The 2013 RexxLA Symposium
AN HTML WEB APP DONE ISPF STYLE

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Representing

Move Immediate Software

at

http://MarcIrvin.com/rexxsrc/

The 2013 RexxLA Symposium

Dirt simple CGI web app design for people who love ISPF on VM and MVS

- **Screen layouts that are static as obsolete 3270 dumb terminal.**
- **Raw and fast Rexx code that talks directly to and from browser.**
- **Imbedded panels defs logic upgraded from old ansi.sys code.**
- **Global variables are handled as hidden HTML attributes.**
- **Listboxes, checkboxes, radiobuttons, PWs, and more supported**
- **What components make it happen:**
  - **CGIPARSE (i.e. ?var1=val1&var2=val2a+val2b&etc...)**
  - **REXXSCRN (i.e. filename panelstart panelstop (options…))**
  - **REXXRDR (i.e. filename sequence searchkey searchmode)**
- **Questions?**

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Screen layouts that are static as obsolete 3270 dumb terminal.

```
/*
PNL_IDSIGNIN:  /* *html */
!      ---- SPACE BOOKS SIGN IN ----


  EMAIL                ===> %IDEMAILADDR                      !
                            &emerrors
  PASSWORD(PW)         ===> `IDPASSWORD        !
                            &pwerrors

  CREATE A SIGNON ID ===> ^IDSIGNUP=REQ      !  Create ID, PW, and sec_ques.

  CHANGE SIGNON DATA ===> ^IDSIGNUP=CHG      !  Change PW, name, or sec_ques.



EOP:        /**** END OF PANEL ****/
*/
```

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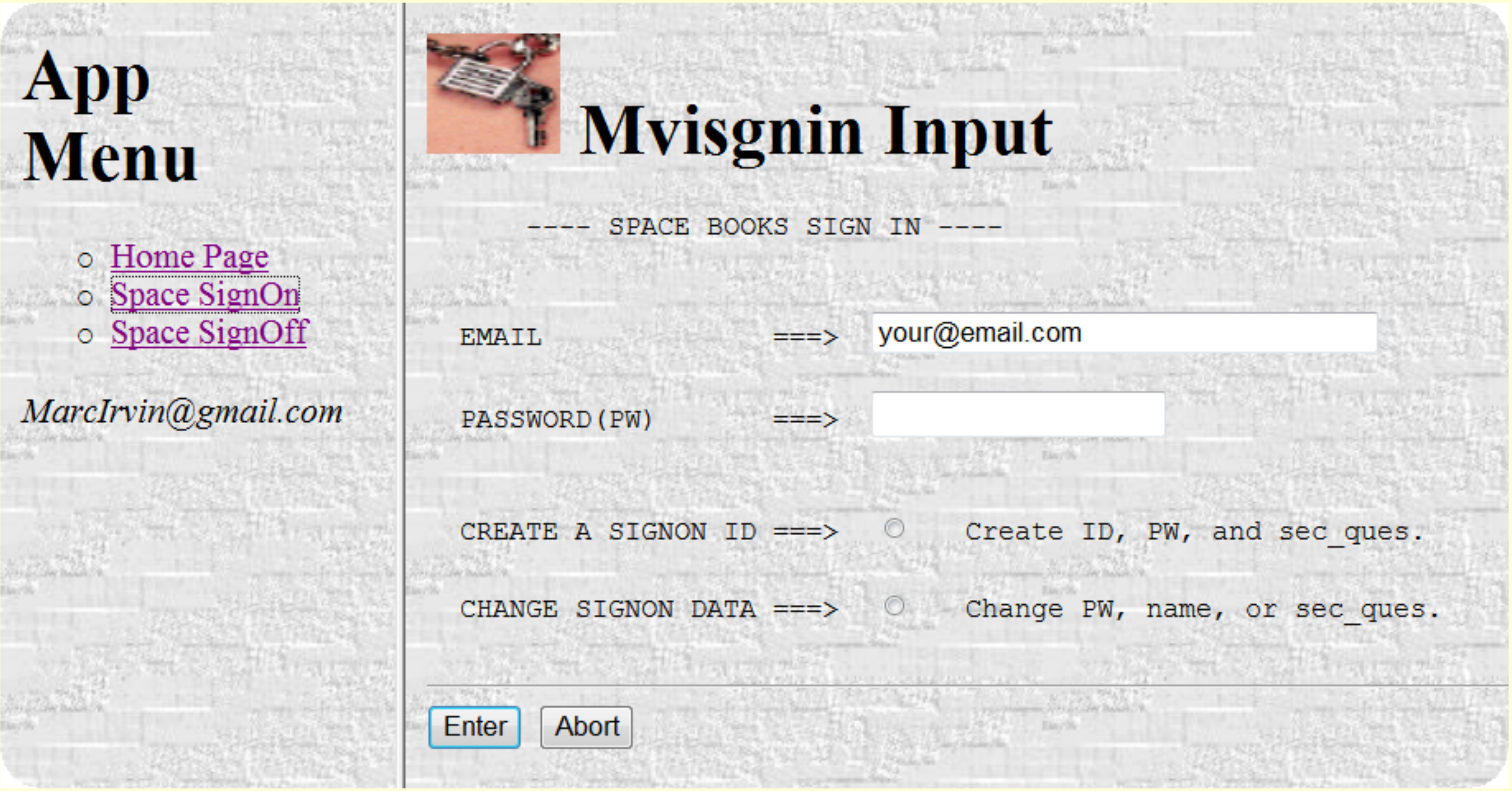

