

Package board

Class Summary

[Brewery](#)

Class Brewery extends Ownable

[Chance](#)

Class Chance extends Squar

[Jail](#)

Class Jail extends Square

[Ownable](#)

Abstract class Ownable, extended from Square.

[Parking](#)

Class Parking extends Square

[Shipping](#)

Class Shipping extends Ownable

[Square](#)

Abstract class Square, superclass to all Squares.

[Start](#)

Class Start extends Square

[Street](#)

Class Street extends Ownable

[Tax](#)

board

Class Brewery

```
java.lang.Object
|
+-- Square
|   |
|   +-- Ownable
|       |
|       +-- board.Brewery
```

< [Constructors](#) > < [Methods](#) >

```
public class Brewery
extends Ownable
```

Class Brewery extends Ownable

Constructors

Brewery

```
public Brewery(java.lang.String name,
               int id,
               Cup gameCup)
```

Constructor

Parameters:

name - of this instance
 id - [1:40]
 gameCup - of the game

Methods

getRent

```
public int getRent()
```

Overrides:

[getRent](#) in class [Ownable](#)

board

Class Chance

```
java.lang.Object
|
+--Square
    |
    +--board.Chance
```

< [Constructors](#) > < [Methods](#) >

```
public class Chance
extends Square
```

Class Chance extends Squar

Constructors

Chance

```
public Chance(java.lang.String name,
              int id,
              AllCards allTheCards)
```

Constructor

Parameters:

name - of this instance

id - [1:40]

allTheCards - of the game

Methods

landOnSquare

```
public void landOnSquare(Player player)
```

Overrides:

[landOnSquare](#) in class [Square](#)

board

Class Jail

```
java.lang.Object
|
+--Square
    |
    +--board.Jail
```

< [Constructors](#) > < [Methods](#) >

```
public class Jail
extends Square
```

Class Jail extends Square

Constructors

Jail

```
public Jail(java.lang.String name,  
            int id)
```

Constructor

Parameters:

name - of this instance
id - [1:40]

Methods

landOnSquare

```
public void landOnSquare(Player player)
```

Overrides:

[landOnSquare](#) in class [Square](#)

board

Class Ownable

```
java.lang.Object  
|  
+--Square  
    |  
    +--board.Ownable
```

Direct Known Subclasses:

[Brewery](#), [Shipping](#), [Street](#)

< [Constructors](#) > < [Methods](#) >

```
public abstract class Ownable  
extends Square
```

Abstract class Ownable, extended from Square. Superclass to all ownable subclasses of Square.

Constructors

Ownable

```
public Ownable(java.lang.String name,  
               int id,  
               int price,  
               int pawn,  
               char type)
```

Constructor

Parameters:

name - of this instance
id - [1:40]
price - of this instance
pawn - price
type - [A:J]

Methods

clearOwner

```
public void clearOwner()
```

Sets owner to null.

getOwner

```
public Player getOwner()
```

Test method for getting the owner

Returns:

Owner of the square of the type Player

getPawn

```
public int getPawn()
```

Returns:

pawn amount.

getPrice

```
public int getPrice()
```

Returns:

price of this instance

getPropertyPawnStatus

```
public boolean getPropertyPawnStatus()
```

Returns:

boolean value of the pawn status.

getRent

```
public abstract int getRent()
```

Method for getting the rent of the instance this method is called upon.

Returns:

rent

getType

```
public char getType()
```

Returns:

the type of this instance.

landOnSquare

```
public void landOnSquare(Player player)
```

Overrides:

[landOnSquare](#) in class [Square](#)

liftPawn

```
public void liftPawn()
```

Sets pawn status to false and withdraws an amount to the owners Account.

pawnProperty

```
public void pawnProperty()
```

Sets pawn status to true and deposits the pawn price to the owners Account.

setOwner

```
public void setOwner(Player player)
```

Test method for setting the owner

Parameters:

player -

board

Class Parking

```
java.lang.Object
|
+-- Square
    |
    +-- board.Parking
```

< [Constructors](#) > < [Methods](#) >

```
public class Parking
extends Square
```

Class Parking extends Square

Constructors

Parking

```
public Parking(java.lang.String name,
               int id)
```

Constructor

Parameters:

name - of this instance

id - [1:40]

Methods

landOnSquare

```
public void landOnSquare(Player player)
```

When landing on a Parking square, a message is printed.

