

```
public class Board

private final Road[] roads;
private final Knight[] knights;
private final Settlement[] settlements;
private final City[] cities;
private int round;
private int[] scoresRecorder;

public Board(Road[] roads, Knight[] knights, Settlement[] settlements, City[] cities){

public boolean tryToBuild(BuildableStructures whatWeWantToBuild, Resources[] resourcesWeHave){

public void build(BuildableStructures whatWeWantToBuild) {}

public boolean whetherShouldFinish(){

public int calculateFinalScores(){

public Resources[] firstRoll(){

public Resources[] rollAgain(int[] positionOfResourcesWantToReplace() public Resources[] tradeByGold(Resources resourceWanted){

public Resources[] tradeWithKnight(Knight knight, Resources resourcePaid){}
```

```
public class BuildableStructures

protected int x;
protected int scores;
protected boolean whetherHaveBuilt=false;
protected Resources[] demandOfResources;

public int getX(){

public int getScores(){

public boolean isWhetherBuild(){

public void setWhetherBuild(boolean whetherBuild){

public Resources[] getDemandOfResources(){}
```

```
public class Road extends BuildableStructures

private int y;

public Road(int x, int y, int scores, Resources[] demandOfResources){

public int getY(){}
```

```
public class Knight extends BuildableStructures

private boolean whetherHaveSwapped=false;

public Knight(int x, int scores, Resources[] demandOfResources){

public boolean isWhetherHaveSwapped(){

public void setWhetherHaveSwapped(boolean whetherHaveSwapped){}
```

```
public class Settlement extends BuildableStructures

public Settlement(int x, int scores, Resources[] demandOfResources){}
```

```
public class City extends BuildableStructures

public City(int x, int scores, Resources[] demandOfResources){}
```

```
Public enum Resources

Grain
Wool
Timber
Brick
Gold
Ore
```