

aMAZed in SPACE game included in this issue is a rocketship-thru-the-maze challenge with a number of levels of difficulty. One problem is that I've lost the name of the originator. I sent the material to Dick Hauser who made a few modifications and prepared the descriptive material. Note how he has separated the listing into blocks that correspond with the flow chart. The program lines marked C are just for information and do not go into the machine.

PROGRAM NAME: AMAZED IN SPACE  
 Type: MAZE  
 Written By: Opponent: SKILL  
 Address: Length: As Desired  
 Telephone # Controls Used: Keyboard, Joystick  
 Adapted From: Graphics: Yes  
 Revised by: R. M. Houser Memory Left sz: 48  
 415-447-8493

PROGRAM DESCRIPTION: Maneuver spaceship thru maze without crashing into walls. Direction is controlled by Joystick. Path size, maze height, maze width and degree of difficulty are selected by keyboard input. Score is based on these inputs and time taken to complete maze. It takes quite awhile to complete maze interior, so start small.

COMMENTS ON PROGRAM: See Flowchart

Variables Used: J, R, L, H, A, X, Y, P, Q  
 A, G, T, D, E, M, N, G, S, @, @, @, @, @

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Line # Statements
1
2
3
4
5 AMAZED IN SPACE
6 BY AQUILA
7 REVISIED BY
8 R. M. HOUSER
9
10 J=0
11 NT=0; CLEAR; BC=0; FC=126
12
13 INPUT STATEMENTS
14 INPUT "DEGREE OF DIFFICULT
Y? 0-EASY 1-MEDIUM 2
HARD "R; CLEAR
15 PRINT "PATH SIZE CAN BE FR
OM " #3, 5+R, " TO 20"
16 INPUT "PATH SIZE?"; L; CLEAR
17 PRINT "HEIGHT CAN BE FROM
2 TO " 36-L
18 INPUT "HEIGHT?" ; H; @ (2) = L * H;
CLEAR
19 IF @ (2) > 36 GOTO 130
20 PRINT "WIDTH CAN BE FROM 2
TO " 74+L
21 INPUT "WIDTH?" ; W; @ (1) = L * W; C
LEAR
22 IF @ (2) > 74 GOTO 160

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Line # Statements
230 CLEAR; FOR A=1 TO 100
240 X=0; Y=0
250 BOX RND (160) - 80, RND (88) -
44, 1, 1, 1; NEXT A
26 MAZE OUTLINE
27 BOX 0, 0, 2 * @ (1) + 8, 2 * @ (2) + 8, 2
28 LINE @ (1), @ (2), 4
29 LINE @ (1), @ (2) + 1, 1
30 LINE @ (1), @ (2), 4
31 LINE @ (1), @ (2), 1
32 LINE @ (1), @ (2) - 1, 1
33 LINE @ (1), @ (2), 4
34 LINE X1, Y1, 4
35 MAZE INTERIOR
36 P = (W * H * (100 - L))
37 FOR Q = 1 TO P
38 A = (RND (3) - 2) * L
39 B = (RND (3) - 2) * L; X = X + A
40 IF X < @ (1) X = @ (1)
41 IF X > @ (1) X = @ (1)
42 IF PX(X, Y) = 1 LINE X, Y, 4
43 LINE X, Y, 1; Y = Y + B
44 IF Y < @ (2) Y = @ (2)
45 IF Y > @ (2) Y = @ (2)
46 IF PX(X, Y) = 1 LINE X, Y, 4
47 LINE X, Y, 4; P = P - 1
48 CY = 40; PRINT "COUNTDOWN=" ; #
2, P
49 NEXT Q
50 CY = 40; PRINT " "
51 STARS