Parameters:

player - who landed on this square

Overrides:

[landOnSquare](#) in class [Square](#)

board

Class Shipping

```
java.lang.Object
|
+--Square
    |
    +--Ownable
        |
        +--board.Shipping
```

< [Constructors](#) > < [Methods](#) >

```
public class Shipping
extends Ownable
```

Class Shipping extends Ownable

Constructors

Shipping

```
public Shipping(java.lang.String name,  
                int id)
```

Constructor

Parameters:

name - of this instance

id - [1:40]

Methods

getRent

```
public int getRent()
```

Overrides:

[getRent](#) in class [Ownable](#)

board

Class Square

```
java.lang.Object  
|  
+--board.Square
```

Direct Known Subclasses:

[Chance](#), [Jail](#), [Ownable](#), [Parking](#), [Start](#), [Tax](#)

< [Constructors](#) > < [Methods](#) >

```
public abstract class Square  
extends java.lang.Object
```

Abstract class Square, superclass to all Squares.

Constructors

Square

```
public Square(java.lang.String name,  
              int id)
```

Constructor

Parameters:

name - of this instance
id - [1:40]

Methods

getID

```
public int getID()
```

Returns the id (int) of this instance.

Returns:

id [1:40]

landOnSquare

```
public abstract void landOnSquare(Player player)
```

Method which determines what happens to a player when he lands on this instance.

Parameters:

player - landed

toString

```
public java.lang.String toString()
```

Returns the name of this instance

Returns:

name

Overrides:

toString in class java.lang.Object

board

Class Start

```
java.lang.Object
|
+-- Square
    |
    +-- board.Start
```

< [Constructors](#) > < [Methods](#) >

```
public class Start
extends Square
```

Class Start extends Square

Constructors

Start

```
public Start(java.lang.String name,
            int id)
```

Constructor

Parameters:

name - of this instance
id - [1:40]

Methods

landOnSquare

```
public void landOnSquare(Player player)
```

Overrides:

[landOnSquare](#) in class [Square](#)

board

Class Street

```

java.lang.Object
|
+--Square
    |
    +--Ownable
        |
        +--board.Street
  
```

< [Constructors](#) > < [Methods](#) >

public class **Street**
 extends [Ownable](#)

Class Street extends Ownable

Constructors

Street

```

public Street(java.lang.String name,
              int id,
              int price,
              int pawn,
              int priceOfBuilding,
              int rent0,
              int rent1,
              int rent2,
              int rent3,
              int rent4,
              int rentHotel,
              char type)
  
```

Constructor

Parameters:

name - of this instance
 id - [1:40]
 price - of this instance
 pawn - price
 priceOfBuilding - price of a building
 rent0 - base
 rent1 - house1
 rent2 - house2
 rent3 - house3
 rent4 - house4
 rentHotel - hotel
 type - [A:H]

Methods

buyBuildings

```
public void buyBuildings(int amount)
```

Method for buying an amount buildings on a Street

Parameters:

amount - of buildings

getNumberOfBuildings

```
public int getNumberOfBuildings()
```

Returns:

Number of buildings of this instance

getPriceOfBuilding

```
public int getPriceOfBuilding()
```

Returns:

The cost of building a building

getRent

```
public int getRent()
```

Overrides:

[getRent](#) in class [Ownable](#)

removeBuildings

```
public void removeBuildings(int amount)
```

Method for removing an amount of buildings on this instance.

Parameters:

amount - to be removed

setBuilding

```
public void setBuilding(int amount)
```

Test method for setting a number of buildings on the street

Parameters:

amount -

board

Class Tax

```
java.lang.Object
|
+--Square
    |
    +--board.Tax
```

< [Constructors](#) > < [Methods](#) >

```
public class Tax
extends Square
```

Constructors

Tax

```
public Tax(java.lang.String name,
          int id,
          int taxAmount)
```

Constructor

Parameters:

name - of this instance

id - [1:40]

taxAmount - to be withdrawn if chosen.

Methods

getTaxAmount

```
public int getTaxAmount()
```

Method for getting taxAmount.

Returns:

taxAmount

landOnSquare

```
public void landOnSquare(Player player)
```

Overrides:

[landOnSquare](#) in class [Square](#)

taxPercent

```
public void taxPercent(Player player)
```

Package cards

Class Summary

Card

Abstract class Card, superclass to all Cards.

ChangePosition

Class ChangePosition extends Move

Expense

Class Expense extends Transaction

GoToJail

Class GoToJail extends Move

Grant

Class Grant extends Transaction

IncomeIncrease

Class IncomeIncrease extends Transaction

Move

Abstract class for Card subclasses which changes the position of the player.

