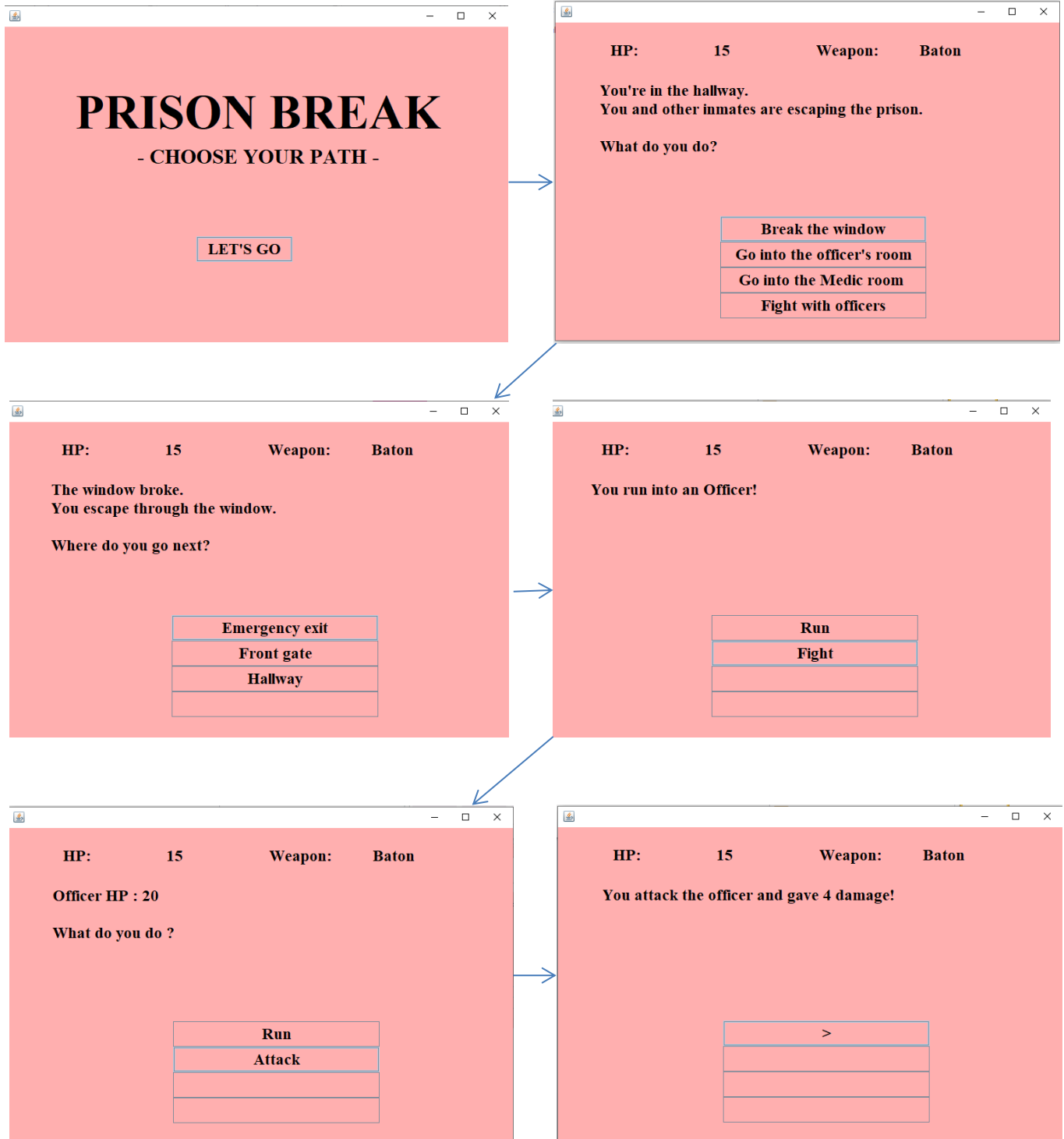




WAY 4:



WAY 5:



HP: 9 Weapon: Baton

The officer attack you back.
(Recieved 6 damage)

>

HP: 9 Weapon: Baton

Officer HP : 16

What do you do ?

Run

Attack

HP: 9 Weapon: Baton

You attack the officer and gave 4 damage!

>

HP: 3 Weapon: Baton

The officer attack you back.
(Recieved 6 damage)

>

HP: 3 Weapon: Baton

Officer HP : 12

What do you do ?