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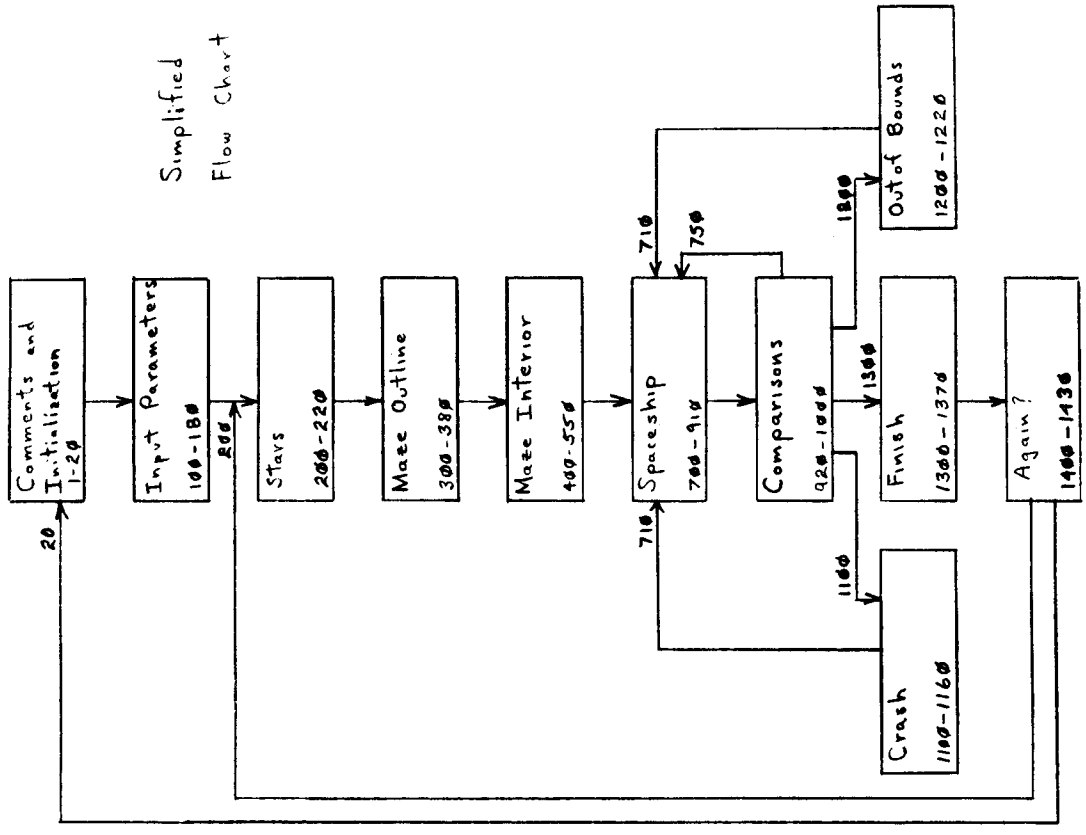
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Line # Statements
C SPACESHIP
700 C=@; T=0
710 X=@(1) - 2
720 Y=@(2) - (L+2); M=0; N=0
730 @ (23) = 255; BC=0
740 D=J * X (1); E=J * Y (1)
750 M=M+D; N=N+E
760 G=3
770 IF M > G M=G
780 IF N > G N=G
790 IF M < -G M=-G
800 IF N < -G N=-G
810 X=X+M; Y=Y+N
820 IF D # 0 @ (21) = 255
830 IF E # 0 @ (21) = 255
840 IF D = 0 IF E = 0 @ (21) = 0
850 I=T+1; CY=40; PRINT #4, T
860 BOX X, Y, 3, 3, 3
870 BOX X-D, Y-E, 1, 1, 3
880 BOX X-D, Y-E, 1, 1, 3
890 BOX X, Y, 3, 3, 3
900
C Comparisons
920 IF PX(X, Y) = 1 GOTO 1100
930 IF PX(X+R, Y+R) = 1 GOTO 1100
940 IF PX(X+R, Y-R) = 1 GOTO 1100
950 IF PX(X-R, Y+R) = 1 GOTO 1100
960 IF PX(X-R, Y-R) = 1 GOTO 1100
970 IF X > @ (1) IF Y < @ (2) + L @ (2)
) = 0; GOTO 130
980 IF X < @ (1) IF Y @ (2) - L @ (2)
) = 0; GOTO 120
990 IF X < @ (1) IF Y @ (2) & (21) = 0
1000 GOTO 750

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AMAZED IN SPACE - AQUILA AND RICHARD HOUSER  
 ARCADIAN, VOL. 6, PGS. 58, 60 AND 61

Line #	Statements	Comments
1100	CRASH	J - Last Score
1110	R(2,1) = 0; C = C + 1	R - Degree of Difficulty
1120	CX = 7.5; CY = 4.4; PRINT C, " CRA	L - Path Size
1130	SH "	H - Maze Height x 2
1140	FOR A = 1 TO 2.5; BC = 80; NT = 5	W - Maze Width x 2
1150	MU = "4"; NEXT A	X - Spaceship X location
1160	NT = 0; GOTO 710	Y - Spaceship Y location
1170	OUT OF BOUNDS	P - # of loops to
1180	NT = 5; CY = 4.4; PRINT "OUTER LI	complete maze
1190	M.L.T.S. OF F.LIMITS; NT = 0	interior, on large
1200	CY = 4.4; PRINT "	mazes can take
1210	GOTO 710	15-20 minutes to
1220	FINISH	complete
1230	NT = 3; CLEAR	C - Crashes
1240	PRINT "FAR OUT!, YOU DID IT	M - X velocity
1250	!; ONLY; #3; C; CRASH(ES);	N - Y velocity
1260	PRINT "TIME = "; #5; T	D - JX input
1270	S = ((R+1) * H * W) * 72 / ((TXL) ÷ 10	E - JY input
1280	) * 10	G - max movement
1290	PRINT "SCORE = "; #5; S	per loop, if any
1300	IF S > J; J = S	larger spaceship
1310	PRINT "TODAY'S HIGH SCORE =	will jump lines
1320	" #5; J	without crashing
1330	TO PLAY AGAIN	S - Score
1340	PRINT "AGAIN?"	Z - Again Input
1350	NT = 0; INPUT "1-YES 2-SAME	A, Q loops
1360	AS LAST GAME" Z	
1370	IF Z = 1; GOTO 200	
1380	IF Z = 2; GOTO 200	
1390	RETURN	



R.M.H.