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.

---

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.

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 printet.

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

---

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 withdrawed if chosen.

Methods

getTaxAmount

```
public int getTaxAmount()
```

Method for getting taxAmount.

Returns:

taxAmount

---

landOnSquare

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

Overrides:

landOnSquare in class Square

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 withdrawed

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 looses.

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
```

< Constructors > < Methods >

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

---

getPawned

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

Returns:

String[] of pawned 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.

---

hasPawned

`public boolean` **`hasPawned`**`()`

Returns:

boolean value of whether the player has a pawned 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]