A project on

Random Number Pieces of Cake Collecting Game

Introduction:

It is a game that machine's ability to perform cognitive functions as humans do, such as perceiving, learning, reasoning, and solving problems. It is a game between player vs player. There will be many random number that will indicate the cake pieces number. If a player takes a number without keeping left side number, other player get all the left sided number(indicating cake pieces).In the end , player having more cake pieces, will won the game.

Game Play Diagram:

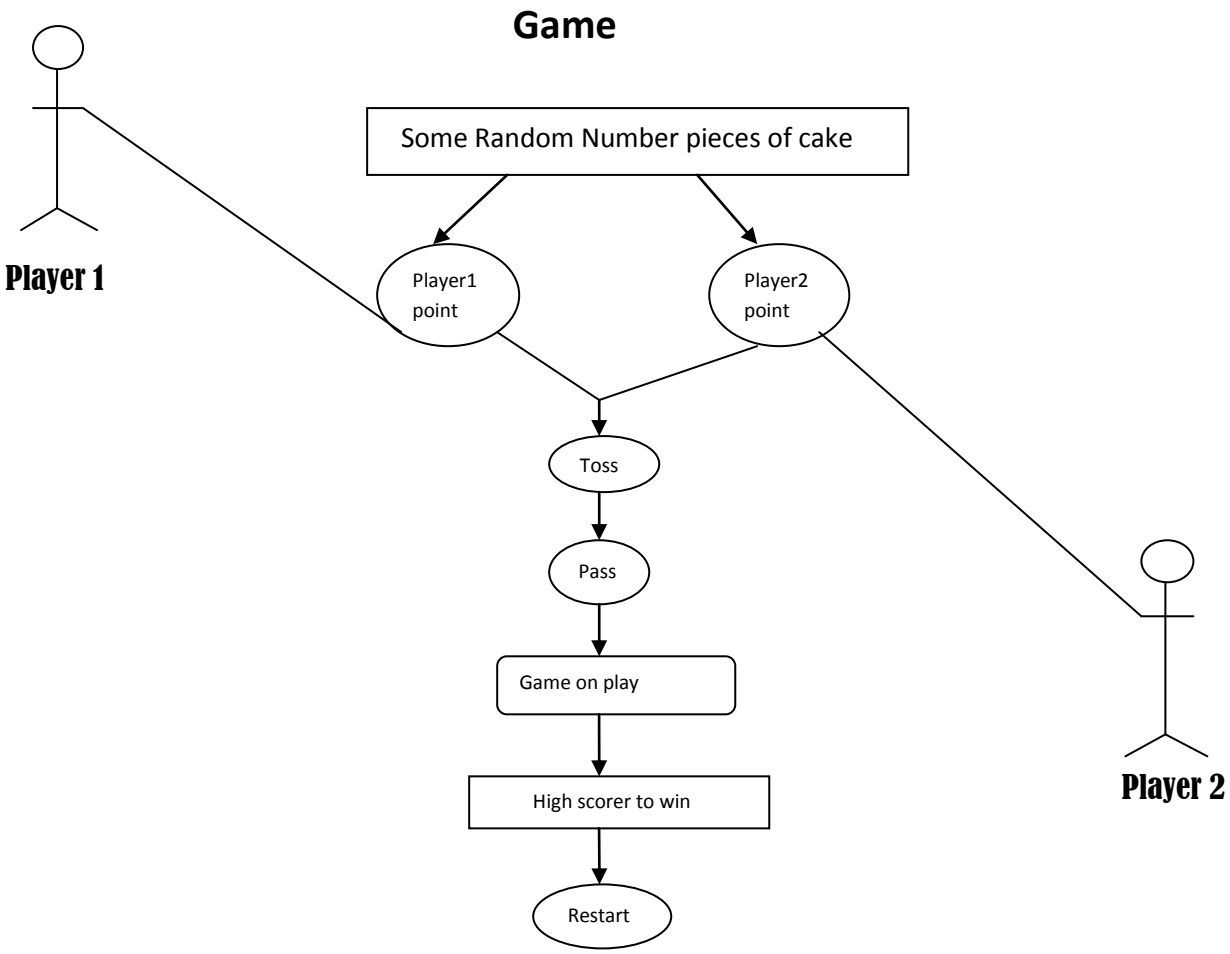


Fig: Game Play

Now describe the all part of the game play diagram is given below-

Random number pieces of cake:

When we start playing the game we will see the on the screen that some random numbers are set so that the players will earn their points by clicking.

Players:

The game will consistof two players known as player 1 and player 2.

Players point:

When either player 1 or player 2 starts the game after winning the toss , they start collecting their points by clicking on the random numbers.

Toss or Pass:

In the game, which player starts the game first is determined by toss and pass option. The player who wins the toss plays first and collects the points.

Game play:

After the toss, the players will start the game.

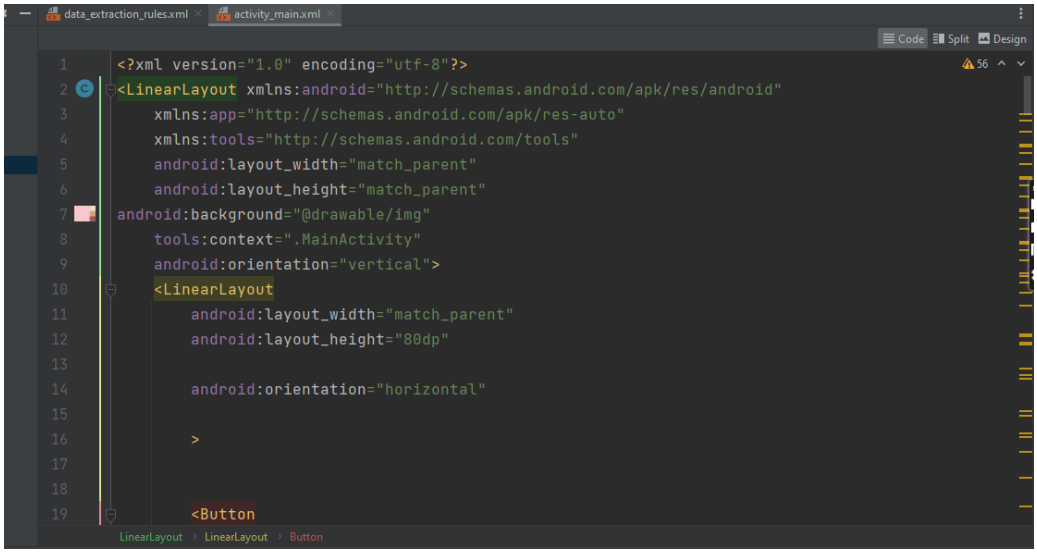
Winner:

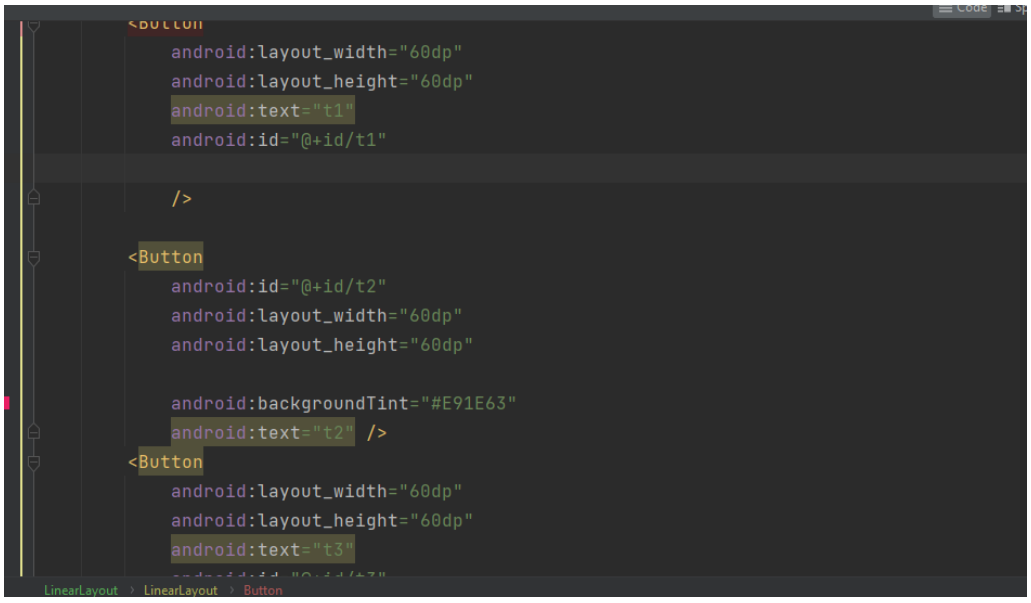
The player who can collect more points first will win.

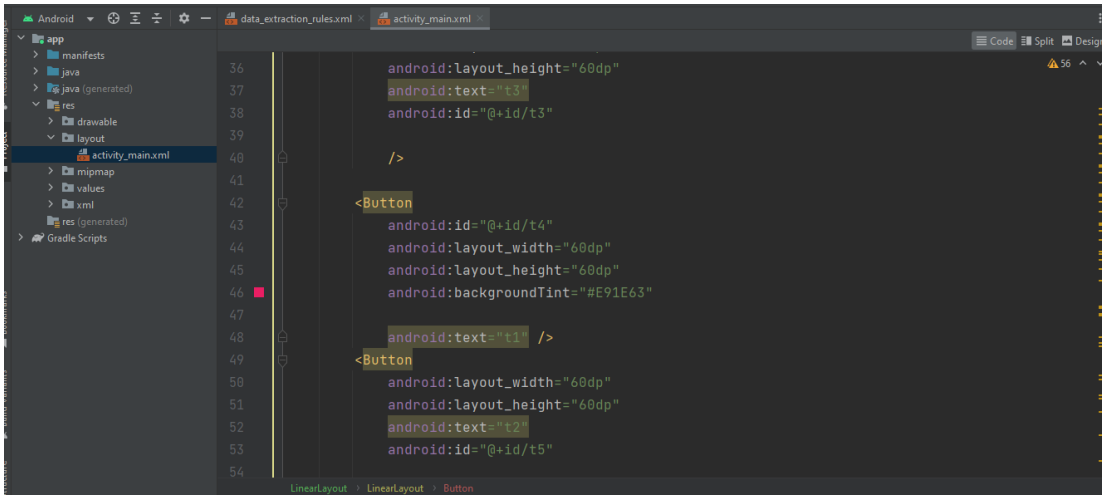
Restart:

Once the game is over,press the restart option to start it again.

Project Screenshot:

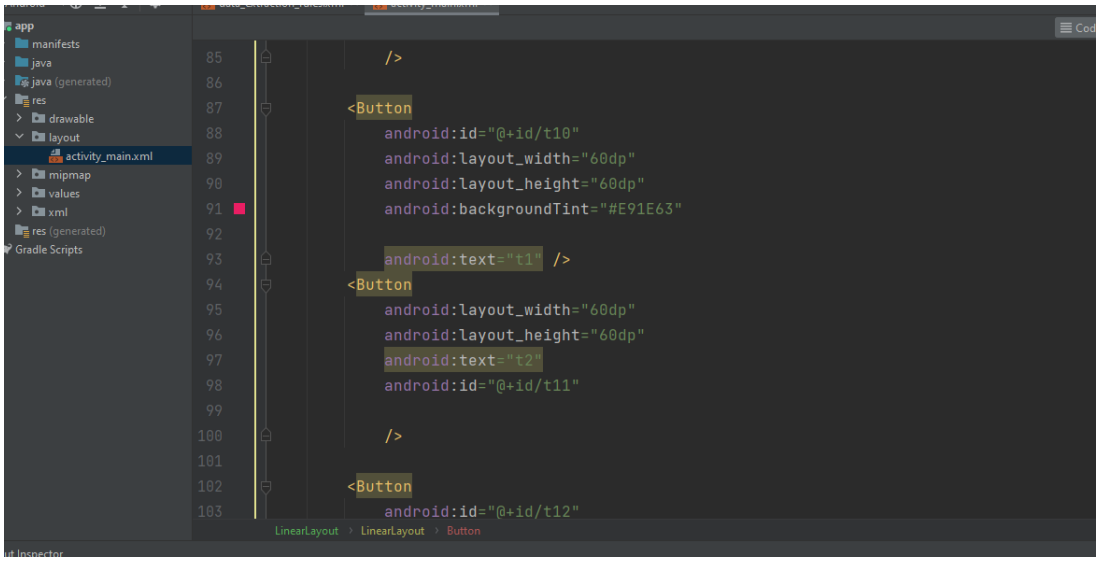







manifests
java
java (generated)
res
drawable
layout
activity_main.xml
mipmap
values
xml
res (generated)
radle Scripts
/>
<Button
android:id="@+id/t6"
android:layout_width="60dp"
android:layout_height="60dp"
android:backgroundTint="#E91E63"
android:text="t3" />
<Button
android:layout_width="60dp"
android:layout_height="60dp"
android:text="t1"
android:id="@+id/t7"
/>
<Button
LinearLayout › LinearLayout › Button

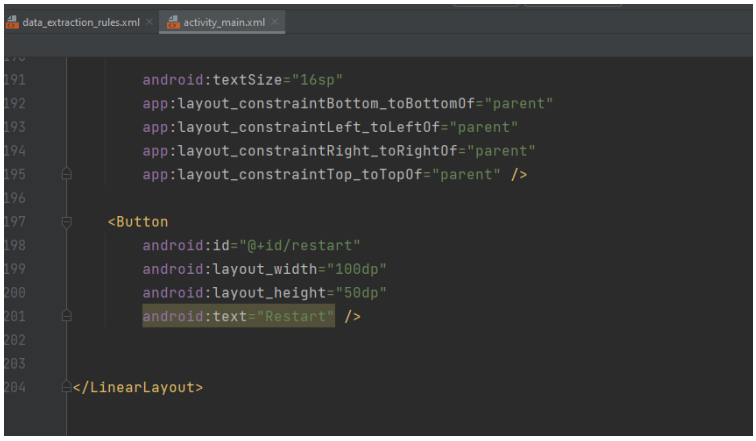

app
manifests
java
java (generated)
res
drawable
layout
activity_main.xml
mipmap
values
xml
res (generated)
Gradle Scripts
Code
Split
<Button
android:id="@+id/t8"
android:layout_width="60dp"
android:layout_height="60dp"
android:backgroundTint="#E91E63"
android:text="t2" />
<Button
android:layout_width="60dp"
android:layout_height="60dp"
android:text="t3"
android:id="@+id/t9"
/>
<Button
android:id="@+id/t10"
android:layout_width="60dp"
android:layout_height="60dp"