App Menu

- Home Page
- Space SignOn
- Space SignOff

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Mvisgnin Input

```
---- SPACE BOOKS SIGN IN ----

EMAIL                ===>  your@email.com

PASSWORD(PW)         ===>

CREATE A SIGNON ID ===>  ○  Create ID, PW, and sec_ques.

CHANGE SIGNON DATA ===>  ○  Change PW, name, or sec_ques.
```

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Raw and fast Rexx code that talks directly to and from browser.

```
SIGNINIT:  /* display the signin screen */
xnam = 'mvisgnin.'!idnt'.htm'
address cmd 'erase' xnam '*sysfn > nul: 2>&1'
idemailaddr = 'your@email.com'
idpassword  = ''
idsignupreq = 1 /* if selected this will be returned. */
idsignupchg = 1 /* if selected this will be returned. */
idsignup    = ''
emerrors    = '' ; pwerrors    = ''
!x = ''
!x = !x 'idemailaddr idpassword idsignupreq idsignupchg',
        'idsignup'
attrs = space(!x,1)
Call signscrn
Signal exit
```

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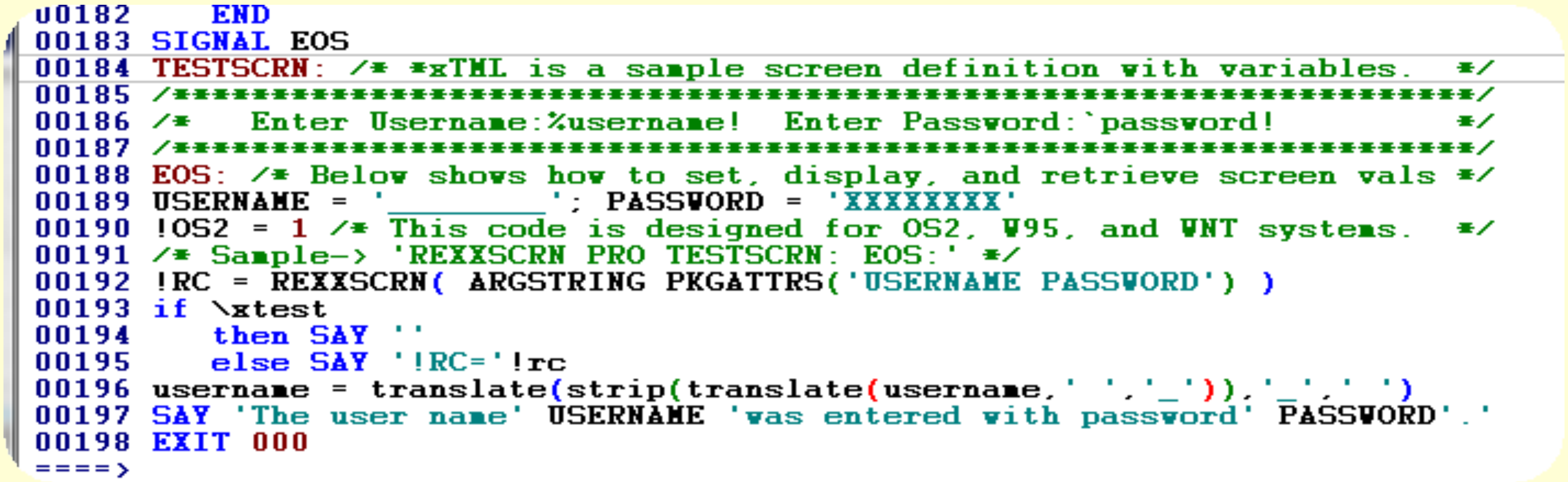
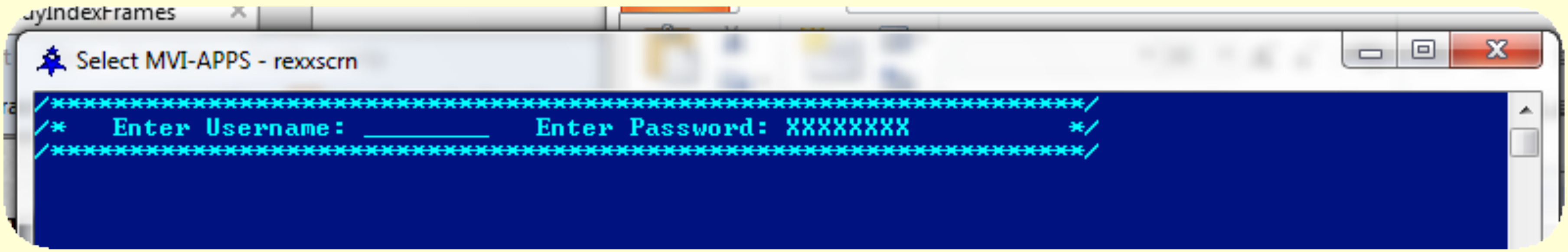
Imbedded panels defs logic upgraded from old ansi.sys code.



```
   END
SIGNAL EOS
TESTSCRN: /* *xTML is a sample screen definition with variables.   */
/*******************************************************************/
/*   Enter Username:%username!  Enter Password:`password!          */
/*******************************************************************/
EOS: /* Below shows how to set, display, and retrieve screen vals */
USERNAME = '________'; PASSWORD = 'XXXXXXXX'
!OS2 = 1 /* This code is designed for OS2, W95, and WNT systems.   */
/* Sample-> 'REXXSCRN PRO TESTSCRN: EOS:' */
!RC = REXXSCRN( ARGSTRING PKGATTRS('USERNAME PASSWORD') )
if \xtest
   then SAY ''
   else SAY '!RC='!rc
username = translate(strip(translate(username,' ','_')),'_',' ')
SAY 'The user name' USERNAME 'was entered with password' PASSWORD'.'
EXIT 000
====>
```



Select MVI-APPS - rexxscrn

```
/*******************************************************************/
/*   Enter Username: ________   Enter Password: XXXXXXXX           */
/*******************************************************************/
```