MoveToShip

Class for cards which moves a player to nearest Shipping square

MoveToSquare

Class for moving a Player to a specific Square

Pardon

Class which awards the Player with a 'get out of jail for free card'.

PlayerTransaction

PriceIncrease

Class for card which charges the Player with a fee for houses and hotels.

Transaction

abstract. amount

cards

Class Card

```
java.lang.Object
|
+--cards.Card
```

Direct Known Subclasses:[Move](#), [MoveToShip](#), [Pardon](#), [Transaction](#)

[< Constructors >](#) [< Methods >](#)

```
public abstract class Card
extends java.lang.Object
```

Abstract class Card, superclass to all Cards.

Constructors

Card

```
public Card(java.lang.String description)
```

Super constructor which takes a String name as a parameter.

Parameters:

description - of the card

Methods

toString

```
public java.lang.String toString()
```

Returns the name of the Card

Returns:

description

Overrides:

toString in class java.lang.Object

useCard

```
public abstract void useCard(Player player)
```

Method which determines what happens to a player when the specific card is picked.

Parameters:

player - to use the card

cards

Class ChangePosition

```
java.lang.Object
|
+--Card
    |
    +--Move
        |
        +--cards.ChangePosition
```

< [Constructors](#) > < [Methods](#) >

```
public class ChangePosition
extends Move
```

Class ChangePosition extends Move

Constructors

ChangePosition

```
public ChangePosition(java.lang.String description,
                      int moveTo,
                      Board board)
```

Constructor

Parameters:

description - of the card.

moveTo - the position the player shall be moved by.

board - of the game

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class Expense

```
java.lang.Object
|
+--Card
    |
    +--Transaction
        |
        +--cards.Expense
```

< [Constructors](#) > < [Methods](#) >

```
public class Expense
extends Transaction
```

Class Expense extends Transaction

Constructors

Expense

```
public Expense(java.lang.String description,
               int money)
```

Constructor which accepts two parameters name and withdrawal for this specific instance.

Parameters:

description - of the card
money - to be withdrawn

Methods

payMoney

```
public int payMoney()
```

Method for retrieving the withdrawal amount.

Returns:

reward

useCard

```
public void useCard(Player player)
```

Player pays the expense, and balance is updated.

Parameters:

player - to use the card

Overrides:

[useCard](#) in class [Card](#)

cards

Class GoToJail

```
java.lang.Object
|
+--Card
|
|   +--Move
|       |
|       +--cards.GoToJail
```

< [Constructors](#) > < [Methods](#) >

```
public class GoToJail
extends Move
```

Class GoToJail extends Move

Constructors

GoToJail

```
public GoToJail(java.lang.String description)
```

Constructor for GoToJail card.

Parameters:

description - of the card

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class Grant

```
java.lang.Object
|
+--Card
    |
    +--Transaction
        |
        +--cards.Grant
```

< [Constructors](#) > < [Methods](#) >

```
public class Grant
extends Transaction
```

Class Grant extends Transaction

Constructors

Grant

```
public Grant(java.lang.String description,
             int money)
```

Constructor for Grant card

Parameters:

description - of the card.
money - to be granted

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class IncomeIncrease

```
java.lang.Object
|
+--Card
    |
    +--Transaction
        |
        +--cards.IncomeIncrease
```

< [Constructors](#) > < [Methods](#) >

```
public class IncomeIncrease
extends Transaction
```

Class IncomeIncrease extends Transaction

Constructors

IncomeIncrease

```
public IncomeIncrease(java.lang.String description,
                      int amount)
```

Constructor

Parameters:

description - of the card
amount - to be rewarded.

Methods

getMoney

```
public int getMoney()
```

Returns:

pay amount

useCard

```
public void useCard(Player player)
```

Player receives award, and balance is updated.

Parameters:

player - to use the card

Overrides:

[useCard](#) in class [Card](#)

cards

Class Move

```
java.lang.Object
|
+--Card
    |
    +--cards.Move
```

Direct Known Subclasses:

[ChangePosition](#), [GoToJail](#), [MoveToSquare](#)

< [Constructors](#) >

```
public abstract class Move
```

extends [Card](#)

Abstract class for Card subclasses which changes the position of the player.

