

Team #1



Bingo	
- computerPlayers: Computer[] - numberOfBingos: int - calledNumbers: bool[]	Array to hold the computer players. Number of Bingos available to win. Array holds true if number has been called.
+ Bingo() + generateComputerPlayers(): void + setNumberOfBingos(bingos: int): void + getNumberOfBingos(): int + callNumber(): void + setNumberCalled(number: int): void + isNumberCalled(number: int): bool + changeBallPosition(number: int): void + speakNumber(number: int): void + backgroundMusic(): void	Default constructor. Generates random # of computer players. Increments totalPlayers. Sets number of Bingos. Gets number of Bingos. Calls a new number to be displayed for player. Sets a called number in the calledNumbers array. Checks if a number has been called or not. Updates the position of the recently called numbers. Speaks called number aloud. Plays background music.

Player	
+ totalPlayers: int - playerCards: Cards[]	Total number of players in play. Array of cards for each human or computer player.



Human	
- ticketBank: int	Amount of tickets for purchasing cards.
+ Human() + Human(initialTicketBalance: int) + setTicketBank(bank: int): void + getTicketBank(): int + purchaseCards(cards: int): void	Default constructor w/ 1 card, increments totalCards & totalPlayers. Constructor to start human player with tickets. Change value of ticketBank. Retrieve value of ticketBank. Adds cards to Cards[].

Computer	
- responseTime: int	Time for AI to respond after Bingo.
+ Computer() + generateNumberOfCards(): void + generateResponseTime(): void + setResponseTime(time: int): void + getResponseTime(): int	Default constructor calls generateResponseTime() & generateNumberOfCards() & increments totalCards. Randomly generates # of cards between 1 and 4. Randomly generates # of seconds between 0 and 3. Set the response time. Returns the response time.

Card	
+ totalCards: int - isBingo: bool - cardLayout: int[][] - tokenPlacement: bool[][]	Total number of cards in play. Indicates if card is valid Bingo. Bingo card numbers and layout. Indicates if a number has been called.
+ Card() + setIsBingo(winState : bool): void + getIsBingo(): bool + generateCardLayout(): void + toggleToken(column : int, row: int): void + checkForBingo(): bool + cardFreeze(): void + cardWin(): void	Empty constructor calls generateCardLayout(). Sets isBingo to the value of winState. Returns the value of isBingo. Generates random numbers & writes to cardLayout. Change matching tokenPlacement bool value. Scans cardLayout & tokenPlacement for valid Bingo. Dims card & disables input for 5 seconds. Congratulates user & disables input.