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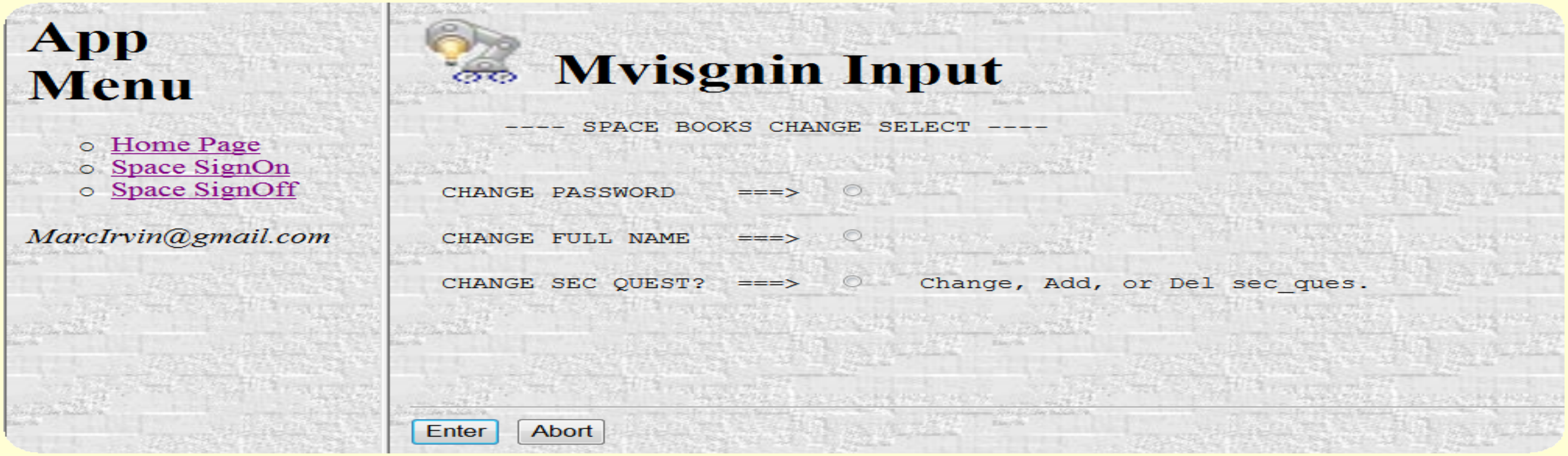
Global variables are handled as hidden HTML attributes.



App Menu

- Home Page
- Space SignOn
- Space SignOff

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Mvisgnin Input

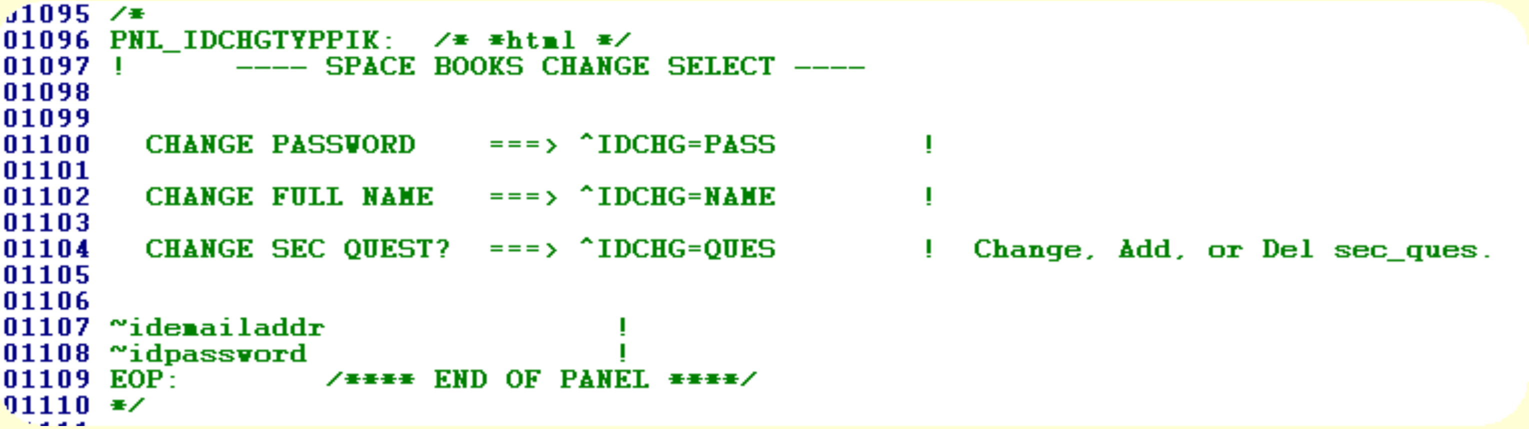
---- SPACE BOOKS CHANGE SELECT ----

CHANGE PASSWORD ===> ○

CHANGE FULL NAME ===> ○

CHANGE SEC QUEST? ===> ○ Change, Add, or Del sec_ques.