Constructors

Move

```
public Move(java.lang.String description,
            int moveTo)
```

Constructor

Parameters:

description - of the cards
moveTo - a number

cards

Class MoveToShip

```
java.lang.Object
|
+--Card
    |
    +--cards.MoveToShip
```

< [Constructors](#) > < [Methods](#) >

```
public class MoveToShip
extends Card
```

Class for cards which moves a player to nearest Shipping square

Constructors

MoveToShip

```
public MoveToShip(java.lang.String description,
                  Board board)
```

Constructor for MoveToShip card

Parameters:

description - oif the card
board - of the game

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class MoveToSquare

```
java.lang.Object
|
+--Card
|   |
|   +--Move
|       |
|       +--cards.MoveToSquare
```

< [Constructors](#) > < [Methods](#) >

```
public class MoveToSquare
extends Move
```

Class for moving a Player to a specific Square

Constructors

MoveToSquare

```
public MoveToSquare(java.lang.String description,
                    int moveTo,
                    Board board)
```

Constructor for MoveToSquare

Parameters:

description - of the card

moveTo - the square ID the player should move to

board - in the game

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class Pardon

```
java.lang.Object
|
+--Card
    |
    +--cards.Pardon
```

< [Constructors](#) > < [Methods](#) >

```
public class Pardon
extends Card
```

Class which awards the Player with a 'get out of jail for free card'.

Constructors

Pardon

```
public Pardon(java.lang.String description)
```

Constructor for PrisonBreak card

Parameters:

description - of the card

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class PlayerTransaction

```
java.lang.Object
|
+--Card
|   |
|   +--Transaction
|       |
|       +--cards.PlayerTransaction
```

< [Constructors](#) > < [Methods](#) >

```
public class PlayerTransaction
extends Transaction
```

Constructors

PlayerTransaction

```
public PlayerTransaction(java.lang.String description,
                          int money,
                          java.util.ArrayList playerList)
```

Constructor for MobilePay Card

Parameters:

description - of the card
money - to be payed
playerList - a list of the players

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class PriceIncrease

```
java.lang.Object
|
+--Card
|   |
|   +--Transaction
|       |
|       +--cards.PriceIncrease
```

< [Constructors](#) > < [Methods](#) >

```
public class PriceIncrease
extends Transaction
```

Class for card which charges the Player with a fee for houses and hotels.

Constructors

PriceIncrease

```
public PriceIncrease(java.lang.String description,
                    int houseTax,
                    int hotelTax)
```

Constructor for a PriceIncrease card

Parameters:

description - of the card
houseTax - increase
hotelTax - increase

Methods

useCard

```
public void useCard(Player player)
```

Overrides:

[useCard](#) in class [Card](#)

cards

Class Transaction

```
java.lang.Object
|
+--Card
    |
    +--cards.Transaction
```

Direct Known Subclasses:[Expense](#), [Grant](#), [IncomeIncrease](#), [PlayerTransaction](#), [PriceIncrease](#)< [Constructors](#) >

```
public abstract class Transaction
extends Card
```

```
abstract. amount
```

Constructors

Transaction

```
public Transaction(java.lang.String description,
                   int money)
```

Constructor for a Transaction card

Parameters:

description - of the card
money - to be transferred

Package controller

Class Summary

[GUIControl](#)

Controller class which handles all contact with the GUI.

[GameLogic](#)

[StartGame](#)

[msgL](#)

controller

Class GUIControl

```
java.lang.Object
|
+--controller.GUIControl
```

< [Constructors](#) > < [Methods](#) >

```
public class GUIControl
extends java.lang.Object
```

Controller class which handles all contact with the GUI.

Constructors

GUIControl

```
public GUIControl()
```

Methods

changeLanguage

```
public java.lang.String changeLanguage()
```

Method for choosing language of the messages.

Returns:

language chosen

createPlayer

```
public void createPlayer(Player newPlayer)
```

Creates a player on the board.

Parameters:

newPlayer - to enter

displayChanceCard

```
public static void displayChanceCard(java.lang.String txt)
```

Displays a text in the chanceCard field in the middle.

Parameters:

txt - of the chance card

endGUI

```
public void endGUI()
```

Closes the GUI.

getBuyChoice

```
public static boolean getBuyChoice(Ownable field,  
                                     Player player)
```

Player choice of buying the square he landed on.

Parameters:

field - the player landed on
player - in question

Returns:

boolean

getTaxChoice

```
public static boolean getTaxChoice(java.lang.String name,  
                                     Player player)
```

Player chooses which way he wants to pay taxes.

