Hi , this is bejeweled game replica made by me , MUSA ENES ERKUVAN

I have 6 interfaces , 17 classes ;

GameGrid : an abstract class , where we construct each jewel

GameGrid implements 3 interfaces;

1 CrushJewels : an interface , which contains crush methods

2 CheckCoord : an interface , which contains methods for which type for jewel to be crushed

3 SlideJewels : an interface , which contains methods for sliding jewels after crushing

3 classes extends GameGrid;

1 NormalCrush : overrides CrushJewels methods , decides which parameters goes to crush methods

2 WildCrush: overrides CrushJewels methods , decides which parameters goes to crush methods

3 MathCrush : overrides CrushJewels methods , decides which parameters goes to crush methods

These 3 subclass of Gamegrid are superclasses of Jewel type classes

JewelW: subclass of WildCrush , includes constructor from GameGrid , includes a String for which method to run

JewelS: subclass of NormalCrush , includes constructor from GameGrid , includes a String for which method to run

JewelT: subclass of NormalCrush , includes constructor from GameGrid , includes a String for which method to run

JewelD: subclass of NormalCrush , includes constructor from GameGrid , includes a String for which method to run

JewelPlus: subclass of MathCrush , includes constructor from GameGrid , includes a String for which method to run

JewelMinus: subclass of MathCrush , includes constructor from GameGrid , includes a String for which method to run

JewelPerpendicular: subclass of MathCrush , includes constructor from GameGrid , includes a String for which method to run

JewelSlash: subclass of MathCrush , includes constructor from GameGrid , includes a String for which method to run

JewelReverseSlash: subclass of MathCrush , includes constructor from GameGrid , includes a String for which method to run

Main: We give instances to objects and create other variables (lists etc.) here and then give it as parameter to PlayGame class object

PlayGame: includes StartGame and GridOutPut methods , StartGame method is doing all the big play and call other methods , Gridoutput method is just for adding the gamegrid's last version to output list

PlayGame implements 3 interfaces;

Reader: an interface , contains a method for reading txt files

Writer: an interface, writing an output to a txt file

GridMaker: makes an object orianted jewel 2d array based on Reader interface output

Player: includes attributes such as , points and name , also implements Comparable

ActivePlayerCheck: a normal class which Player class extends , contains 2 method ;

1 is for deciding an Active Player , if its a new player or existing player on leaderboard txt

2 is for using sort and binary methods so we can add their results to monitoring txt

As for summary ,

Main class creates instances for objects

Game object calls Read and gather data

Game object calls Gridmaker for making an 2d array of jewel objects

We create a player object and decides who he/she is

Game object calls StartGame method

This method gets commands txt args as input and calls CheckCoord interface

This interface decides which jewel type and which method it uses so it creates a coordinate couples based on that

After it calls crush methods from CrushJewels interface

CrushJewels interface has 2 methods

1 method is an empty body and its getting overrides from 3 class NormalCrush,WildCrush,MathCrush

Which our interface call this method firstly

Each jewel gets decided which coordinate to terminate and be crushed there and send to second crush method

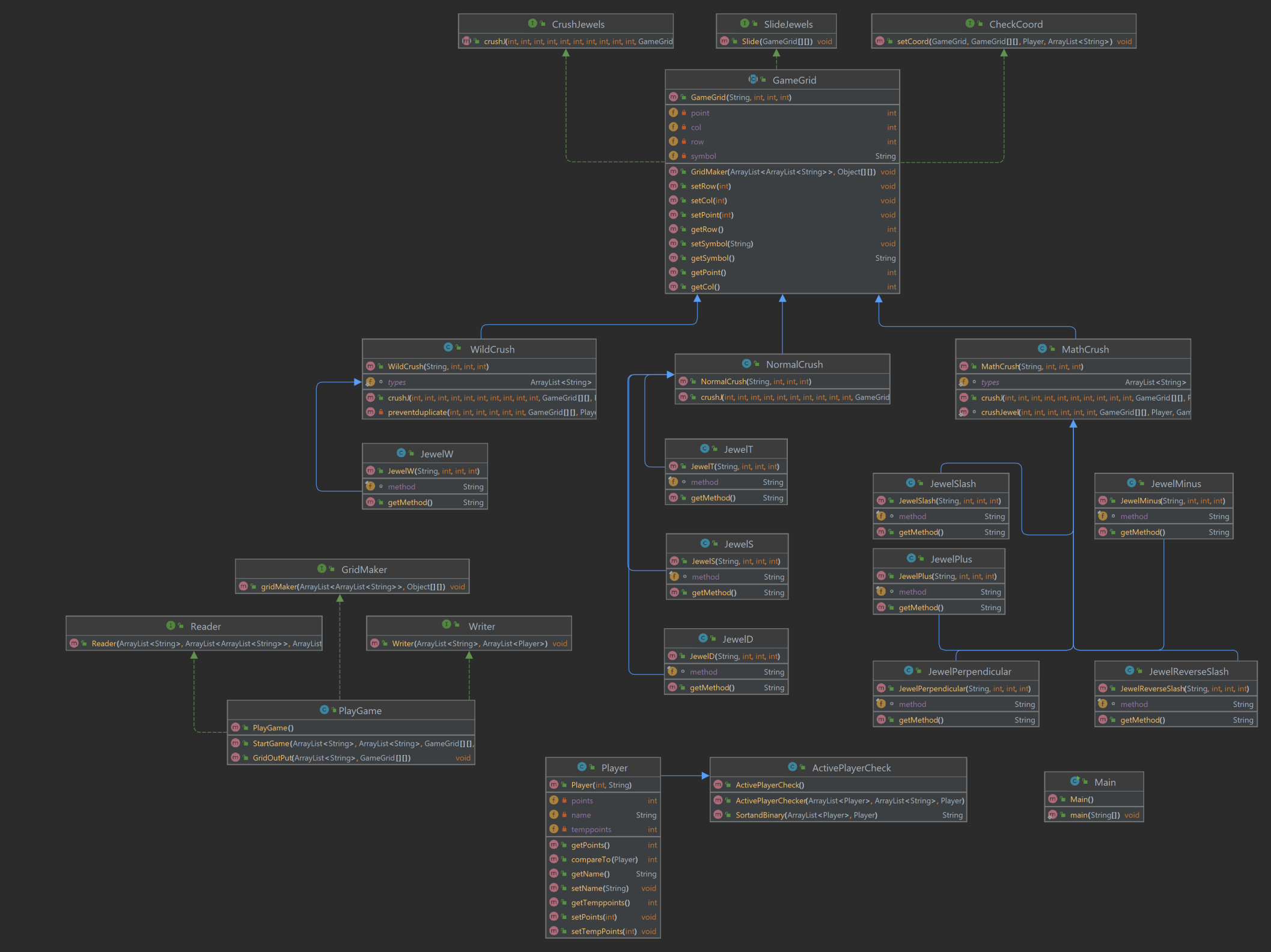
Second crush method has default body and actually crushes jewels based on that coordinates

