Frame State for Double Strikes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Frame | 4 | 5 | 6 | 7 | 8 |
| Frame  State In | GS=fsSecondBall | GS=fsSB | GS=fsSB1R | GS=gsDSBR1 | GS=gsDBR1 |
| Result | 9 / | X | X | X | 4 |
| Frame State after Roll | F4R2=1  F4S=fsSpareBonus  GS=fsSpareBonus | F4B1=10  F5R1=10  F4S=Strike  F5S=fsSB1R  GS=fsSB1R | F5B1=10  F6R1=10  F5S=fsSB2R  F6S=fsSBR1  GS=gsDSBR1 | F7R1=10  F6B1=10  F5B2=10  F5S=fsStrike  F6S=fsSBR2  F7S=fsSBR1  F6S=gsDSBR1 | F8R1=4  F7B1=4  F6B2=4  F6S=fsStrike  F7S=fsSBR1  F8S=fsR2  GS=gsSBR1 |

Legend

FnRn = Frame <number> Roll < 1 or 2 >

FnBn = Frame <number> Bonus < 1 or 2 >

FnS = Frame <number> State

GS = Game State

|  |  |  |  |
| --- | --- | --- | --- |
| Frame | 8 | 9 | 10 |
| Frame  State In | GS=fsOpen | GS=fsOpen |  |
| Result | 4 5 | 4 / |  |
| Frame  State  after  Roll | F8R2=fsOpen  F8S=fsOpen  GS=fsOpen | F9R2=6  F9S=fsSpareBonus  GS=fsSpareBonus |  |

Frame 10 possible states

fsFirstRoll

fsSecondRoll

fsSpareBonusRoll

fsSpare

fsStrikeBonusRoll1

fsStrikeBonusRoll2

fsStrike

fsSpareBonusRollFrame10

fsStrikeBonusFirstRollFrame10

fsStrikeBonusSecondRollFrame10

// fsDoubleStrikeBonusRoll = two strikes in a row

TGameState = (fsFirstRoll, fsSecondRoll, fsOpen, fsSpareBonusRoll, fsSpare,

fsStrikeBonusFirstRoll, fsStrikeBonusSecondRoll, fsStrike,

fsGameOver, fsDoubleStrikeBonusRoll,

fsSpareBonusRollFrame10, fsStrikeBonusFirstRollFrame10,

fsStrikeBonusSecondRollFrame10, fsDoubleStrikeBonusRollFrame10);

TFrameState = fsFirstRoll..fsGameOver;

TRoll = (trFirst=1, trSecond);

const

cCrLf = #$D#$A;

cMaxFrames = 10; // Frames collection starts at "0"

cDisplayLastTwoFrames = false; // should NOT of brought these out to the UI, but oh well ;-(

cDisplayInLine = true; // displays stats in a single line.. Same here with UI ;-(

cShowLastTwoFrameState = ([fsSpareBonusRoll, fsSpare,

fsStrikeBonusFirstRoll, fsStrikeBonusSecondRoll, fsStrike,

fsDoubleStrikeBonusRoll,

fsSpareBonusRollFrame10, fsStrikeBonusFirstRollFrame10,

fsStrikeBonusSecondRollFrame10]);