Team #1

Bingo

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

Player

+ <u>totalPlayers</u>: int	Total number of players in play.
- playerCards: ArrayList<Card>	Array of cards for each human or computer player.

Human

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

Computer

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

Card

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