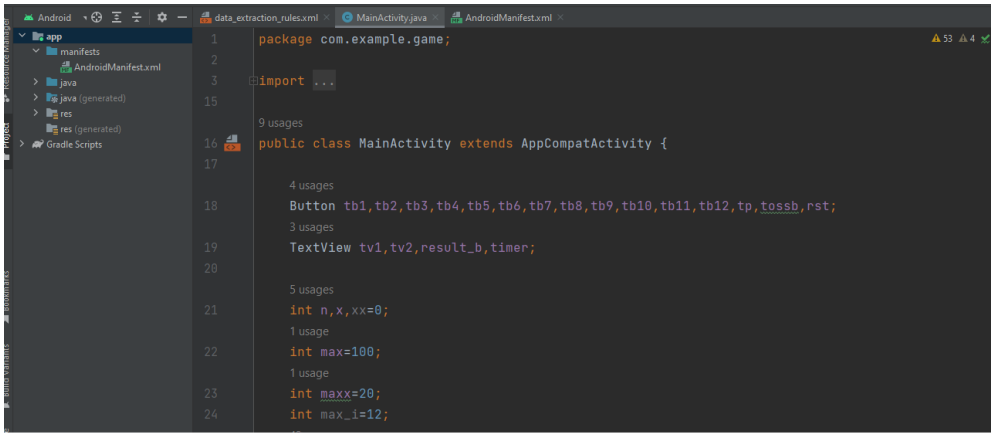

app
manifests
java
java (generated)
res
drawable
layout
activity_main.xml
mipmap
values
xml
res (generated)
Gradle Scripts
/>
<Button
android:id="@+id/t10"
android:layout_width="60dp"
android:layout_height="60dp"
android:backgroundTint="#E91E63"
android:text="t1" />
<Button
android:layout_width="60dp"
android:layout_height="60dp"
android:text="t2"
android:id="@+id/t11"
/>
<Button
android:id="@+id/t12"
LinearLayout › LinearLayout › Button

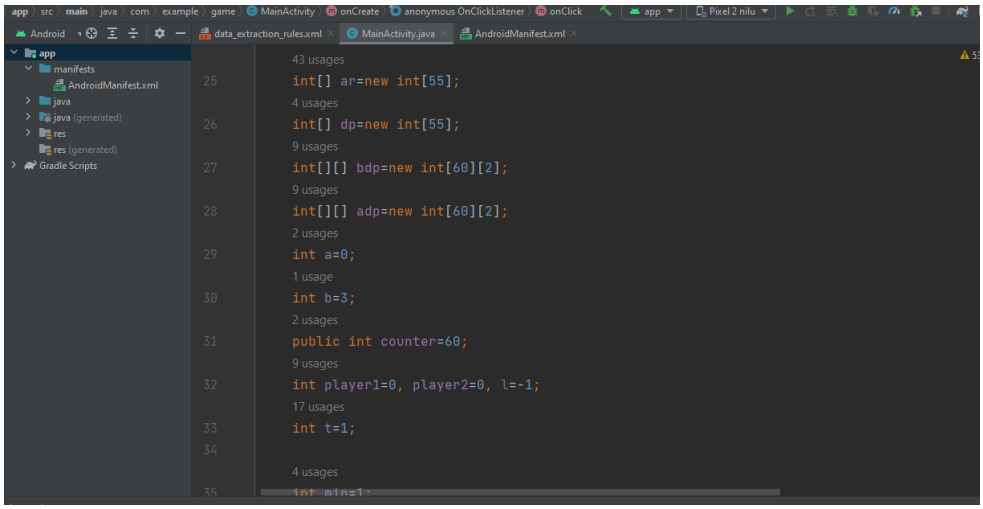
```
<Button
    android:layout_width="100dp"
    android:layout_height="60dp"
    android:text="Toss"
    android:id="@+id/tossid"
    android:layout_marginRight="100dp"

    />

<Button
    android:id="@+id/t_pass"
    android:layout_width="100dp"
    android:layout_height="60dp"
    android:layout_marginRight="150dp"

    android:text="Pass" />

<TextView
    android:id="@+id/timer"
```

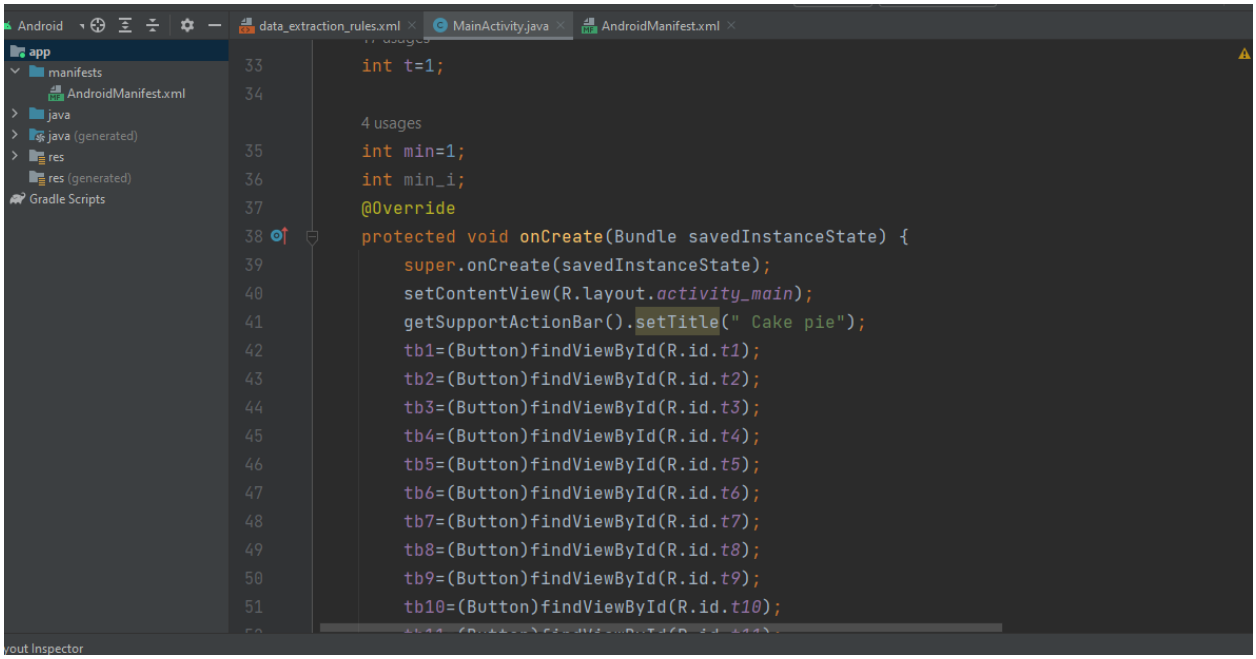
```
            android:layout_marginRight="150dp"

            android:text="Pass" />

        <TextView
            android:id="@+id/timer"
            android:layout_width="150dp"
            android:layout_height="30dp"
            android:background="#A8D86FEA"
            android:text="Time to win:60 sec"

            android:textSize="16sp" />

    </LinearLayout>

    <TextView
        android:id="@+id/resultid"
        android:layout_width="129dp"
        android:layout_height="wrap_content"
```

```
a_extraction_rules.xml × activity_main.xml ×

    <TextView
        android:id="@+id/resultid"
        android:layout_width="129dp"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:background="#882246AF"
        android:text="  Game On Play"


        android:textSize="16sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/restart"
        android:layout_width="100dp"
        android:layout_height="50dp"
```