Parameters:

name - of the Tax field.
player - to get choice

Returns:

boolean

getUserInputTurn

```
public java.lang.String getUserInputTurn(Player thePlayer,  
                                           java.lang.String[] choices)
```

Parameters:

thePlayer - in question
choices - in String[]

Returns:

input

make2Buttons

```
public static java.lang.String make2Buttons(java.lang.String message,  
                                              java.lang.String button1,  
                                              java.lang.String button2)
```

Makes two buttons and returns a string representation of what was pressed.

Parameters:

message - to be printed
button1 - text
button2 - text

Returns:

button pressed

make3Buttons

```
public static java.lang.String make3Buttons(java.lang.String message,  
                                             java.lang.String button1,  
                                             java.lang.String button2,  
                                             java.lang.String button3)
```

Makes three buttons and returns a string representation of what was pressed.

Parameters:

message - to be printed
button1 - text
button2 - text
button3 - text

Returns:

button pressed

makeBoard

```
public void makeBoard()
```

Makes the visual board.

makeLists

```
public static java.lang.String makeLists(java.lang.String message,  
                                           java.lang.String[] options)
```

Makes a list for the player to choose from.

Parameters:

message - to be printed
options - to choose from

Returns:

selection String

moveVehicle

```
public static void moveVehicle(Player thePlayer)
```

Moves vehicle on the board

Parameters:

thePlayer - type: Player

numberOfPlayers

```
public java.lang.String[] numberOfPlayers()
```

Getting a string array with the names of the players.

Returns:

playerNames String[]

printMessage

```
public static void printMessage(java.lang.String message)
```

Prints message in GUI

Parameters:

message - type: String

removeBuilding

```
public void removeBuilding(int position,  
                           int numberOfBuildings)
```

Removes a number of houses from a street.

Parameters:

position - of the Street
numberOfBuildings - to be removed

removePlayer

```
public void removePlayer(Player thePlayer)
```

Removing player from playing board when player surrenders or loses.

Parameters:

thePlayer - to be removed

setBuilding

```
public void setBuilding(int position,  
                        int numberOfBuildings)
```

Sets a number of buildings on the specified square.

Parameters:

position - of the Street
numberOfBuildings - to be set

setOwned

```
public static void setOwned(int squareNumber,  
                             Player thePlayer)
```

Marks a square as owned buy a player.

Parameters:

squareNumber - of the Ownable
thePlayer - to own

showDice

```
public void showDice(Cup newCup)
```

Visual representation of the dices.

Parameters:

newCup - reference

showWinner

```
public void showWinner(Player winner)
```

Shows the winner in the GUI

Parameters:

winner - to be announced

updateBalance

```
public static void updateBalance(Player player)
```

Updates the balance of the player in the GUI

Parameters:

player - in question

controller

Class GameLogic

```
java.lang.Object
|
+--controller.GameLogic
```

< [Fields](#) > < [Constructors](#) >

```
public class GameLogic
extends java.lang.Object
```

Fields

thePlayers

```
public java.util.ArrayList thePlayers
```

Constructors

GameLogic

```
public GameLogic()
    GameLogic controls the gameflow
```

controller

Class StartGame

```
java.lang.Object
|
+--controller.StartGame
```

< [Constructors](#) > < [Methods](#) >

```
public class StartGame
extends java.lang.Object
```

Constructors

StartGame

```
public StartGame()
```

Methods

main

```
public static void main(java.lang.String[] args)
```

controller

Class msgL

```
java.lang.Object
|
+--controller.msgL
```

< [Constructors](#) > < [Methods](#) >

```
public class msgL
extends java.lang.Object
```

Constructors

msgL

```
public msgL()
```

Methods

changeLanguage

```
public static void changeLanguage(java.lang.String language)
```

Changes the language of the strings msg() returns

Parameters:

language - chosen

msg

```
public static java.lang.String msg(int index)
```

Getter for the String arrays with messages.

Parameters:

index - of message

Returns:

string

Package entities

Class Summary

[Account](#)

Class for creating an Account, which keeps track of a players balance.

[AllCards](#)

Class for holding all Cards

[Assets](#)

Class which keeps track of a Player's assets (Squares, buildings and jailCards).

[Board](#)

Keeps track of all the squares, in an array

[Cup](#)

Class Cup, for operating two Die at once.

[Dice](#)

Class Dice, for getting random value between 1 and 6.

