

Final Project

– Mancala –

I. Driver class

Packages needed:

```
import java.util.*;
```

```
import javafx.*; // for 2d graphics
```

II. abstract Mancala class

Mancala	
protected LinkedList[] board;	// Board of stones
<<constructors>> public Mancala(); <<accessors>> <none> <<modifiers>> public void move(); public boolean isWon(); public abstract void fillBackground(); private void drawBoard(); public void drawNumbers();	// constructor for Mancala // move method for changing stone location (depends on game type) // return true or false depending on whether the user has won (depends on game type) // fills the background with a color (depending on game type) // draws the board onto the screen // draws the number of stones onto the screen next to eat pit

III. Capture class

Capture	
<pre><<constructors>> public Capture(); <<accessors>> <none> <<modifiers>> private void captured() public void move(); public boolean isWon(); public void fillBackground();</pre>	<pre>// constructor for Capture // helper method for when stones are captured // move method specifically for capture game type // determines the winner based on rules for stones in pits // fills the background of the screen depending on the type</pre>

IV. Avalanche class

Avalanche	
<pre><<constructors>> public Avalanche(); <<accessors>> <none> <<modifiers>> public void insertRecursion(TreeNode node, Object data) public void insert(Comparable element) public void fillBackground();</pre>	<pre>// constructor for Avalanche // inserts element into the tree // calls recursive method for insert</pre>

V. Stone class

Stone	
private int xLocation private int yLocation private Color myColor	// stores the x location of the stone // stores the y location of the stone // stores the color of the stone
<<constructors>> public Stone(); <<accessors>> <none> <<modifiers>> public static void draw(Graphics g, int x, int y) private void setColor(Comparable element)	// constructor for Stone // draws stone // sets stone color