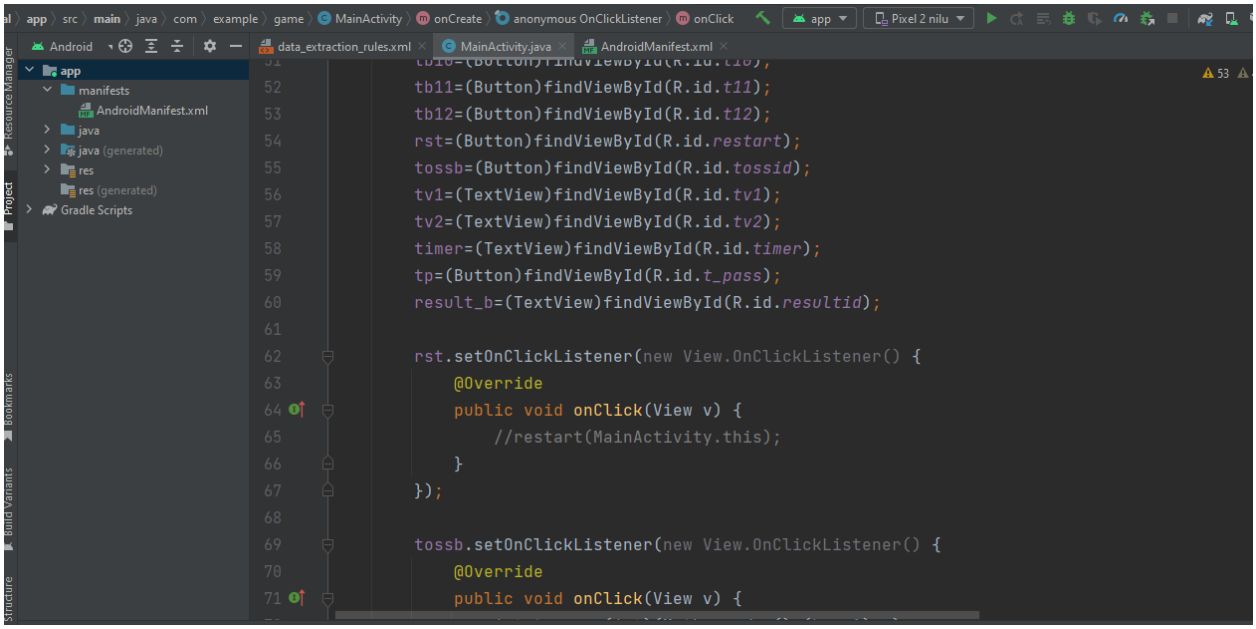

data_extraction_rules.xml
activity_main.xml
android:textSize="16sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<Button
android:id="@+id/restart"
android:layout_width="100dp"
android:layout_height="50dp"
android:text="Restart" />
</LinearLayout>


Android
data_extraction_rules.xml
MainActivity.java
AndroidManifest.xml
app
manifests
AndroidManifest.xml
java
java (generated)
res
res (generated)
Gradle Scripts
package com.example.game;
import ...
9 usages
public class MainActivity extends AppCompatActivity {
4 usages
Button tb1,tb2,tb3,tb4,tb5,tb6,tb7,tb8,tb9,tb10,tb11,tb12,tp,tossb,rst;
3 usages
TextView tv1,tv2,result_b,timer;
5 usages
int n,x,xx=0;
1 usage
int max=100;
1 usage
int maxx=20;
int max_i=12;


app
src
main
java
com
example
game
MainActivity
onCreate
anonymous OnClickListener
onClick
Pixel 2 nilu
Android
data_extraction_rules.xml
MainActivity.java
AndroidManifest.xml
app
manifests
AndroidManifest.xml
java
java (generated)
res
res (generated)
Gradle Scripts
43 usages
int[] ar=new int[55];
4 usages
int[] dp=new int[55];
9 usages
int[][] bdp=new int[60][2];
9 usages
int[][] adp=new int[60][2];
2 usages
int a=0;
1 usage
int b=3;
2 usages
public int counter=60;
9 usages
int player1=0, player2=0, l=-1;
17 usages
int t=1;
4 usages



```
int t=1;

4 usages
int min=1;
int min_i;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    getSupportActionBar().setTitle(" Cake pie");
    tb1=(Button)findViewById(R.id.t1);
    tb2=(Button)findViewById(R.id.t2);
    tb3=(Button)findViewById(R.id.t3);
    tb4=(Button)findViewById(R.id.t4);
    tb5=(Button)findViewById(R.id.t5);
    tb6=(Button)findViewById(R.id.t6);
    tb7=(Button)findViewById(R.id.t7);
    tb8=(Button)findViewById(R.id.t8);
    tb9=(Button)findViewById(R.id.t9);
    tb10=(Button)findViewById(R.id.t10);
```



```
    tb11=(Button)findViewById(R.id.t11);
    tb12=(Button)findViewById(R.id.t12);
    rst=(Button)findViewById(R.id.restart);
    tossb=(Button)findViewById(R.id.tossid);
    tv1=(TextView)findViewById(R.id.tv1);
    tv2=(TextView)findViewById(R.id.tv2);
    timer=(TextView)findViewById(R.id.timer);
    tp=(Button)findViewById(R.id.t_pass);
    result_b=(TextView)findViewById(R.id.resultid);

    rst.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            //restart(MainActivity.this);
        }
    });

    tossb.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
```


app
manifests
AndroidManifest.xml
java
java (generated)
res
res (generated)
Gradle Scripts
public void onTick(long millisUntilFinished){
timer.setText("Time remaining "+ String.valueOf(counter)+"");
counter--;
}
public void onFinish(){
timer.setText("Time Over !!Be Fast Gamer ");
result_b.setText(" player2 win ");
}
}.start();
if(toss==0|| toss==1 || toss==2){
Toast.makeText(context: MainActivity.this, text: "Player2 has won the toss", Toast.LE
t=0;
action_of_ai();
}
if(toss==3){
Toast.makeText(context: MainActivity.this, text: "you have won the toss", Toast.LENGT
Toast.makeText(context: MainActivity.this, text: "Its your turn", Toast.LENGTH_LONG).


});
tb1.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
x=1;
action_of_click();
t=0;
}
});
tb2.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
x=2;
action_of_click();
t=0;

```
        t=0;
    }
});
tb3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        x=3;

        action_of_click();
        t=0;
    }
});
tb4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        x=4;

        action_of_click();
        t=0;
    }
```

```
    tb5.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            x=5;

            action_of_click();
            t=0;
        }
    });
    tb6.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            x=6;

            action_of_click();
            t=0;
        }
    });

    tb7.setOnClickListener(new View.OnClickListener() {
        @Override
```

```
            action_of_click();
            t=0;
        }
    });
    tb8.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            x=8;

            action_of_click();
            t=0;
        }
    });
    tb9.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            x=9;

            action_of_click();
```

```
            @Override
            public void onClick(View v) {
                x=11;

                action_of_click();
                t=0;
            }
        });
        tb12.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                x=12;
                action_of_click();
                t=0;
            }
        });
        tp.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                t=0;
```

```
        PackageManager packageManager = context.getPackageManager();
        Intent intent = packageManager.getLaunchIntentForPackage(context.getPackageName());
        ComponentName componentName = intent.getComponent();
        Intent mainIntent = Intent.makeRestartActivityTask(componentName);
        context.startActivity(mainIntent);
        Runtime.getRuntime().exit( status: 0);
    }
    public int com(int i){

        if (i==n) return 0;
        if (bdp[i][0]!=-1) return bdp[i][0];
        int a=ar[i]+dp[i+1]-player_c( i: i+1);
        int b=com( i: i+1);

        bdp[i][0]= Math.max(a,b);

        if(a>b) bdp[i][1]=i;
        else bdp[i][1]=bdp[i+1][1];
        return bdp[i][0];
```

```
2 usages
public void game_result(){
    if(player1>player2) {
        Toast.makeText( context: MainActivity.this,  text: "Players win", Toast.LENGTH_LONG).show();
        int diff=player1-player2;
        result_b.setText("" + " Player1 Win by " + diff + "");


    }
    else if(player1<player2){
        Toast.makeText( context: MainActivity.this,  text: "player2 win", Toast.LENGTH_LONG).show();
        int diff=player2-player1;
        result_b.setText("" + " player2 Win by " + diff + "");

    }
    else
    {
        int diff=0;
        Toast.makeText( context: MainActivity.this,  text: "drow", Toast.LENGTH_LONG).show();
```