Enter Abort



```
/*
PNL_IDCHGTYPPIK:  /* *html */
!      ---- SPACE BOOKS CHANGE SELECT ----


  CHANGE PASSWORD    ===> ^IDCHG=PASS        !

  CHANGE FULL NAME   ===> ^IDCHG=NAME        !

  CHANGE SEC QUEST?  ===> ^IDCHG=QUES        !  Change, Add, or Del sec_ques.


~idemailaddr                 !
~idpassword                  !
EOP:        /**** END OF PANEL ****/
*/
```

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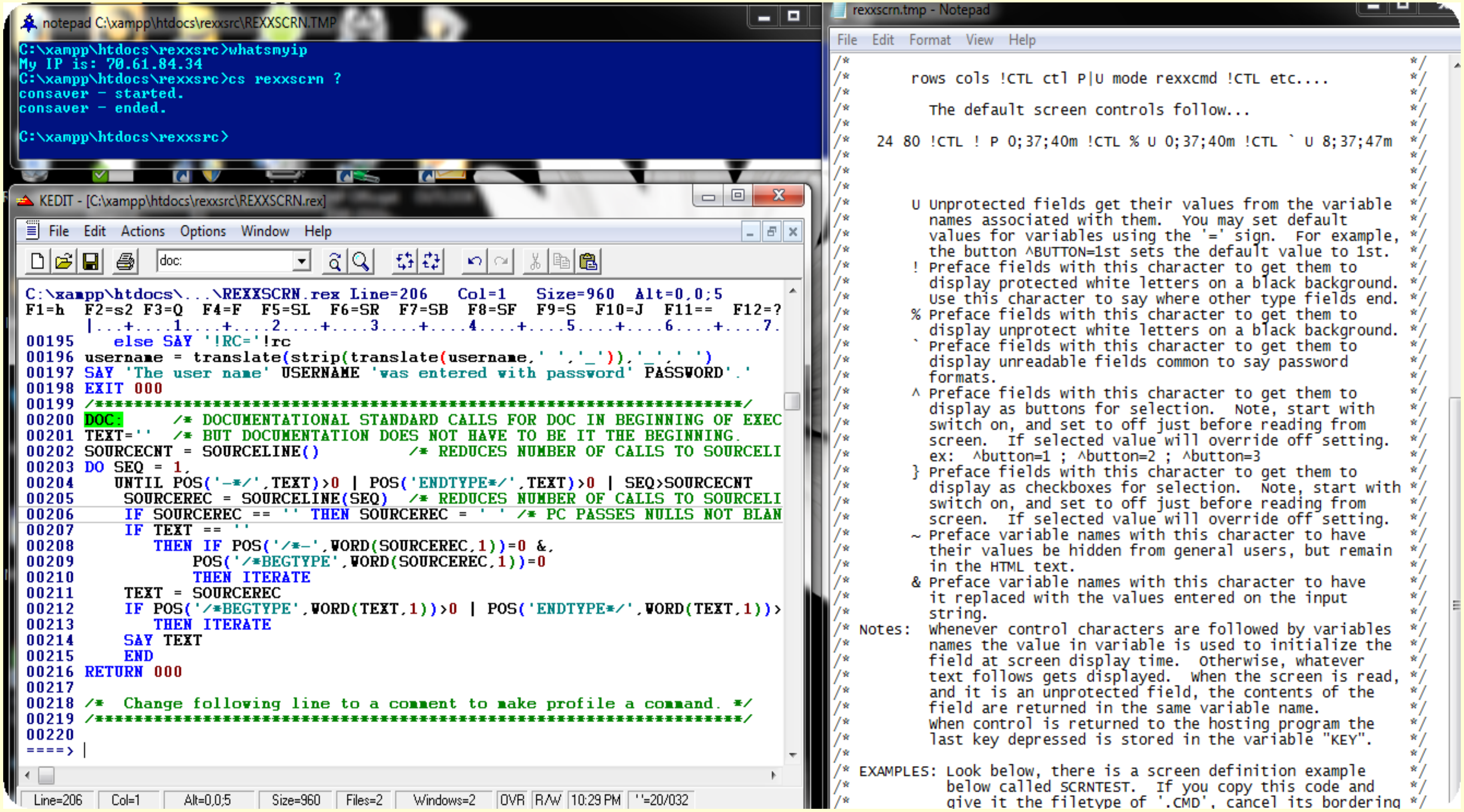
Listboxes, checkboxes, radiobuttons, PWs, and more supported