[Player](#)

[Vehicle](#)

Class which keeps track of the player's position on the board and creates a piece that the player moves with

entities

Class Account

```
java.lang.Object
|
+--entities.Account
```

< [Constructors](#) > < [Methods](#) >

```
public class Account
extends java.lang.Object
```

Class for creating an Account, which keeps track of a players balance.

Constructors

Account

```
public Account()
```

Constructor the initializes the player's account with a balance of 0

Methods

deposit

```
public void deposit(int value)
```

Method for depositing money into a player's account

Parameters:

value - of money

getBalance

```
public int getBalance()
```

Method for checking the amount on a player's account balance

Returns:

The amount of money on an account, of the type integer

withdraw

```
public void withdraw(int value)
```

Method for withdrawing money from a player's account

Parameters:

value - of money

entities

Class AllCards

```
java.lang.Object
|
+--entities.AllCards
```

< [Constructors](#) > < [Methods](#) >

```
public class AllCards
```


extends java.lang.Object

Class for holding all Cards

Constructors

AllCards

```
public AllCards(java.util.ArrayList thePlayers,  
                Board theBoard)
```

Creating an AllCards instance

Parameters:

thePlayers - of the game
theBoard - of the game

Methods

getCard

```
public Card getCard(int index)
```

Method which takes an int as a parameter and returns that index from the 'theCards' array of this instance

Parameters:

index - [0:43]

Returns:

Card

shuffle

```
public void shuffle()
```

Shuffles the cards

entities

Class Assets

```
java.lang.Object  
|  
+--entities.Assets
```

```
public class Assets
extends java.lang.Object
```

Class which keeps track of a Player's assets (Squares, buildings and jailCards).

Constructors

Assets

```
public Assets(Player player)
```

Constructor for Assets

Parameters:

player - owner of this asset

Methods

buyBuildings

```
public void buyBuildings(Street street,
                        int amount)
```

Method for buying an amount of buildings on a specific Street.

Parameters:

street - in question
amount - of buildings

buySquare

```
public void buySquare(Ownable square)
```

Method for adding a bought square to list of squares a player owns

Parameters:

square - bought

getBuildStatus

```
public boolean getBuildStatus()
```

Method for returning a boolean value of whether the player can build a house.

Returns:

boolean

getBuildableList

```
public java.lang.String[] getBuildableList()
```

Method for getting a String array of streets which there can be built buildings on.

Returns:

String[]

getBuilding

```
public boolean getBuilding()
```

Method for returning a boolean value of whether the player owns a building.

Returns:

boolean hasBuilding

getHotelList

```
public java.lang.String[] getHotelList()
```

Method for getting an array of the names of properties with hotels built on them

Returns:

String[]

getHouseList

```
public java.lang.String[] getHouseList()
```

Method for getting an array of the names of properties with houses built on them

Returns:

String[]

getJailCard

```
public boolean getJailCard()
```

Method for checking if the player has a get out of jail free card

Returns:

Boolean value true or false depending on whether or not the player has a card

getOwned

```
public java.util.ArrayList getOwned()
```

Method for getting an ArrayList of owned squares

Returns:

ArrayList of Ownables

getOwnedID

```
public int[] getOwnedID()
```

Method for determining the square IDs of the squares a player owns

Returns:

An integer array with the square IDs

getOwnedStreet

```
public java.util.ArrayList getOwnedStreet()
```

Returns:

ArrayList Street of the owned streets.

getPawnStatus

```
public boolean getPawnStatus()
```

Returns:

pawnstatus

getPawnable

```
public java.lang.String[] getPawnable()
```

Returns:

list of pawnable squares.

getPawned

```
public java.lang.String[] getPawned()
```

Returns:

list of the pawned squares.

getProperty

```
public boolean getProperty()
```

Method for returning a boolean value of whether the player owns a a property.

Returns:

boolean hasProperty

getPropertyList

```
public java.util.ArrayList getPropertyList()
```

Returns:

property String ArrayList

getSellableList

```
public java.lang.String[] getSellableList()
```

Returns:

list of sellable squares.

hasPawned

```
public boolean hasPawned()
```

Returns:

boolean value of whether Assets contain a pawned square.

liftPawn

```
public void liftPawn(Ownable ownable)
```

Unpawns a square.

Parameters:

ownable - in question

pawnProperty

```
public void pawnProperty(Ownable ownable)
```

Sets the pawnstatus to true of this square

Parameters:

ownable - in question

removeBuildings

```
public void removeBuildings(Street street,  
                             int amount)
```

Method for removing an amount of houses from a specific Street.