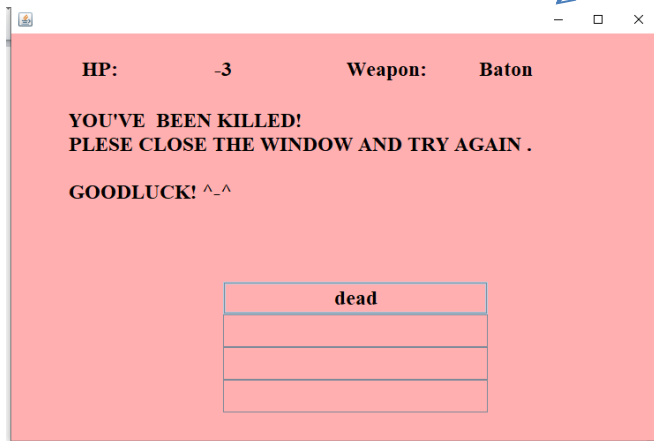
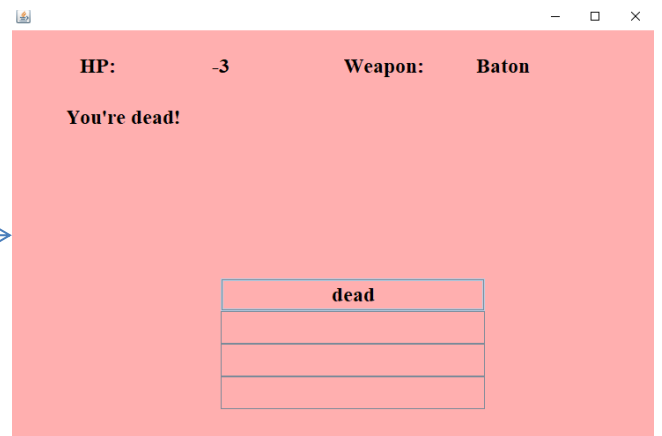
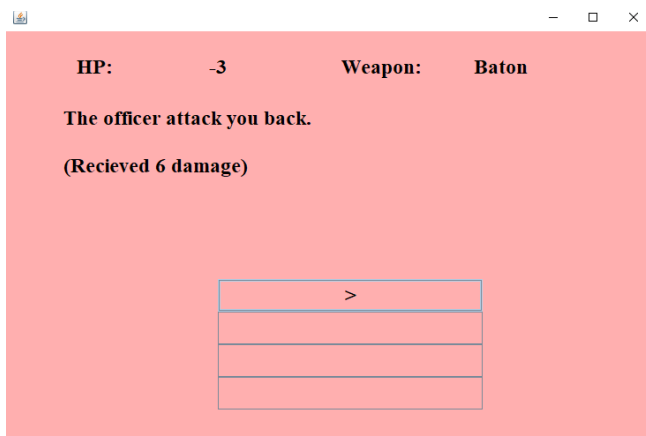
Run