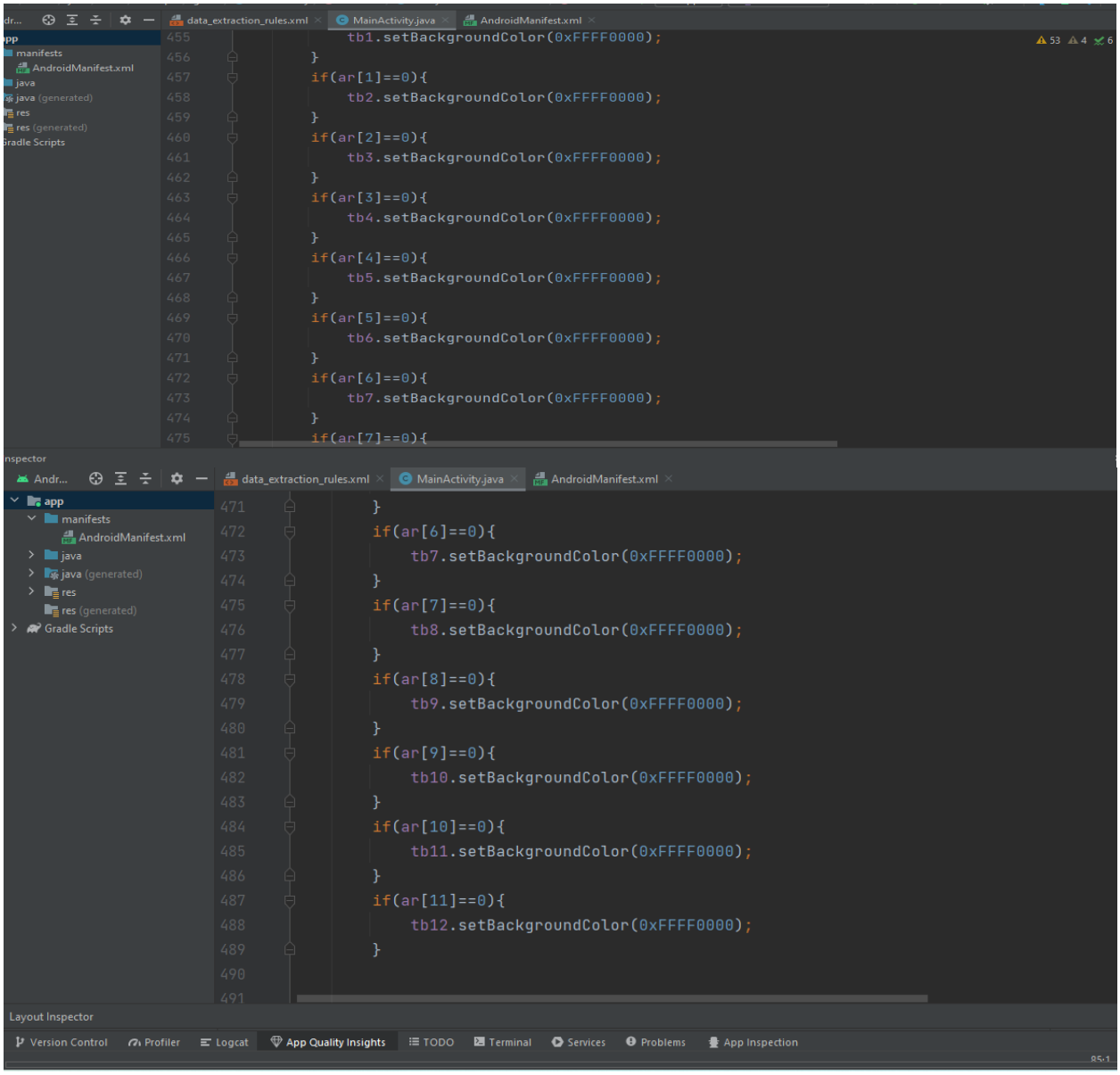
```
1 usage                                                          ⚠ 53  ⚠ 4
public  int ai_choose(){
    //chose max cake and index

    int temp_max=ar[0];
    int max_index=0;
    for ( int i = 1; i <12; i++) {
        if (ar[i] > temp_max) {
            temp_max = ar[i];
            max_index=i;

        }
    }


    // int max_index=11;
    // int temp_max=ar[0];
    //avg
    int avg=0;
    for(int m=0;m<12;m++){
```

```
                                                                 ⚠ 53  ⚠ 4
    int left_sum=0;
    for(int p=0;p<max_index;p++){
        left_sum=left_sum+ar[p];
    }

    while((left_sum>temp_max) ||( (temp_max-left_sum<avg ) &&(left_sum!=0))){
        max_index=max_index-1;
        left_sum=0;
        for(int p=0;p<max_index;p++){
            left_sum=left_sum+ar[p];
            temp_max=ar[max_index];

        }
    }

    //  l=bdp[x+1][1];
    //return l;
    return  max_index;
}
12 usages
public void  action of click(){
```


Toast.makeText(context: MainActivity.this, text: "Its not your turn.Pass token",
}
else{
// Toast.makeText(MainActivity.this, "pressed"+x, Toast.LENGTH_LONG).show();
x--;
// Toast.makeText(MainActivity.this, "cake pics "+ar[x], Toast.LENGTH_LONG).show();
//point of ai
for(int i=0; i<x; i++)
{
player2+=ar[i];
}
//point of player
player1=player1+ar[x];
// Toast.makeText(MainActivity.this, "Players point"+player, Toast.LENGTH_LONG).show();
// Toast.makeText(MainActivity.this, "AI point"+ai, Toast.LENGTH_LONG).show();
tv1.setText("" + " Player1 point " + player1 + "");
tv2.setText("" + " player2 point " + player2 + "");
//clearing