Parameters:

street - in question
amount - of buildings

setJailCard

```
public void setJailCard()
```

Method for adding a get out of jail free card to the player

useJailCard

```
public void useJailCard()
```

Method for removing a get out of jail free card after it is used by the player

entities

Class Board

```
java.lang.Object
|
+--entities.Board
```

< [Constructors](#) > < [Methods](#) >

```
public class Board
extends java.lang.Object
```

Keeps track of all the squares, in an array

Constructors

Board

```
public Board(Cup theCup,
             java.util.ArrayList thePlayers,
             boolean testMode)
```

Constructor for a Board

Parameters:

theCup - of the game
thePlayers - of the game
testMode - value of test mode

Methods

getSquare

```
public Square getSquare(int index)
```

Method for returning a square from the array in this instance.

Parameters:

index - message

Returns:

Square

entities

Class Cup

```
java.lang.Object
|
+--entities.Cup
```

< [Constructors](#) > < [Methods](#) >

```
public class Cup
extends java.lang.Object
```

Class Cup, for operating two Die at once.

Constructors

Cup

```
public Cup()
```

Methods

getD1

```
public int getD1()
```

Method for getting the value of dice 1.

Returns:

value of dice 1.

getD2

```
public int getD2()
```

Method for getting the value of dice 2.

Returns:

value of dice 2.

getEquals

```
public boolean getEquals()
```

Method for identifying if the two die show the same value.

Returns:

true if the two dices shows the same eyes.

getSum

```
public int getSum()
```

Method for getting the result of the roll.

Returns:

sum of the two dices.

roll

```
public int roll()
```

Method for rolling the dices

Returns:

sum of the two dices

entities

Class Dice

```
java.lang.Object  
|  
+--entities.Dice
```

< [Constructors](#) > < [Methods](#) >

```
public class Dice  
extends java.lang.Object
```

Class Dice, for getting random value between 1 and 6.

Constructors

Dice

```
public Dice()
```

Dice

```
public Dice(int eyes)
```

Methods

getValue

```
public int getValue()
```

Method for getting the current value of the dice.

Returns:

value of the dice.

roll

```
public int roll()
```

Method for rolling the die.

Returns:

value of dice (from 1 to eyes).

entities

Class Player

```
java.lang.Object  
|  
+--entities.Player
```

< [Constructors](#) > < [Methods](#) >

```
public class Player  
extends java.lang.Object
```

Constructors

Player

```
public Player(java.lang.String name,  
              int balance)
```

Constructor for a Player, that initiates the player with an account balance, a vehicle, a jail status and a jail counter

Parameters:

name - String with the player name

balance - Int with the player's starting balance

Methods

addToJailCounter

```
public void addToJailCounter()
```

Method for adding to this players jailCounter.

buyBuildings

```
public void buyBuildings(Street street,  
                          int amount)
```

Method for buying houses on a Street.

Parameters:

street - in question

amount - of houses

buySquare

```
public void buySquare(Ownable square)
```

Method for buying an Ownable Square.

Parameters:

square - in question

deposit

```
public void deposit(int amount)
```

Method for depositing an amount from the player account

Parameters:

amount - of money

getBalance

```
public int getBalance()
```

Method for getting the current account balance of a player

Returns:

Account balance of the type integer

getBuildStatus

```
public boolean getBuildStatus()
```

Method for getting a boolean value of whether the player can build houses

Returns:

boolean of has a building.

getBuildableList

```
public java.lang.String[] getBuildableList()
```

Returns a string array of streets which can be built on.

Returns:

String[] buildable squares

getBuilding

```
public boolean getBuilding()
```

Returns a boolean value of whether the player owns a building

Returns:

boolean

getColor

```
public java.awt.Color getColor()
```

Method for generating a color used by the

Returns:

A color of the type Color

getCurrentPosition

```
public int getCurrentPosition()
```

Method for getting the current position of the player's vehicle

Returns:

Player position of the type integer

getFirstRound

```
public boolean getFirstRound()
```

Returns:

a boolean value of whether this is the players first round.

getHotelList

```
public java.lang.String[] getHotelList()
```

Method for getting a list of the properties with hotels built on them.

Returns:

String []

getHouseList

```
public java.lang.String[] getHouseList()
```

Method for getting a list of the properties with houses built on them.

Returns:

String[]

getJailCard

```
public boolean getJailCard()
```

Method that returns whether or not the player has a get out of jail free card

Returns:

Boolean value true or false depending on whether the player has a card

getJailCounter

```
public int getJailCounter()
```

getter method for the players jailCounter.

