

PieceDead extends PieceNotPickable

Exception

PieceNotPickable extends Exception

PieceNotRolled extends PieceNotPickable

Main

UML

Game

```
+ Board board;  
+ Player[] players;  
+ Boolean Playng;  
  
+ Game(): void  
+ addNewPlayer(String Name): Player  
+ StartGame(): void  
+ FindWhitePlayer(Player[]): Player  
+ SaveGame(): void  
+ LoadGame(): void
```

Player

```
+ String name  
+ Piece[] pieces  
+ Boolean color  
  
+ Player(String name, boolean color): void  
  
+ RollDice(): int[]  
+ PieceToMove(boolean B): Piece  
+ GameMove(Board B): void
```

Board

```
+ Spot[][] board = new Spot[8][8]  
+ UpdateBoard(Piece P): void
```

Spot

```
+ int x;  
+ int y;  
+ Piece P;  
  
+ Spot(int x, int y): void  
+ Spot(int x, int y, Piece P): void  
+ isPieceThere(): boolean
```

<<Interface>>

Interfaces

Moveable

```
+ Abstract: move(int x, int y): void
```

Pieces

Abstract

Piece implements moveable

```
+ boolean color  
+ int xCoord=0  
+ int yCoord=0  
+ boolean isAlive=true;  
+ Piece(boolean color): void
```

Knight extends Piece

```
+ Knight(boolean color): void  
+ move(int newX, int newY): void
```

Queen extends Piece

```
+ Bishop(boolean color): void  
+ move(int newX, int newY): void
```

Rook extends Piece

```
+ Bishop(boolean color): void  
+ move(int newX, int newY): void
```

Bishop extends Piece

```
+ Bishop(boolean color): void  
+ move(int newX, int newY): void
```

King extends Piece

```
+ King(boolean color): void  
+ move(int newX, int newY): void
```

Pawn extends Piece

```
+ Bishop(boolean color): void  
+ move(int newX, int newY): void
```