Attack

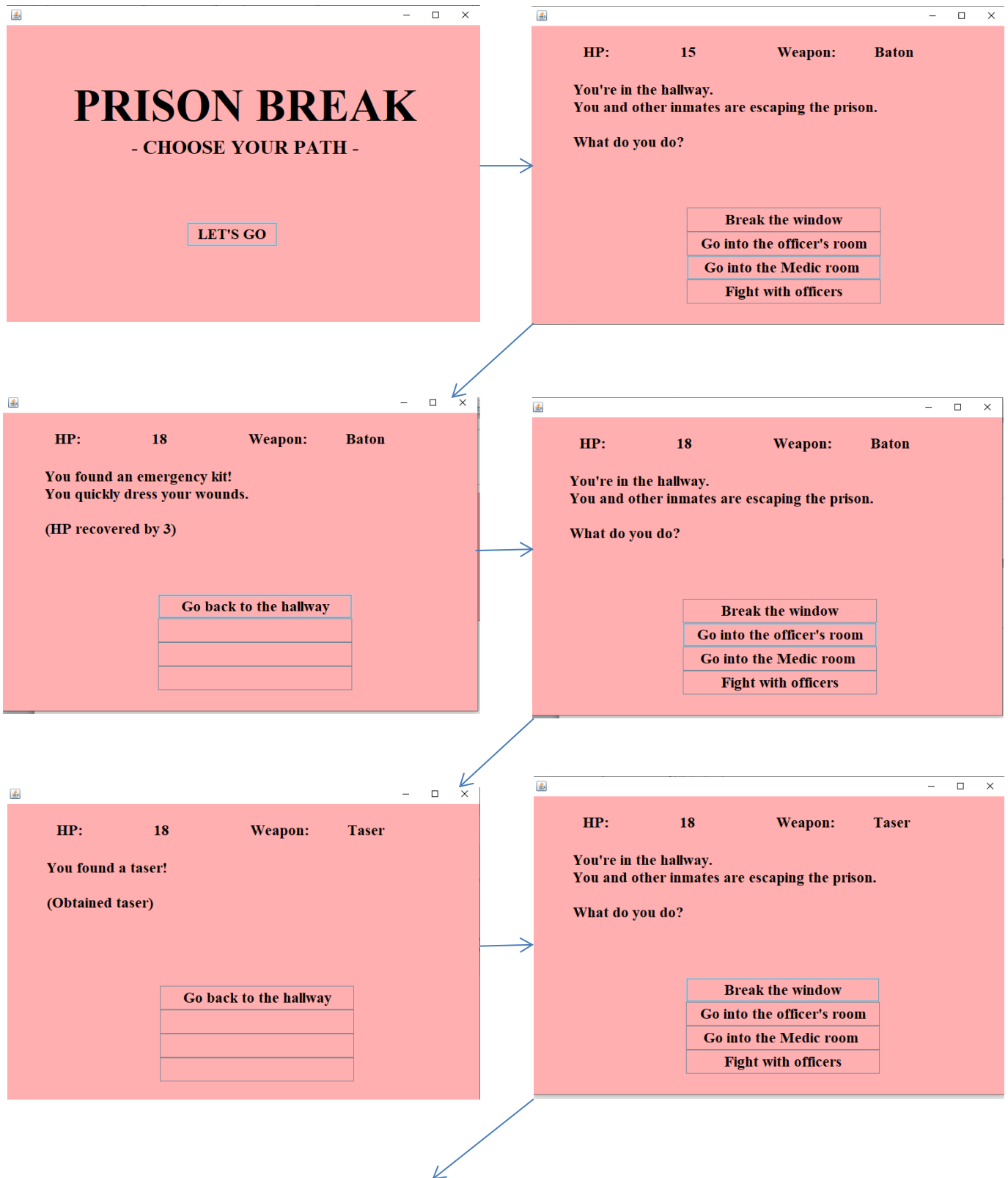
HP: 3 Weapon: Baton

You attack the officer and gave 4 damage!

>



WAY 6:



HP: 18 Weapon: Taser

The window broke.
You escape through the window.

Where do you go next?

Emergency exit
Front gate
Hallway

HP: 18 Weapon: Taser

You run into an Officer!

Run
Fight

HP: 18 Weapon: Taser

Officer HP : 20

What do you do ?

Run
Attack

HP: 18 Weapon: Taser

You attack the officer and gave 10 damage!

>

HP: 12 Weapon: Taser

The officer attack you back.
(Recieved 6 damage)

>

HP: 12 Weapon: Taser

Officer HP : 10

What do you do ?

Run
Attack

-

□

×

HP: 12 Weapon: Taser

You attack the officer and gave 10 damage!

>

-

□

×

HP: 12 Weapon: Taser

You defeated the officer!
The officer dropped the key for the Emergency exit.
(Obtained Key)

freedom

-

□

×

HP: 12 Weapon: Taser

THE DOOR UNLOCKED!
CONGRATULATIONS! YOU'VE MADE YOUR WAY
TO FREEDOM (^-^)/.
PLESE CLOSE THE WINDOW TO EXIT

freedom

OBJECT ORIENTED PROGRAMMING CONCEPT

1. Inheritance

- Inheritance in Java is a mechanism in which one object acquires all the properties and behaviors of a parent object.
- It is the ability to create a new class from an existing class.
 - Parent class (Superclass) is the general class i.e. SuperWeapon, SuperOfficer.
 - Children classes (subclass) is the more specific classes i.e. WeaponBaton, WeaponTaser, OfficerAttack.
 - These common classes share many attributes and behaviors (code reusability)

2. Abstraction

- Abstraction is a process of hiding the implementation details and showing only functionality to the user.
- It is the ability to represent data at a very conceptual level without any details.
- Another way, it shows only essential things to the user and hides the internal details, for example, clicking the buttons in the game. User does not know the internal processing about the next action will be.
- Abstraction lets you focus on what the object does instead of how it does it.

3. Polymorphism

- Polymorphism in Java is a concept by which we can perform a single action in different ways.
- A single statement is used to call various methods and the exact method to be called is only known during runtime.