notepad C:\xampp\htdocs\rexxsrc\REXXSCRN.TMP
KEDIT - [C:\xampp\htdocs\rexxsrc\REXXSCRN.rex]
File
Edit
Actions
Options
Window
Help
doc:
rexxscrn.tmp - Notepad
File
Edit
Format
View
Help

```
C:\xampp\htdocs\rexxsrc>whatsmyip
My IP is: 70.61.84.34
C:\xampp\htdocs\rexxsrc>cs rexxscrn ?
consaver - started.
consaver - ended.

C:\xampp\htdocs\rexxsrc>
```

```
C:\xampp\htdocs\...\REXXSCRN.rex Line=206   Col=1   Size=960  Alt=0,0;5
F1=h  F2=s2 F3=Q  F4=F  F5=SL  F6=SR  F7=SB  F8=SF  F9=S  F10=J  F11==  F12=?
|...+....1....+....2....+....3....+....4....+....5....+....6....+....7.
   else SAY '!RC='!rc
username = translate(strip(translate(username,' ','_')),'_',' ')
SAY 'The user name' USERNAME 'was entered with password' PASSWORD'.'
EXIT 000
/*****************************************************************/
DOC:      /* DOCUMENTATIONAL STANDARD CALLS FOR DOC IN BEGINNING OF EXEC
TEXT=''   /* BUT DOCUMENTATION DOES NOT HAVE TO BE IT THE BEGINNING.
SOURCECNT = SOURCELINE()            /* REDUCES NUMBER OF CALLS TO SOURCELI
DO SEQ = 1,
   UNTIL POS('-*/',TEXT)>0 | POS('ENDTYPE*/',TEXT)>0 | SEQ>SOURCECNT
    SOURCEREC = SOURCELINE(SEQ)  /* REDUCES NUMBER OF CALLS TO SOURCELI
    IF SOURCEREC == '' THEN SOURCEREC = ' ' /* PC PASSES NULLS NOT BLAN
    IF TEXT == ''
       THEN IF POS('/*-',WORD(SOURCEREC,1))=0 &,
           POS('/*BEGTYPE',WORD(SOURCEREC,1))=0
           THEN ITERATE
    TEXT = SOURCEREC
    IF POS('/*BEGTYPE',WORD(TEXT,1))>0 | POS('ENDTYPE*/',WORD(TEXT,1))>
       THEN ITERATE
    SAY TEXT
    END
RETURN 000

/*  Change following line to a comment to make profile a command. */
/*****************************************************************/

====> |
```

```
Line=206  Col=1  Alt=0,0;5  Size=960  Files=2  Windows=2  OVR  R/W  10:29 PM  ''=20/032
```

```
/*                                                                   */
/*      rows cols !CTL ctl P|U mode rexxcmd !CTL etc....              */
/*                                                                   */
/*        The default screen controls follow...                       */
/*                                                                   */
/*   24 80 !CTL ! P 0;37;40m !CTL % U 0;37;40m !CTL ` U 8;37;47m      */
/*                                                                   */
/*                                                                   */
/*                                                                   */
/*      U Unprotected fields get their values from the variable      */
/*        names associated with them.  You may set default           */
/*        values for variables using the '=' sign.  For example,     */
/*        the button ^BUTTON=1st sets the default value to 1st.      */
/*      ! Preface fields with this character to get them to          */
/*        display protected white letters on a black background.     */
/*        Use this character to say where other type fields end.     */
/*      % Preface fields with this character to get them to          */
/*        display unprotect white letters on a black background.     */
/*      ` Preface fields with this character to get them to          */
/*        display unreadable fields common to say password           */
/*        formats.                                                   */
/*      ^ Preface fields with this character to get them to          */
/*        display as buttons for selection.  Note, start with        */
/*        switch on, and set to off just before reading from         */
/*        screen.  If selected value will override off setting.      */
/*        ex:  ^button=1 ; ^button=2 ; ^button=3                     */
/*      } Preface fields with this character to get them to          */
/*        display as checkboxes for selection.  Note, start with     */
/*        switch on, and set to off just before reading from         */
/*        screen.  If selected value will override off setting.      */
/*      ~ Preface variable names with this character to have         */
/*        their values be hidden from general users, but remain      */
/*        in the HTML text.                                          */
/*      & Preface variable names with this character to have         */
/*        it replaced with the values entered on the input           */
/*        string.                                                    */
/* Notes: Whenever control characters are followed by variables     */
/*        names the value in variable is used to initialize the      */
/*        field at screen display time.  Otherwise, whatever         */
/*        text follows gets displayed.  When the screen is read,     */
/*        and it is an unprotected field, the contents of the        */
/*        field are returned in the same variable name.              */
/*        When control is returned to the hosting program the        */
/*        last key depressed is stored in the variable "KEY".        */
/*                                                                   */
/* EXAMPLES: Look below, there is a screen definition example       */
/*           below called SCRNTEST.  If you copy this code and       */
/*           give it the filetype of '.CMD', cancel its bordering    */
```

