

```
1 package engine.pieces;
2
3 import chess.PieceType;
4 import chess.PlayerColor;
5 import engine.movements.Movements;
6 import engine.movements.Step;
7 import engine.utils.BoardDimensions;
8 import engine.utils.Coordinates;
9
10 public class Queen extends Piece {
11     public Queen(PlayerColor color) {
12         super(PieceType.QUEEN, color, new Movements(new Step[] {
13             //Horizontal
14             new Step(new Coordinates(1, 0),
15                 BoardDimensions.WIDTH.getValue(),
16                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
17             new Step(new Coordinates(-1, 0),
18                 BoardDimensions.WIDTH.getValue(),
19                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
20
21             //Vertical
22             new Step(new Coordinates(0, 1),
23                 BoardDimensions.HEIGHT.getValue(),
24                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
25             new Step(new Coordinates(0, -1),
26                 BoardDimensions.HEIGHT.getValue(),
27                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
28
29             //Diagonal
30             new Step(new Coordinates(1, 1),
31                 BoardDimensions.DIAGONAL.getValue(),
32                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
33             new Step(new Coordinates(1, -1),
34                 BoardDimensions.DIAGONAL.getValue(),
35                 color == PlayerColor.BLACK, color == PlayerColor.BLACK),
```

```
36         new Step(new Coordinates(-1, 1),
37                   BoardDimensions.DIAGONAL.getValue(),
38                   color == PlayerColor.BLACK, color == PlayerColor.BLACK),
39         new Step(new Coordinates(-1, -1),
40                   BoardDimensions.DIAGONAL.getValue(),
41                   color == PlayerColor.BLACK, color == PlayerColor.BLACK),
42         }));
43     }
44 }
```