COMP20020 HINTS 2016/2017
Chris Bleakley

Game data and a board image are available from: http://monopoly.wikia.com/wiki/Monopoly

Here are some constants from that source. Note, you can use your own if you prefer.

```java
        public static final int NUM_SQUARES = 40;

        public static final int TYPE_GO = 0;
        public static final int TYPE_SITE = 1;
        public static final int TYPE_STATION = 2;
        public static final int TYPE_UTILITY = 3;
        public static final int TYPE_COMMUNITY = 4;
        public static final int TYPE_CHANCE = 5;
        public static final int TYPE_JAIL = 6;
        public static final int TYPE_PARKING = 7;
        public static final int TYPE_GOTO_JAIL = 8;
        public static final int TYPE_TAX = 9;

        private static final int[] SQUARE_TYPES = {
                TYPE_GO, TYPE_SITE, TYPE_COMMUNITY, TYPE_SITE, TYPE_TAX, TYPE_STATION,
TYPE_SITE, TYPE_CHANCE, TYPE_SITE, TYPE_SITE,
                TYPE_JAIL, TYPE_SITE, TYPE_UTILITY, TYPE_SITE, TYPE_SITE, TYPE_STATION,
TYPE_SITE, TYPE_COMMUNITY, TYPE_SITE, TYPE_SITE,
                TYPE_PARKING, TYPE_SITE, TYPE_CHANCE, TYPE_SITE, TYPE_SITE,
TYPE_STATION, TYPE_SITE, TYPE_SITE, TYPE_UTILITY, TYPE_SITE,
                TYPE_GOTO_JAIL, TYPE_SITE, TYPE_SITE, TYPE_COMMUNITY, TYPE_SITE,
TYPE_STATION, TYPE_CHANCE, TYPE_SITE, TYPE_TAX, TYPE_SITE};

        private static final String GO_NAME = "GO";
        private static final String[] SITE_NAMES = {
                "Old Kent Rd","Whitechapel Rd","The Angel Islington","Euston
Rd","Pentonville Rd",
                "Pall Mall","Whitehall","Northumberland Ave","Bow St","Marlborough
St","Vine St",
                "Strand","Fleet St","Trafalgar Sq","Leicester Sq","Coventry
St","Piccadilly",
                "Regent St","Oxford St","Bond St","Park Lane","Mayfair"};
        private static final String[] SITE_SHORT_NAMES = {
                "kent","whitechapel","angel","euston","pentonville",
                "mall","whitehall","northumberland","bow","marlborough","vine",
                "strand","fleet","trafalgar","leicester","coventry","piccadilly",
                "regent","oxford","bond","ark","mayfair"};
        private static final int[] SITE_PRICES = {
                60,60,100,100,120,
                140,140,160,180,180,200,
                220,220,240,260,260,280,
                300,300,320,350,400};
        private static final int[][] SITE_RENTS = {

        {2,10,30,90,160,250},{4,20,60,180,320,450},{6,30,90,270,400,550},{6,30,90,270,
400,550},{8,40,100,300,450,600},

        {10,50,150,450,625,750},{10,50,150,450,625,750},{12,60,180,500,700,900},{14,70
,200,550,750,950},{25,50,100,200,200,200},{14,70,200,550,750,950},{16,80,220,600,800,1
000},

        {18,90,250,700,875,1050},{4,10,0,0,0,0},{18,90,250,700,875,1050},{25,50,100,20
0,200,200},{20,100,300,750,925,1100},{25,50,100,200,200,200},{22,110,330,800,975,1150}
,{22,110,330,800,975,1150},{22,120,360,850,1025,1200},

        {26,130,390,900,1100,1275},{26,130,390,900,1100,1275},{28,150,450,1000,1200,14
00},{25,50,100,200,200,200},{35,175,500,1100,1300,1500}};
        private static final int[] HOUSE_PRICE = {
                50,50,50,50,50,
                100,100,100,100,100,100,
                150,50,150,150,150,150,150,
                200,200,200,200,200};
        private static final int[] SITE_MORTGAGE_VALUE = {
                50,50,50,50,60,
                70,70,80,90,90,100,
                110,110,120,150,150,150,
                200,200,200,175,200};
```

```java
        private static final String[] STATION_NAMES = {
                "King's Cross Station",
                "Marylebone Station",
                "Fenchurch St Station",
                "Liverpool St Station"};
        private static final String[] STATION_SHORT_NAMES =
{"kings","marylebone","fenchurch","liverpool"};
        private static final int STATION_PRICE = 200;
        private static final int[] STATION_RENTS = {25,50,100,200,200,200};
        private static final int STATION_MORTGAGE_VALUE = 100;

        private static final String[] UTILITY_NAMES = {"Electric Co","Water Works"};
        private static final String[] UTILITY_SHORT_NAMES = {"electric","water"};
        private static final int UTILITY_PRICE = 150;
        private static final int[] UTILITY_RENTS = {4,10};
        private static final int UTILITY_MORTGAGE_VALUE = 75;

        private static final String COMMUNITY_NAME = "Community Chest";
        private static final String CHANCE_NAME = "Chance";
        private static final String JAIL_NAME = "Jail (Just Visiting)";
        private static final String PARKING_NAME = "Free Parking";
        private static final String GOTO_JAIL_NAME = "Go To Jail";
        private static final String[] TAX_NAMES = {"Income Tax", "Super Tax"};
        private static final int[] TAX_AMOUNTS = {200,100};

        private static final int COL_BROWN = 0;
        private static final int COL_LIGHT_BLUE = 1;
        private static final int COL_PINK = 2;
        private static final int COL_ORANGE = 3;
        private static final int COL_RED = 4;
        private static final int COL_YELLOW = 5;
        private static final int COL_GREEN = 6;
        private static final int COL_DARK_BLUE = 7;
        private static final int[] SITE_COLOURS = {
                COL_BROWN, COL_BROWN, COL_LIGHT_BLUE, COL_LIGHT_BLUE, COL_LIGHT_BLUE,
                COL_PINK, COL_PINK, COL_PINK, COL_ORANGE, COL_ORANGE, COL_ORANGE,
                COL_RED, COL_RED, COL_RED, COL_YELLOW, COL_YELLOW, COL_YELLOW,
                COL_GREEN, COL_GREEN, COL_GREEN, COL_DARK_BLUE, COL_DARK_BLUE};
        private static final String[] COLOUR_GROUP_NAME = {"brown","light
blue","pink","orange","red","yellow","green","dark blue"};
        private static final int[] NUM_IN_GROUP = {2,3,3,3,3,3,3,2};
```