## **Game class**

class Game{

[Player] players

Int numPlayers

Bool gameInProgress

Player dealer

[Int] scores

Trick currTrick

Card currTrump

Deck deck

startGame(){

// starts game after players join and teams assigned

}

endGame(){

// ends game after team wins game

}

menuHelp(){

// displays a text-based menu for a quick tutorial of the game

}

nextTurn(){

// assigns next player turn to play card

}

scoreUpdate{

// updates the score of each player and team

}

initRound{

// initialises the round for tricks to be played

}

initTable(){

// updates the view of the game

}

initCards(){

// initialises the cards for the current game once the cards are shuffled and

// dealt

}

}

## **Player class**

class Player{

String name

Int ID

Bool isDealer

[Card] hand

joinGame(){

// allows player to join game through share-link

}

quitGame(){

// allows player to quit game

}

move(){

// player makes their move

}

getHand(){

// player gets a new hand per trick/game

}

}

## **Server class**

class Server{

[Array] listUsers

[Array] waitingList

startConnection(){

// initialises game connection for players

}

endConnection(){

// terminates game connection for players

}

generateLink(){

// generates a share-link for players to access the online game

}

updateGame(){

// provides updates to the current game

}

updatePlayer(){

// updates players for any changes mid game

}

}

## **Table class**

class Table{

Int size

Int colour

[Card] cards

}

## **Trick class**

class Trick{

Int cardCount

Card winningCard

[Card] trick

addCard(){

// appends cards played by players to the current trick

}

compare(){

// compares the cards in current trick to find strongest card played

}

}

## **Card class**

class Card{

String rank

String suit

String type

isTrump(){

// checks if the current card is trump card or trump suited card

}

}

## **AI class**

class AI{

Int difficulty

}

## **Deck class**

class Deck{

[Cards] cards

deal(){

// deals the cards to players

}

shuffle(){

// cards are shuffled in the deck

}

trump(){

// sets random card as trump card

}

}

## **Team class**

class Team{

String teamName

Int teamID

[Array] members

[Card] tricks

Int score

addPlayer(){

// game adds player to a team

}

}