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1  !S3Main-CallYourApps.f95  Group ID:      #19 = "-unlisted.f95"
2  !2025.05.24.1840cdt- Branches execution via the keyboard function keys
3
4  !           Author- Jeffrey M. Setterholm, Lakeville,MN 55044 USA
5  !           IP Status- Free source code (e.g.: post copyright)
6  !
7  !           Computer- "T3"/Dell Precision T3500/Intel i5 E5520/win10Pro-21H2
8  !                   ^name ^mfgId      ^chipset      ^OS
9  !                   /Absoft Pro Fortran 21.0.2/GeForce GTX 1050/f90gl~Glut3.7
10 !                   ^compiler ~Fortran 95      ^graphics card ^graphics
11
12 !           f90gl bindings- public domain; see "https://math.nist.gov/f90gl/"
13
14 !Disclaimer:
15 ! *****
16 ! ***** Individual cognition is always flawed, *****
17 ! ***** including yours and mine. *****
18 ! ***** - So: - *****
19 ! ***** Use this code at your own risk. *****
20 ! *****
21
22 !Table of Contents: ...use to search...
23 ! Subroutine CallYourApps      !Group#19
24 ! Subroutine ImportYourNm1     !This is called by S3Main; reads "Sn3D.nm1"
25 !-----7-9
26
27 Subroutine CallYourApps      !Group#19 = "-unlisted.f95"
28 !2025.04.18.0835cdt JMS- A generic interface to NameList datafiles.
29 !--Globals      S1ModDef.f95
30 !S1ModDef.f95 variables:
31 use AppsDef      ,only: AppNumber !User Apps F1-F8
32 use ioDef        ,only: Up
33 use ViewDef      ,only: ThreePhase
34 use S2Callback,only: CheckGL
35
36 !use RubikDef      ,only: RubSizeOverride
37
38 !S0-Rubik-ModDef.f95 variables:
39 !Use RubikDef,      only: RubSizeBaseline
40
41
42 !--End Globals
43 implicit none
44 integer(4)::AppNumberL,Init=0,nTry
45 !--Arguments
46 !--Internals
47 !--EndDefs-----
48 !--      ! end defs
49 if((AppNumber==1).and.(ThreePhase==2)) then
50 !   call BreakHere(Up)      !////////// Example debug Breakpoint use. /////
51 endif!(AppNumber=1 & ThreePhase=2)
52
53
54 !Using the function keys within the simulation environment:
55 20 continue
56                                     call CheckGL(-190058)
57 select case(AppNumber)
58 case( 1); call S11AppF1      !Function key - F1 accessed within OpenGL
59 case( 2); call S12AppF2      !           - F2 Dodecahedron visualization
60 ! case( 3); call S13AppF3      !           - F3
61 ! case( 4); call S14TppF4      !           - F4
62 ! case( 5); call S15AppF5      !           - F5

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63 ! case( 6); call S16AppF6      ! - F6
64 ! case( 7); call S17AppF7      ! - F7
65 case( 8); call PixelDraw      ! - F8 shows screen color choices
66 end select!(S.AppNumber)
67                                     call CheckGL(+190071)
68                                     return
69 End Subroutine CallYourApps
70 !-----7 9
71 Subroutine ImportYourNm1
72 !2025.04.18.0835cdt JMS- Reading/importing "Sn3D.nm1"
73 !--Globals
74 !S1ModDef.f95 variables:
75 use TaskDef, only: ExeBanner,ExeName,ExeVersion      &
76                  ,Analyst,Phone,Street,CityStateZip,IPSummary &
77 use ioDef      ,only: & !Files,Units,TimeStamp,Selfies,Flags
78                  ,ExeFileIn,ExeFileOut,EnvNm1,EnvIni,LExists &
79                  ,UserIni,UserNm1,Ur,Us,UT,Uread,DaTimeLabel &
80                  ,Pi16,ModePi,IterPi
81
82 use ViewDef ,only:FrustNom,UnitCube0
83 !--End Globals
84 implicit none
85 !--Arguments
86 integer(4)::iP      !Write enable>5: write(iP,...)
87 !--Internals
88 integer(4)::i
89 NAMELIST / Sn3Dnm1 / ExeFileIn      , ExeFileOut      &
90                      ,UserIni       , UserNm1          &
91                      ,ExeBanner      , ExeName          &
92                      ,Analyst        , Phone            &
93                      ,CityStateZip,IPSummary            &
94                      ,Ut,FrustNom    ,UnitCube0          &
95                      ,Pi16           ,ModePi             ,IterPi
96 !--EndDefs-----
97 ! Modifying key variables at runtime using NameList file `Sn3D.nm1`:
98 ! Initial defaults are set here:
99 Ut      = 13      !Output unit#: Set to 6 or 13
100 EnvNm1  = './Sn3D.nm1' !default~ hard-coded here
101 ExeFileOut = './Sn3D-Out.txt' ! -can be overwritten
102 !! ActNm1 = ActReset
103
104 !Sn.nm1 variables listing: S1ModDef.f95 @L119.
105 write(Us, "('ImportYourNm1(): reading ',:,79a1)") &
106                (EnvNm1(i:i),i=1,len_trim(EnvNm1))
107 inquire(file=EnvNm1,exist=LExists)
108 if(LExists)then
109     open( unit=Ur, file=EnvNm1, action='read' &
110           , access='sequential', status='old',err=9)
111     read(Ur,nm1=Sn3Dnm1,err=8) !<--Defined above
112     close(Ur) ;goto 10
113 8 pause "Error reading `&Sn3Dnm1`. Press enter to continue."
114     close(Ur) ;goto 10
115 9 pause "Error trying to open your `Sn3D.nm1` file. Press enter to continue."
116     close(Ur)
117 else
118     write(Us,*) "Didn't find `Sn3D.nm1`."
119 endif!LExists
120 10 continue
121 UnitCube0 = FrustNom
122 write(Us, "(/'ImportYourNm1() - done. ',10('|'))")
123
124                                     return

```

125 End Subroutine ImportYourNm1

126 !-----7 9

127

128