After that StartGame method calls for Slide method from SlideJewels interfaces and its slides jewel

After that we call gridoutput method in PlayGame class

Lastly we call Sortandbinary methods and StartGame methods ends

Game object calls write method from Writer interface and out code went to an end.


CrushJewels
crushJ(int, int, int, int, int, int, int, int, int, int, GameGrid
SlideJewels
Slide(GameGrid[][]) void
CheckCoord
setCoord(GameGrid, GameGrid[][], Player, ArrayList<String>) void
GameGrid
GameGrid(String, int, int, int)
point int
col int
row int
symbol String
GridMaker(ArrayList<ArrayList<String>>, Object[][]) void
setRow(int) void
setCol(int) void
setPoint(int) void
getRow() int
setSymbol(String) void
getSymbol() String
getPoint() int
getCol() int
WildCrush
WildCrush(String, int, int, int)
types ArrayList<String>
crushJ(int, int, int, int, int, int, int, int, int, int, GameGrid[][],
preventduplicate(int, int, int, int, int, int, GameGrid[][], Play
NormalCrush
NormalCrush(String, int, int, int)
crushJ(int, int, int, int, int, int, int, int, int, int, GameGrid
MathCrush
MathCrush(String, int, int, int)
types ArrayList<String>
crushJ(int, int, int, int, int, int, int, int, int, int, GameGrid[][], P
crushJewel(int, int, int, int, int, int, GameGrid[][], Player, Gam
JewelW
JewelW(String, int, int, int)
method String
getMethod() String
JewelT
JewelT(String, int, int, int)
method String
getMethod() String
JewelSlash
JewelSlash(String, int, int, int)
method String
getMethod() String
JewelMinus
JewelMinus(String, int, int, int)
method String
getMethod() String
JewelS
JewelS(String, int, int, int)
method String
getMethod() String
JewelPlus
JewelPlus(String, int, int, int)
method String
getMethod() String
GridMaker
gridMaker(ArrayList<ArrayList<String>>, Object[][]) void
Reader
Reader(ArrayList<String>, ArrayList<ArrayList<String>>, ArrayList
Writer
Writer(ArrayList<String>, ArrayList<Player>) void
JewelD
JewelD(String, int, int, int)
method String
getMethod() String
JewelPerpendicular
JewelPerpendicular(String, int, int, int)
method String
getMethod() String
JewelReverseSlash
JewelReverseSlash(String, int, int, int)
method String
getMethod() String
PlayGame
PlayGame()
StartGame(ArrayList<String>, ArrayList<String>, GameGrid[][],
GridOutPut(ArrayList<String>, GameGrid[][]) void
Player
Player(int, String)
points int
name String
temppoints int
getPoints() int
compareTo(Player) int
getName() String
setName(String) void
getTemppoints() int
setPoints(int) void
setTempPoints(int) void
ActivePlayerCheck
ActivePlayerCheck()
ActivePlayerChecker(ArrayList<Player>, ArrayList<String>, Player)
SortandBinary(ArrayList<Player>, Player) String
Main
Main()
main(String[]) void