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What components make it happen: CGIPARSE

```
!nx = 1
!hs = ''
do x = 1 while !qv \= ''
   parse var !qv !qt '=' !qd '&' !qv
   !qd = cgideweb(!qd,'+')
   if !qd == '+' then !qd = ' '
   if symbol(!qt) = 'BAD' then iterate
   ! = wordpos(translate(!qt),!hs)
   if ! \= 0
      then do
      parse value subword(!hs,!,2) with . !hx .
      parse value answ.!hx with . '= ' !hv
      !hv = substr(!hv,2,length(!hv)-2)
      !qd = strip(!hv'|'!qd)
      end
   if pos("'",!qd) = 0
      then do
      answ.!nx = !qt "= '"!qd"'"
      end
      else if pos('"',!qd) = 0
      then do
      answ.!nx = !qt '= "'!qd'"'
      end
      else iterate  /* illegal use of dbl-quote */
   !hs = strip(translate(!qt) !nx !hs)
   if !qt = 'xidnt' /* set the hidden value now */
      then !idnt = value(!qd)
   answ.0 = !nx
   !nx = !nx + 1
   end
do !nx = 1 for answ.0
   interpret answ.!nx
   end
```

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What components make it happen: REXXSCRN

```
SIGNSCRN:
xnam = 'mvisgnin.'!idnt'.htm'
!x = "mvisgnin.rex pnl_idsignin: eop:",
     "( *html *startoff *resp *idt("!idnt") *quiet",
     "*cginame(mvisgnin.rex)",
     "*icon(keynlock.gif)" pkgattrs(attrs)
!x = REXXSCRN(!x debug)
if !x = 0 then do
   address cmd 'TYPE' xnam '2> mvisgnin.'!idnt'.err'
   if result \= 0
      then do
      errormsg = 'Problem Typing' xnam 'into browser.'
      signal stop
      end
   end
if !x \= 0 then do
   errormsg = 'Problem displaying' xnam'.'
   signal stop
   end
return 0
```

