|  |
| --- |
| NimGame |
| - HUMAN : int  - COMPUTER : int  - turn : int  - winner : int |
| + playGame(int) : void  + humanMove(int) : boolean  + computerMove() : void  + computerMoveWin() : void  + userWon() : boolean |

|  |
| --- |
| NimMatch |
| - humanScore : int  - computerScore : int  - gameNumber : int |
| + playMatch() : void  + updateScores (NimGame) : int  + reportScores() : String |

|  |
| --- |
| NumOfSticks |
| - sticks : int |
| + getSticks(): int  + setSticks(int): void |

|  |
| --- |
| NimGame – Description in Order |
| - Class constant represented by 1  - Class constant represented by 2  - Who’s turn is it? (1 = H 2 = C)\*  - Who won the game? (1 = H 2 = C) |
| - Completes game(param = 1 or 2[H or C])  - Check if player input a valid move  - Comp removes random # of sticks  - Comp removes sticks using winning strategy  - Who won : true = H false = C |

|  |
| --- |
| NimMatch – Description in Order |
| - # of games won by Human  - # of games won by Computer  - # of games played |
| - Repeatedly creates NimGame obj, updates score, prompts user if they want to continue playing more games, starts all even-numbered games with Computer and odd- numbered with Human, reports overall winner.  - Updates score based on who won each game.  - Displays current score |

|  |
| --- |
| NumOfSticks – Description in Order |
| - # of sticks left |
| - Retrieves # of sticks left  - Changes # of sticks left |