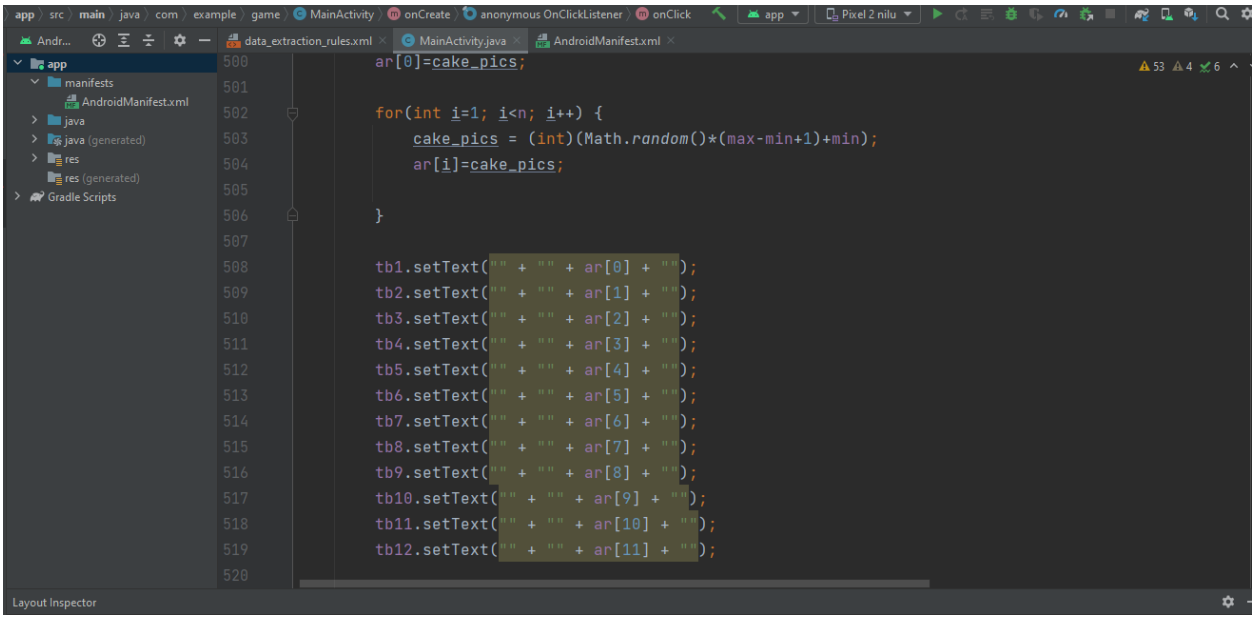
```
        // Toast.makeText(MainActivity.this, "AI  point"+ai, Toast.LENGTH_LONG).show();
        tv1.setText("" + "  Player1 point  " + player1 + "");
        tv2.setText("" + "     player2 point   " + player2 + "");


        //clearing
        for(int i=0; i<=x; i++)
        {
            ar[i]=0;
        }
        setcolor();

        //check_game_end
        int g_state=  check_game_end();
        if(g_state==0){
            game_result();
        }


    }

}
2 usages
public int check_game_end(){
    int sum=0;
    for(int i=0; i<12; i++)
    {
        sum=sum+ar[i];
    }
    return sum;

}

2 usages
public  void  action_of_ai(){
    int c=ai_choose();
    int tbl=c+1;
    // Toast.makeText(MainActivity.this, "player2 choose"+tbl, Toast.LENGTH_LONG).show();

    //point of player1
```

```
for(int i=0; i<c; i++)
{
    player1+=ar[i];
}
//point of player2
player2=player2+ar[c];

// Toast.makeText(MainActivity.this, "PLAYER POINT "+player, Toast.LENGTH_LONG).show();
tv1.setText("" + "Player1 point  " + player1 + "");
// Toast.makeText(MainActivity.this, "AI point "+ai, Toast.LENGTH_LONG).show();
tv2.setText("" + "player2 point  " + player2 + "");
//clearing

for(int i=0; i<=c; i++)
{
    ar[i]=0;
    //tb1.setBackgroundColor(getResources().getColor(R.color.red));

}
setcolor();
```



```
            tb1.setBackgroundColor(0xFFFF0000);
        }
        if(ar[1]==0){
            tb2.setBackgroundColor(0xFFFF0000);
        }
        if(ar[2]==0){
            tb3.setBackgroundColor(0xFFFF0000);
        }
        if(ar[3]==0){
            tb4.setBackgroundColor(0xFFFF0000);
        }
        if(ar[4]==0){
            tb5.setBackgroundColor(0xFFFF0000);
        }
        if(ar[5]==0){
            tb6.setBackgroundColor(0xFFFF0000);
        }
        if(ar[6]==0){
            tb7.setBackgroundColor(0xFFFF0000);
        }
        if(ar[7]==0){
```

```
        }
        if(ar[6]==0){
            tb7.setBackgroundColor(0xFFFF0000);
        }
        if(ar[7]==0){
            tb8.setBackgroundColor(0xFFFF0000);
        }
        if(ar[8]==0){
            tb9.setBackgroundColor(0xFFFF0000);
        }
        if(ar[9]==0){
            tb10.setBackgroundColor(0xFFFF0000);
        }
        if(ar[10]==0){
            tb11.setBackgroundColor(0xFFFF0000);
        }
        if(ar[11]==0){
            tb12.setBackgroundColor(0xFFFF0000);
        }
```



```
        ar[0]=cake_pics;

        for(int i=1; i<n; i++) {
            cake_pics = (int)(Math.random()*(max-min+1)+min);
            ar[i]=cake_pics;

        }

        tb1.setText("" + "" + ar[0] + "");
        tb2.setText("" + "" + ar[1] + "");
        tb3.setText("" + "" + ar[2] + "");
        tb4.setText("" + "" + ar[3] + "");
        tb5.setText("" + "" + ar[4] + "");
        tb6.setText("" + "" + ar[5] + "");
        tb7.setText("" + "" + ar[6] + "");
        tb8.setText("" + "" + ar[7] + "");
        tb9.setText("" + "" + ar[8] + "");
        tb10.setText("" + "" + ar[9] + "");
        tb11.setText("" + "" + ar[10] + "");
        tb12.setText("" + "" + ar[11] + "");
```

Source Code:

https://github.com/gyan-droid/coin-collector.

