

```
Woo
- int numAi
- int numRealPlayers
- ArrayList <Player> allPlayers
- ArrayList <Card> discardPile
- ArrayList <Card> drawPile
+ Woo()
+ void rollDice()
+ void reverse(int index)
+ void checkDrawPile()
+ String mkPin()
+ String draw(Player currentPlayer)
+ void sort(Player currentPlayer)
+ void firstCard()
+ void clearScreen()
+ void playerCardInfo()
+ void beginGame()
+ void playGame()
+ void main(String[] args)
```

```
Player
- String name
- int score
- String pin
- ArrayList<Card> currentCards
+ Player(String name, String pin)
+ boolean playCard(int index, ArrayList<Card>
playedArea)
+ Card draw(ArrayList<Card> deck)
+ boolean win()
+ void sortCards()
+ int sortCardsColor(int color)
+ void sortCardsNum()
+ ArrayList<Card> getCurrentCards()
+ int getScore()
+ int setScore(int score)
+ void checkPin()
+ String toString()
```

```
Card
- int num
- int color
- int pointVal
+ ArrayList<Card> createDeck()
+ void shuffle(ArrayList<Card>
deck)
+ boolean isMatch(Card lastCard,
Card playCard)
+ int getColor()
+ int getNum()
+ getPoint()
+ int setPoint(int point)
```

```
NormalCard
+ NormalCard(int i, int color1)
+ String toString()
```

```
SpecialCard
- int action
- String name
+ SpecialCard(int action1, int color1)
+ int getAction()
+ String toString()
```

```
Ai
+ Ai ()
+ void analyzeAndPlay(int turn, ArrayList<Player> allPlayers,
ArrayList<Card> discarded)
+ boolean drawOrNot(int turn, ArrayList<Card> discarded)
+ playCard (int index, ArrayList<Card> discarded)
+ void determineNormalCards(ArrayList<Card> discarded)
+ Card determineSpecialCards(int turn, ArrayList<Player>
players, ArrayList<Card> discarded)
- double calculateProb (ArrayList<Card> discarded, Card C)
- boolean haveCard(int color, int num)
```