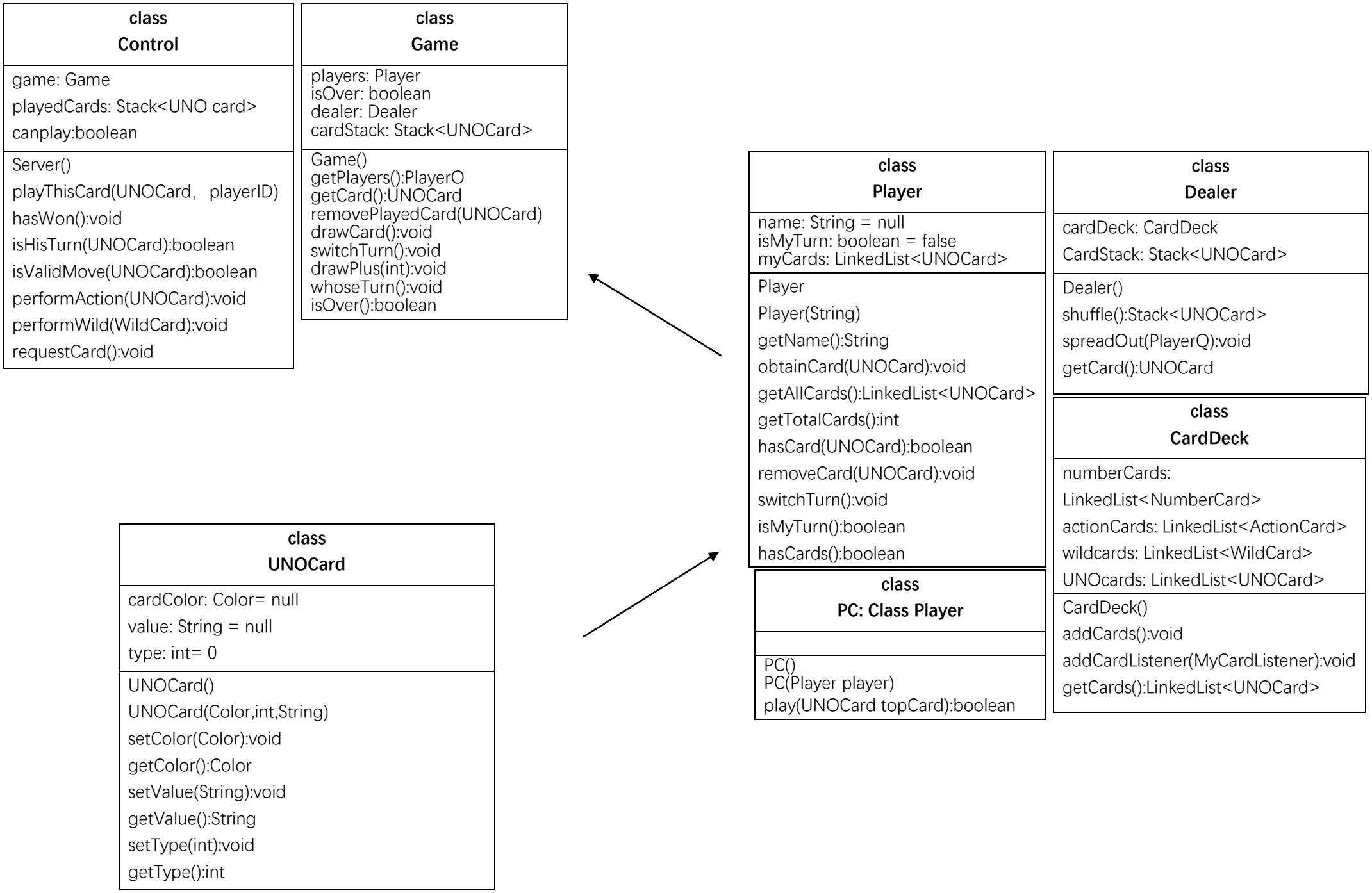
Main

```
*Main*
Int i;
Int card;
Cin Mode
Cin TotalNum   NumOfPlayer  NumOfPc
Control con;
While (!con.game.isOver)
{
   For(i=0;i<NumOfPlayer;i++)
  {
    Cout <<”you are playing as player ”<<i<<”please input your card num:”<<endl;
    Cin>>card;
    Con.game.PlayThisCard(card)
  }
}
```

**Main 函数里缺少[喊 uno]的部分*


class
Control
game: Game
playedCards: Stack<UNO card>
canplay:boolean
Server()
playThisCard(UNOCard, playerID)
hasWon():void
isHisTurn(UNOCard):boolean
isValidMove(UNOCard):boolean
performAction(UNOCard):void
performWild(WildCard):void
requestCard():void
class
Game
players: Player
isOver: boolean
dealer: Dealer
cardStack: Stack<UNOCard>
Game()
getPlayers():PlayerO
getCard():UNOCard
removePlayedCard(UNOCard)
drawCard():void
switchTurn():void
drawPlus(int):void
whoseTurn():void
isOver():boolean
class
Player
name: String = null
isMyTurn: boolean = false
myCards: LinkedList<UNOCard>
Player
Player(String)
getName():String
obtainCard(UNOCard):void
getAllCards():LinkedList<UNOCard>
getTotalCards():int
hasCard(UNOCard):boolean
removeCard(UNOCard):void
switchTurn():void
isMyTurn():boolean
hasCards():boolean
class
Dealer
cardDeck: CardDeck
CardStack: Stack<UNOCard>
Dealer()
shuffle():Stack<UNOCard>
spreadOut(PlayerQ):void
getCard():UNOCard
class
CardDeck
numberCards:
LinkedList<NumberCard>
actionCards: LinkedList<ActionCard>
wildcards: LinkedList<WildCard>
UNOcards: LinkedList<UNOCard>
CardDeck()
addCards():void
addCardListener(MyCardListener):void
getCards():LinkedList<UNOCard>
class
UNOCard
cardColor: Color= null
value: String = null
type: int= 0
UNOCard()
UNOCard(Color,int,String)
setColor(Color):void
getColor():Color
setValue(String):void
getValue():String
setType(int):void
getType():int
class
PC: Class Player
PC()
PC(Player player)
play(UNOCard topCard):boolean

Class 的关系：

UNOCard：牌本身这个类
CardDeck：牌堆，即 108 张牌这个类
Player：玩家类
Dealer：发牌者类
Game：游戏对象，包含上面所有的类的对象
Control：游戏控制类，包含 Game 对象

重点类函数设计：

Dealer

shuffle()
洗牌
spreadOut（）
发牌

Game

Game(int mode)
创建游戏环境必须的对象：玩家、牌堆、发牌者

Control

playThisCard(UNOCard，playerID)
判断是否该目前 Player 出牌，出牌后的后续操作处理（动作派，万能牌）。同时在所有 Player 出完牌后触发 PC 出牌

Reference：https://github.com/tk-codes/uno