Returns:

jailCounter

getJailStatus

```
public boolean getJailStatus()
```

Method for checking the jail status of a player

Returns:

Boolean value true or false depending on the jail status of the player

getOwned

```
public java.util.ArrayList getOwned()
```

Method for returning and ArrayList of the squares this player owns.

Returns:

ArrayList of ownables

getOwnedID

```
public int[] getOwnedID()
```

Method for getting an integer array of the ID of the Ownable Squares this player owns.

Returns:

array of integers containing the ID of owned squares.

getOwnedStreet

```
public java.util.ArrayList getOwnedStreet()
```

Returns:

ArrayList of the streets, this player owns.

getPawnStatus

```
public boolean getPawnStatus()
```

Returns:

boolean value of whether the player can pawn something.

getPawnable

```
public java.lang.String[] getPawnable()
```

Returns:

string array of pawnable squares

getPawnd

```
public java.lang.String[] getPawnd()
```

Returns:

String[] of pawnd properties.

getPreviousPosition

```
public int getPreviousPosition()
```

Method for getting the previous position of the player's vehicle

Returns:

Previous player position of the type integer

getProperty

```
public boolean getProperty()
```

Returns:

Returns a boolean value of whether the player owns a property or not.

getPropertyList

```
public java.util.ArrayList getPropertyList()
```

Returns a list of the names of the properties owned by this player.

Returns:

String ArrayList

getSellableList

```
public java.lang.String[] getSellableList()
```

Returns:

string array of sellable squares.

hasPawnd

```
public boolean hasPawnd()
```

Returns:

boolean value of whether the player has a pawnd square.

liftPawn

```
public void liftPawn(Ownable ownable)
```

Lifts the pawn of the property.

Parameters:

ownable - square

moveVehicle

```
public void moveVehicle(int roll)
```

Method for calculating where the player's vehicle lands after rolling the dice

Parameters:

roll - value of the cup

pawnProperty

```
public void pawnProperty(Ownable ownable)
```

Pawns a property.

Parameters:

ownable - square

removeBuildings

```
public void removeBuildings(Street street,  
                             int amount)
```

Method for removing houses on a Street

Parameters:

street - in question
amount - of houses

resetJailCounter

```
public void resetJailCounter()
```

Method for resetting this players jailCounter.

setFirstRound

```
public void setFirstRound(boolean b)
```

Setting the value of firstRound

Parameters:

b - value of firstRound

setJailCard

```
public void setJailCard()
```

Method for receiving a get out of jail free card

setJailStatus

```
public void setJailStatus(boolean jailStatus)
```

Method for setting the jail status of a player

Parameters:

jailStatus - of the player

setPosition

```
public void setPosition(int currentPosition,  
                        int previousPosition)
```

Method for setting the position of the player's vehicle

Parameters:

currentPosition - Type: int
previousPosition - Type: int

toString

```
public java.lang.String toString()
```

Method for returning the name of the player

Returns:

Player name of the type string

Overrides:

toString in class java.lang.Object

useJailCard

```
public void useJailCard()
```

Method for using a get out of jail free card

withdraw

```
public void withdraw(int amount)
```

Method for withdrawing an amount from the player account

Parameters:

amount - of money

entities

Class Vehicle

```
java.lang.Object  
|  
+--entities.Vehicle
```

< [Constructors](#) > < [Methods](#) >

```
public class Vehicle  
extends java.lang.Object
```

Class which keeps track of the player's position on the board and creates a piece that the player moves with

Constructors

Vehicle

```
public Vehicle()
```

Constructor that initializes a vehicle with a counter and a color for a player

Methods

getColor

```
public java.awt.Color getColor()
```

Method for returning the color of the player's vehicle

Returns:

Color of the type Color

getCurrentPosition

```
public int getCurrentPosition()
```

Method for getting the current position of a player's vehicle

Returns:

The current position of the player vehicle, of the type integer

getPreviousPosition

```
public int getPreviousPosition()
```

Method for getting the previous position of a player's vehicle

Returns:

The previous position of the player vehicle, of the type integer

move

```
public int move(int value)
```

Method for calculating and returning the new position of a player's vehicle while also saving the previous position

Parameters:

value - of movement

Returns:

currentPosition

setPosition

```
public void setPosition(int currentPosition,  
                        int previousPosition)
```

Method for setting a new position of the player's vehicle

Parameters:

currentPosition - [0-39]

previousPosition - [0-39]