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10 REM Musical Mousetrap
20 INK 0,0: BORDER 0
30 mouseX=0: mouseY=0: px=0: py=0: vx=0: vy=0: pvx=
  0: pvy=0: best=32700
40 GOSUB 490: REM START MUSIC.
50 INK 2,26: INK 3,15: GOSUB 360: REM set up border
60 PLOT 32,16,1: DRAWR 572,0: DRAWR 0,350: DRAWR -572
  ,0: DRAWR 0,-350
70 DEF FN rndpos(n1%,n2%)=n1%+n2%*RND(1)
80 mouseX=FN rndpos(40,350): mouseY=FN rndpos(20,
  300)
90 vx=4*(1-2*INT(2*RND(1))): vy=2*(1-2*INT(2*RND(
  1)))
100 px=FN rndpos(40,350): py=FN rndpos(20,300)
110 score%=0: PEN 1: LOCATE 1,1: PRINT "BEST: "; best:
120 PLOT px%,py%,3: mink%=TEST(mouseX%,mouseY%): IF
  mink%=0 THEN PLOT mouseX%,mouseY%,2: GOTO 170
130 REM check for wall collisions
140 ix=vy%: IF TESTR(-vx%,0)<>0 THEN GOSUB 470: vy%=
  -vy%
150 IF TESTR(vx%,-ix)<>0 THEN GOSUB 470: vx%=-vx%
160 GOTO 180
170 REM test arrow keys
180 pvx=0: pvy=0
190 IF INKEY(0)=0 AND (py%<366) THEN pvy%=2: GOTO 2
  30
200 IF INKEY(2)=0 AND (py%>18) THEN pvy%=-2: GOTO 2
  30
210 IF INKEY(8)=0 AND (px%>36) THEN pvx%=-4: GOTO 2
  30
220 IF INKEY(1)=0 AND (px%<600) THEN pvx%=4
230 REM
240 REM update positions
250 mouseX%=mouseX%+vx%: mouseY%=mouseY%+vy%
260 IF INKEY(47)=0 THEN PLOT px%,py%,0 ELSE PLOT p
  x%,py%,1
270 REM check for mouse-trapped!
280 px%=px%+pvx%: py%=py%+pvy%: IF mouseX%>64 OR mou
  sey%<326 THEN c%=0
290 c%=c%+1: score%=score%+1
300 IF mink%=0 THEN PLOT mouseX%-vx%,mouseY%-vy%,0
310 IF c%<30 THEN 120: REM if trapped for 30 passes
  , end of game
320 WINDOW#1,2,19,3,24: CLS#1: LOCATE#1,5,13: PRINT#1
  ,"Press a key "; PRINT#1,TAB(5); "to restart."
330 LOCATE#1,2,3: PRINT#1,"You scored: -"; score%: IF
  best>score% THEN best=score%: PRINT#1: PRINT#1," Bes
  t score today!"
340 IF INKEY#<>"" THEN 340
350 IF INKEY#="" THEN GOSUB 470: GOTO 350 ELSE 50
360 REM set up border
370 MODE 0: CLS: LOCATE 1,2: i4%=0: i1%=1: i2%=20: i3%=2
  : GOSUB 430
380 i1%=3: i2%=24: i3%=20: GOSUB 450: i1%=20: i2%=1: i3%
  =25: GOSUB 430
390 i1%=24: i2%=3: i3%=1: GOSUB 450

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400 cMx(0)=20:cMx(1)=18:cMx(2)=26:cMx(3)=6:cpX=0
410 PEN 1:LOCATE 5,11:PRINT"THE MUSICAL":LOCATE 6,
13:PRINT"HOUSETRAP":FOR iX=1 TO 50:GOSUB 470:FOR c
1X=1 TO 100:NEXT:NEXT:WINDOW#1,2,19,3,24
420 CLS#1:RETURN
430 REM horizontal border
440 FOR iX=11X TO 12X STEP SGN(12X-11X):PEN 14X+12
:LOCATE 1X,13X:PRINT CHR$(143);i14X=(14X+1) MOD 4:
NEXT:RETURN
450 REM vertical border
460 FOR iX=11X TO 12X STEP SGN(12X-11X):PEN 14X+12
:LOCATE 13X,1X:PRINT CHR$(143);i14X=(14X+1) MOD 4:
NEXT:RETURN
470 REM set colours
480 FOR c1X=12 TO 15:INK c1X,cMx((cpX+c1X-12) MOD
4):NEXT:cpX=(cpX+1) MOD 4:RETURN
490 REM set up music
500 DIM musX(46,2):RESTORE 510:FOR iX=0 TO 46:READ
musX(iX,1),musX(iX,2):NEXT
510 ENV 1,1,15,1,2,-1,2,13,-1,10:ENV 2,3,5,1,15,-1
,9:ENT -1,4,1,2,4,-1,2
520 DATA 190,50,213,50,239,100,190,50,213,33,213,1
7,239,100
530 DATA 159,50,179,50,190,100,159,50,179,33,179,1
7,190,83
540 DATA 159,17,119,33,119,17,127,17,142,17,127,16
,119,33,159,17,159,33,159,17
550 DATA 119,17,119,16,119,17,127,17,142,17,127,16
,119,33,159,17,159,33,159,9,159,8
560 DATA 119,33,119,17,127,17,142,17,127,16,119,33
,159,17,159,33,179,17
570 DATA 190,50,213,50,239,100
580 p1X=0:p2X=0:p3X=0:SOUND 128+66,100,400,0:SOUND
128+68,100,800,0:ON SQ(1) GOSUB 590:ON SQ(2) GOSU
B 620:ON SQ(4) GOSUB 640:RETURN
590 REM channel A control
600 SOUND 1,musX(p1X,1),musX(p1X,2),0,1:RELEASE 6:
p1X=(p1X+1) MOD 47

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610 ON SQ(1) GOSUB 590: RETURN
620 REM channel B control
630 SOUND 2, MUSX(p2X, 1), MUSX(p2X, 2), 0, 1: p2X = (p2X + 1
) MOD 47: ON SQ(2) GOSUB 620: RETURN
640 REM channel C control
650 SOUND 4, MUSX(p3X, 1), MUSX(p3X, 2), 0, 2, 1: p3X = (p3X
+ 1) MOD 47: ON SQ(4) GOSUB 640: RETURN
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