Code:

```
package
pack1;


import java.awt.Color;
import java.awt.Graphics;
import java.awt.event.KeyEvent;
import java.awt.event.KeyListener;


import javax.swing.JFrame;
import javax.swing.JPanel;


public class BackGround extends JPanel implements KeyListener{
public final int width = 1200;
public final int height = 800;
private JFrame window = new JFrame("Collect Coin");
private Star stars[] = new Star[1000];
private Player gyan = new Player(2,2,20,20,Color.red,this);
Coins[] coins = new Coins[100];
//bomb[] bombs = new bomb[20];
private int time = 60;
public static int score = 0;
public void initStars() {
for(int i =0;i<stars.length;i++) {
stars[i] = new Star((int)(Math.random()*1200),(int)(Math.random()*800)
);


}
}
public void initCoins()
{
for(int i = 0; i <coins.length; i++)
{
```

```
coins[i] = new Coins((int)(Math.random()*1200),((int)(Math.
random()*800)),
15,15,gyan);
}
}
//public void initbomb()
//{
// for(int i = 0; i <bombs.length; i++)
// {
// bombs[i] = new bomb((int)(Math.random()*1200),((int)(Math.
random()*800)
),
15,15,gyan);
// }
//}
private void drawStar(Graphics g) {
for(int i = 0;i<stars.length;i++)
stars[i].drawstar(g);
}
public BackGround() {


window.add(this);
this.setFocusable(true);
this.addKeyListener(this);


initStars();
initCoins();
// initbomb();


Thread thread = new Thread(()->
{
while(time > 0) {
try {
Thread.sleep(1000);
time--;
} catch (InterruptedException e) {
// TODO Auto-generated catch block
e.printStackTrace();
}
}
```

```
window.dispose();


});
thread.start();
window.setSize(width,height);
window.setLocation(0, 0);
window.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
window.setVisible(true);
}


public void paint(Graphics g) {
super.paintComponent(g);
this.setBackground(Color.black);
drawStar(g);
this.repaint();
gyan.rightFace(g);
gyan.leftFace(g);
for(int i = 0; i <coins.length; i++) {
coins[i].drawCoin(g);}
// for(int i = 0; i <bombs.length; i++) {
// bombs[i].drawbomb(g);}
g.setColor(Color.PINK);
g.drawString("Time Remaining : "+time, 10, 10);
g.drawString("Score : "+score, 10, 40);
g.setColor(Color.green);
g.drawString("This game is designed by Gyanendra", 700, 700);
}
public void keyPressed(KeyEvent arg0) {
// TODO Auto-generated method stub
if(arg0.getKeyCode() == KeyEvent.VK_RIGHT)
{
for(int i = 0; i <coins.length; i++)
coins[i].isCollected();
gyan.rightSpeed(5);




}
else if(arg0.getKeyCode() == KeyEvent.VK_LEFT)
```

```
{
for(int i = 0; i <coins.length; i++)
coins[i].isCollected();
gyan.leftSpeed(-5);


}
else if(arg0.getKeyCode() == KeyEvent.VK_UP)
{
for(int i = 0; i <coins.length; i++)
coins[i].isCollected();
gyan.upSpeed(-5);


}
else if(arg0.getKeyCode() == KeyEvent.VK_DOWN)
{
for(int i = 0; i <coins.length; i++)
coins[i].isCollected();
gyan.downSpeed(5);


}
else
{
gyan.rightSpeed(0);
gyan.leftSpeed(0);
gyan.upSpeed(0);
gyan.downSpeed(0);
}




}
@Override
public void keyReleased(KeyEvent arg0) {
// TODO Auto-generated method stub
// if(arg0.getKeyCode() == KeyEvent.VK_RIGHT)
// {
// for(int i = 0; i <coins.length; i++)
// coins[i].isCollected();
```

```
                        // player.setXSpeed(5);
                        //
                        //
                        // }
                        // if(arg0.getKeyCode() == KeyEvent.VK_LEFT)
                        // {
                        // for(int i = 0; i <coins.length; i++)
                        // coins[i].isCollected();
                        // player.setXSpeed(-5);
                        //
                        // }
                        // if(arg0.getKeyCode() == KeyEvent.VK_UP)
                        // {
                        // for(int i = 0; i <coins.length; i++)
                        // coins[i].isCollected();
                        // player.setYSpeed(-5);
                        //
                        // }
                        // if(arg0.getKeyCode() == KeyEvent.VK_DOWN)
                        // {
                        // for(int i = 0; i <coins.length; i++)
                        // coins[i].isCollected();
                        // player.setYSpeed(5);
                        //
                        // }


                        }
                        @Override
                        public void keyTyped(KeyEvent arg0) {




                        }


                        }



package pack1;
```

```
import java.awt.Color;
import java.awt.Graphics;


public class Coins {
public intxPos;
public intyPos;
public int width;
public int height;
private Player player;
public Boolean isCollected = false;


public Coins(intxPos, intyPos, int width, int height, Player
player)
{
this.xPos = xPos;
this.yPos = yPos;
this.width = width;
this.height = height;
this.player = player;
}


public void isCollected()
{


Thread thread = new Thread(()->
{
isCollected = player.hasCollected(this);
});
thread.start();
if(isCollected == true)
thread.stop();


}


public void drawCoin(Graphics g)
```

```
{
g.setColor(Color.YELLOW);
g.fillOval(xPos, yPos, width, height);
}
}
```

```
package pack1;

public class Exe {

public static void main(String[] args) {
// TODO Auto-generated method stub

BackGround scene = new BackGround();
}

}
```

```
package
pack1;

import java.awt.Color;
import java.awt.Graphics;
import java.awt.Rectangle;

public class Player {
private intxPos;
private intyPos;
private int speed;
private Color color;
private int width;
private int height;
private BackGround current;
public Player(intxPos , intyPos ,int width , int height , Color color ,
BackGround current) {
this.xPos = xPos;
this.yPos = yPos;
this.color = color;
this.current = current;
```

```
this.width = width;
this.height = height;
}
public void rightSpeed(int speed) {
this.speed = speed;
for(int i = 0; i<=5;i++)
{
if(current.width>=xPos)
xPos+=speed;
}


}
public void leftSpeed(int speed) {
this.speed = speed;
for(int i = 0; i<=5;i++)
{
if(xPos>0)
xPos+=speed;
}
}
public void downSpeed(int speed) {
this.speed = speed;
for(int i = 0; i<=5;i++)
{
if(current.height>=yPos)
yPos+=speed;
}
}
public void upSpeed(int speed) {
this.speed = speed;
for(int i = 0; i<=5;i++)
{
if(yPos>0)
yPos+=speed;


}
}
public booleanhasCollected(Coins coin)
{
Rectangle coinRect = new Rectangle(coin.xPos, coin.yPos, coin.width + 1,
```

```
                                coin.height + 1);
                                Rectangle playerRect = new Rectangle(xPos, yPos, width + 1, height + 1);


                                if(coinRect.intersects(playerRect))
                                {
                                coin.xPos = -1000;
                                coin = null;
                                BackGround.score++;
                                return true;
                                }


                                // if(bombRect.intersects(playerRect)) {
                                // bombs.xPos = -1000;
                                // bombs = null;
                                // BackGround.score--;
                                // return true;
                                // }
                                return false;
                                }
                                //


                                public void rightFace(Graphics g) {
                                int offset = 5;
                                g.setColor(color);
                                g.fillOval(xPos, yPos, width, height );
                                g.setColor(Color.yellow);
                                g.fillRect(xPos+width-offset, yPos+offset, 3, 3);
                                }
                                public void leftFace(Graphics g) {
                                int offset = 5;
                                g.setColor(color);
                                g.fillOval(xPos, yPos, width, height);
                                g.setColor(Color.yellow);
                                g.fillRect(xPos+offset, yPos+offset, 3, 3);
                                }
                                }
package
pack1;
```

```
import java.awt.Color;
import java.awt.Graphics;


public class Star {
private intxPos;
private intyPos;
private final int width = 3;
private final int height = 3;
private int red;
public int green;
public int blue;


public Star() {
super();
}
public Star(intxPos, intyPos ) {
this.xPos = xPos;
this.yPos = yPos;
}




public void randomizeColor1()
{
this.red = (int)(Math.random()*255);
this.green = (int)(Math.random()*255);
this.blue = (int)(Math.random()*255);
}
@Override
public String toString() {
return "Star [xPos=" + xPos + ", yPos=" + yPos + ", width=" + width + ",
 height=" + height + ", red=" + red
+ ", green=" + green + ", blue=" + blue + "]";
}
public Color randomizeColor() {
return Color.black;
}
public intrandomizeColor(int limit) {
```

```
return 0;
}
public void drawstar(Graphics g) {
randomizeColor1();
g.setColor(new Color(this.red,this.green,this.blue));
g.fillOval(xPos, yPos, width, height);


}
}
```

Project Features:

a)**Platform:** Android Studio
b)**Language:** Java

Target Population:

This game is mainly made for entertainment of people especially kids.
And because they love to play new games. And since this game is very easy to play,kids of any age can easily play it and get some entertainment out of it. This game android available. Now almost all people in our country are using android phone more or less . So we hope it is about 90% kids will get chance to play it and enjoy it.