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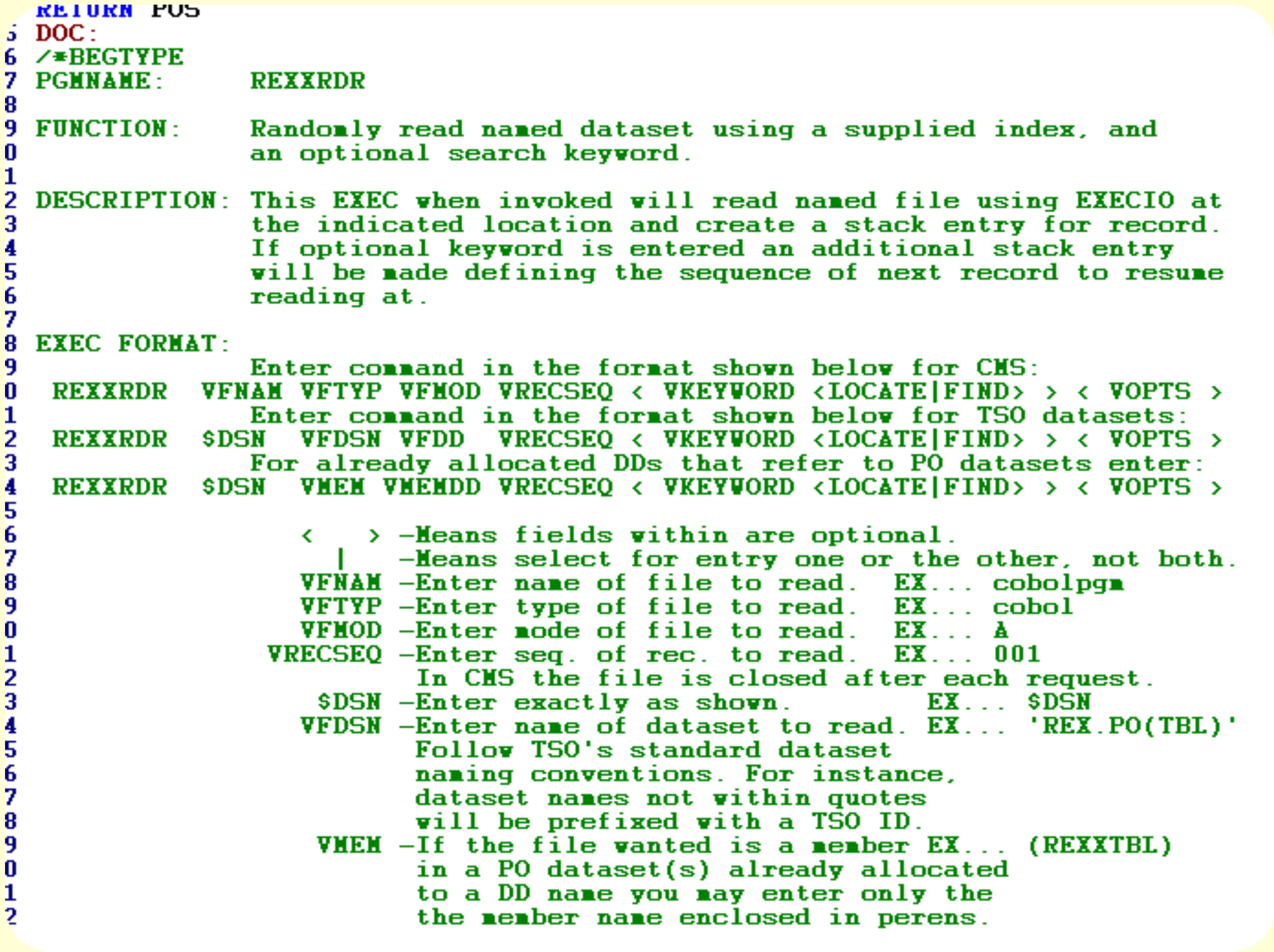
What components make it happen: REXXRDR



```
RETURN POS
DOC:
/*BEGTYPE
PGMNAME:     REXXRDR

FUNCTION:    Randomly read named dataset using a supplied index, and
             an optional search keyword.

DESCRIPTION: This EXEC when invoked will read named file using EXECIO at
             the indicated location and create a stack entry for record.
             If optional keyword is entered an additional stack entry
             will be made defining the sequence of next record to resume
             reading at.

EXEC FORMAT:
             Enter command in the format shown below for CMS:
 REXXRDR  VFNAM VFTYP VFMOD VRECSEQ < VKEYWORD <LOCATE|FIND> > < VOPTS >
             Enter command in the format shown below for TSO datasets:
 REXXRDR  $DSN   VFDSN VFDD  VRECSEQ < VKEYWORD <LOCATE|FIND> > < VOPTS >
             For already allocated DDs that refer to PO datasets enter:
 REXXRDR  $DSN   VMEM VMEMDD VRECSEQ < VKEYWORD <LOCATE|FIND> > < VOPTS >

                <   > -Means fields within are optional.
                  |   -Means select for entry one or the other, not both.
                VFNAM -Enter name of file to read.  EX... cobolpgm
                VFTYP -Enter type of file to read.  EX... cobol
                VFMOD -Enter mode of file to read.  EX... A
              VRECSEQ -Enter seq. of rec. to read.  EX... 001
                       In CMS the file is closed after each request.
                 $DSN -Enter exactly as shown.        EX... $DSN
                VFDSN -Enter name of dataset to read. EX... 'REX.PO(TBL)'
                       Follow TSO's standard dataset
                       naming conventions. For instance,
                       dataset names not within quotes
                       will be prefixed with a TSO ID.
                 VMEM -If the file wanted is a member EX... (REXXTBL)
                       in a PO dataset(s) already allocated
                       to a DD name you may enter only the
                       the member name enclosed in perens.
```

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QUESTIONS?