Social and Economics Benefits:

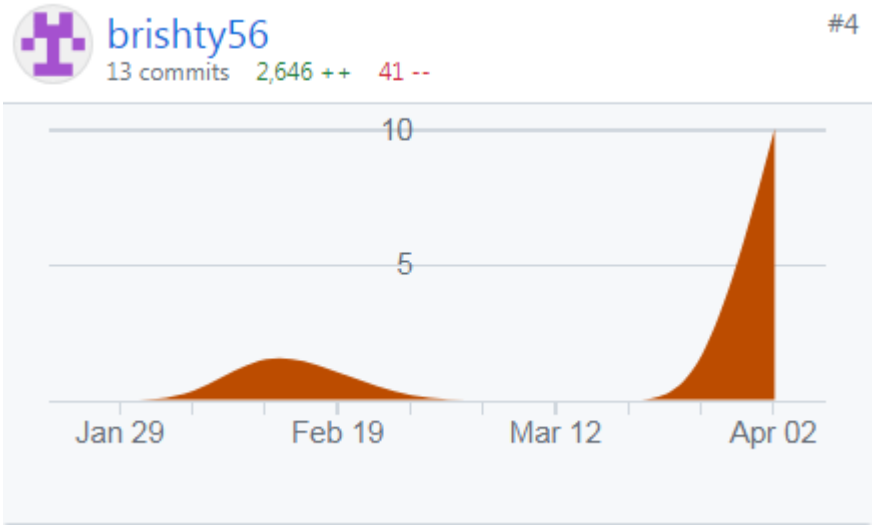
The game we developed is an entertainment game. It will not have any negative effect on people's mind but it can play a helpful role in the healthy development of children by entertaining them. And on the other hand the money earned from it will help to make our economic infrastructure more prosperous.

Github Id:

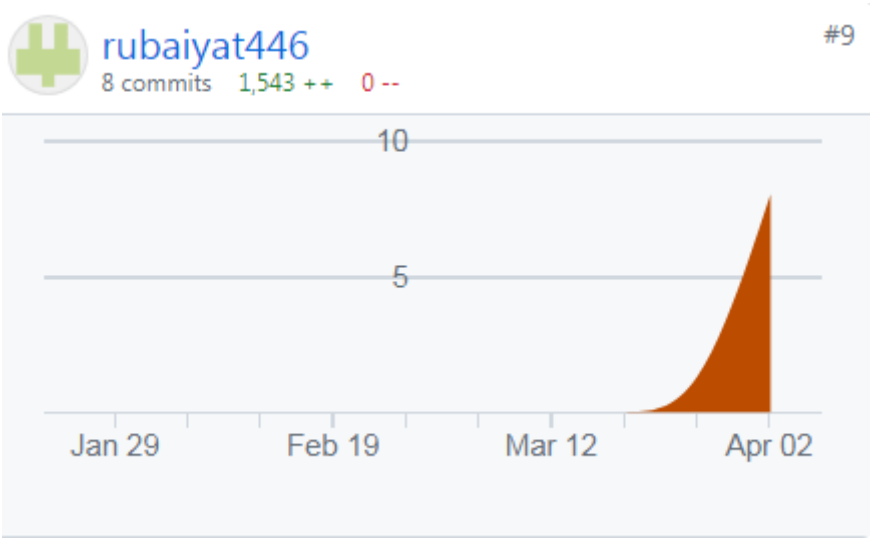
- brishty56
- rubaiyat446
- shadat16

Github's commit screenshot (per person):

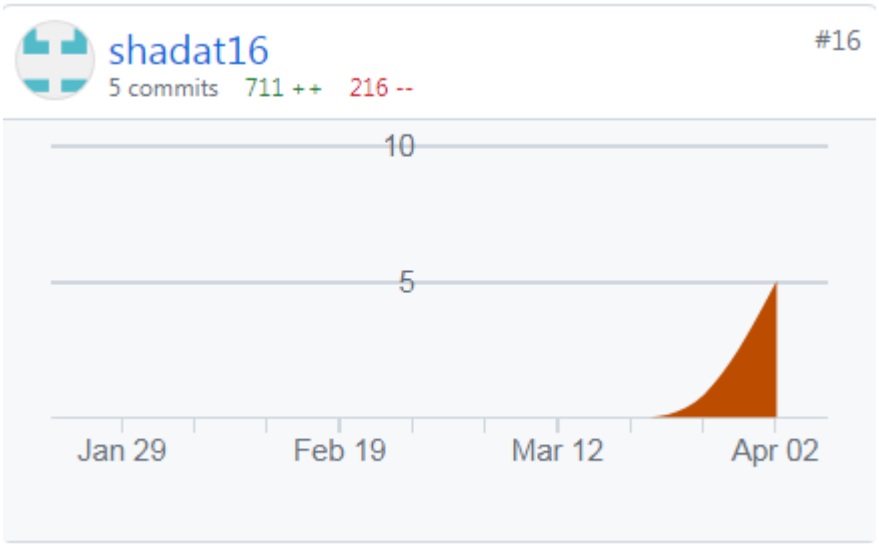
1.brishty56



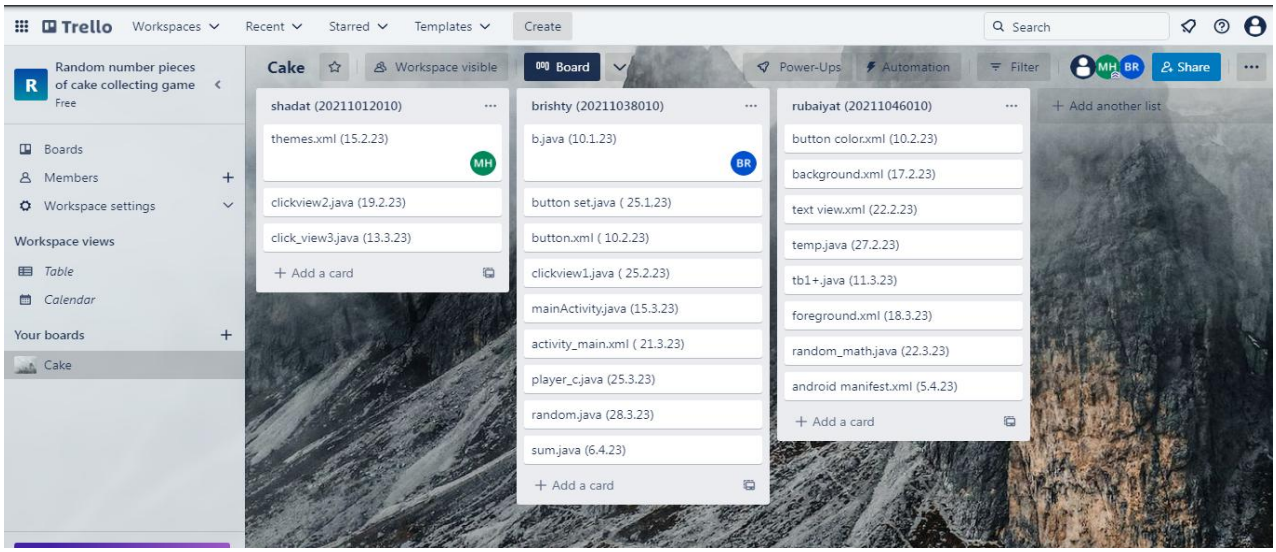
2.rubaiyat446



3.shadat16



Task Scheduling Schreenshot (Trello):



Conclusion:

Above all our developed game is an entertaining game so it will be helpful for kids and other age group also to develop mind please mind try to refresh a bit.

Reference:

- https://www.sourcecodester.com/tags/java-game-programming
- https://www.youtube.com/watch?v=gfX8UHTpq3o
- https://www.youtube.com/watch?v=Dr_ZEOiXQ64
- https://www.geeksforgeeks.org/java/
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