Select

Vincenzo Gervasi

COLLABORATORS

	TITLE : Select		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY	Vincenzo Gervasi	August 6, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

Select

1.1   Select/Except 1.8

```
                  Select/Except 1.8
~~~~~~~~~~~~~~~~~


  Select and Except are two incarnations of a program intended
to simplify the use of the
              patterns
               capability
of
              AmigaDOS
              .

- Select lets you execute a command on a subset of the files
  matching a given pattern;

- Except lets you execute a command on a subset of the files
  NOT matching a given pattern

Both Select and Except share the very same executable code, so you
can simply copy Select to your favourite directory and have a

              link
               to it under the name "Except".
You can also choose to have the installation automatically performed
by the supplied
              Install
               script.

Once Select/Except is installed, you can just have a try at it;
however, you should first know its
              syntax
               and
how to operate its
              GUI
              .

  Select/Except is ©1991-1993 by Vincenzo Gervasi of ICARUS ug.
```

This program is freely redistributable in its original, unmodified
form.

1.2 About AmigaDOS Patterns

                   About AmigaDOS Patterns
~~~~~~~~~~~~~~~~~~~~~~~

             AmigaDOS
              uses patterns to indicate a whole set of files with a
single expression.

A pattern includes one or more of the following special
characters:

             #
                 matches any number of the expression following it;

             ?
                 matches any single character;

             (..|..)
               matches two or more alternatives;

             [...]
                 matches a class of characters;

             ~
                 matches anything BUT the expression following it;

             %
                 matches the empty string.

 A single "'" before any of these characters overrides its special
meaning, treating it as a simple literal.

Any other character matches itself.

1.3 The # meta-character

The "#" meta-character
~~~~~~~~~~~~~~~~~~~~~~~

matches any number of occurrences (even zero) of the following
expression.

So, #a will match "", "a", "aa", "aaa" and so on, while #? will
match "any number of any character", i.e., everything.

```
# can be followed by complex expressions, as in

   #(a|b)

that matches any sequence of a or b, as "aaab" or "baba".
```

1.4 The ? meta-character

```
The "?" meta-character
~~~~~~~~~~~~~~~~~~~~~~~~

"?" matches any single character, like "q" or "3".

So, "???" will match any string of exactly three characters, like
"foo" or "bar".

You can use "?" in combination with other patterns:

#?  matches everything, while
#?.?  matches every string ending in ".?", such as "hello.c" and
  "hello.o".
```

1.5 The (..|..) pattern

```
                  The (..|..) pattern
~~~~~~~~~~~~~~~~~~~~~~

By using (..|..) you can specify that your pattern can match any
of a number of alternatives.

For example, (aa|abc) matches either "aa" or "abc".

You can also use (..|..) in complex constructs, such as

#?.(c|o|s) that matches every string ending in ".c", ".o" or ".s".

Sometimes you can use the
             [..]
              pattern instead.
```

1.6 The [..] pattern

```
                 The [..] pattern
~~~~~~~~~~~~~~~~~

You can use the [..] pattern to indicate a set of single characters.
So, [abc] matches "a", "b" and "c".

Note that this use of [..] is equivalent to
             (a|b|c)
```

         .

```
You can also specify sets of contigous characters by using the
dash "-".

For example,

   [0-9a-z]

matches any of the ten digits or any alphabetic character, and is
equivalent to the less handy

   [0123456789abcdefghijklmnopqrstuvwxyz]
```

1.7   The ~ meta-character

```
The "~" meta-character
~~~~~~~~~~~~~~~~~~~~~~~

The "~" symbol negates the expression that follows it.

So, while "#?.info" matches any string ending in ".info",
"~(#?.info)" matches any string NOT ending in ".info".

When using "~" be careful not to forget parenthesis...

~#?.info would have negated only the "#?" part, resulting in
"any string NOT matching #?, followed by .info" (i.e., no string
at all).

You can use "~" in complex constructs:

   #?~(.c|.o)

matches any file NOT ending in ".c" or ".o".
```

1.8   The % meta-character

```
                 The "%" meta-character
~~~~~~~~~~~~~~~~~~~~~~~

The "%" character matches the empty string always.

It is sometime useful with
             (..|..)
             to indicate an empty
alternative, as in

   hello(.c|.o|%)

that matches "hello.c", "hello.o" and "hello".
```

1.9 AmigaDOS

```
About AmigaDOS
~~~~~~~~~~~~~~
```

AmigaDOS is the Amiga's Disk Operating System; as such, it handles
disk operations such as writing, reading, renaming and formatting.

It also includes a command processor, known as the "Shell" or
"CLI"; you can type commands in a Shell and AmigaDOS will execute
them for you.

1.10 Select/Except's syntax

```
              Select/Except's syntax
~~~~~~~~~~~~~~~~~~~~~~~
```

The syntax of Select (or Except) is very straightforward:

just prepend "select" to your usual command to expand its pattern
capabilities.

For example,

  select more #?.doc

would let you call "more" using a pattern (usually, more can't
handle patterns).

Select uses the first pattern found in its command line for
graphical selection.

When in
             Separate
              mode, the command line can also contain
any of several
             Special symbols
              .

1.11 Special Symbols

```
              Special Symbols
~~~~~~~~~~~~~~~~
```

When using Select (or Except) in
             Separate
              mode, you can
use several special symbols on the command line.

Each of them expands to a part of the full name of the file
matching the pattern, as specified in the following table:

```
    With        You Get
    ----        -------

            %P or %p
              the file's path

            %N or %n
              the file's name

            %B or %b
              the file's basename

            %E or %e
              the file's extension
```

"%" followed by any other character produces the character itself,
so you can obtain a true "%" by specifying "%%".

On a file name of "RAM:t/hello.c.info" the various parts are:

```
            %p
              RAM:t/

            %n
                hello.c.info

            %b
                hello.c

            %e
                  .info
```

1.12 Usage of %p

```
      Usage of "%p"
      ~~~~~~~~~~~~~
```

When expanding the command line, %p gets replaced by the file's
complete path.

So, if we have a file "RAM:t/hello.c",

  select echo ram:t/#?.c %p

would echo, "ram:t/hello.c ram:t/"

1.13   Usage of %n

```
Usage of "%n"
~~~~~~~~~~~~~

When expanding the command line, %n gets replaced by the file's
own name.

So,

   select rename #? %n.old

would rename "hello.c" to "hello.c.old".
```

1.14   Usage of %b

```
Usage of "%b"
~~~~~~~~~~~~~

When expanding the command line, %b gets replaced by the file's
"basename", i.e., its name with the extension part (if any)
removed.

So,

   select rename #? %b.bak

would rename "hello.c" to "hello.bak".

Please note that "hello.c.info" would be renamed to "hello.c.bak".
```

1.15   Usage of %e

```
Usage of "%e"
~~~~~~~~~~~~~

When expanding the command line, %e gets replaced by the file's
extension (if any).

So,

   select rename hello.#? aloha%e

would rename "hello.c" to "aloha.c" and "hello.o" to "aloha.o".

Please note that "hello.c.info" would be renamed to "aloha.info".
```

1.16   Select's Graphical User Interface

```
                    Select's Graphical User Interface
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Select/Except is mainly intended to supply a GUI to Shell
commands.

Select offers a window with several
                gadgets
                 and
a couple of
                menus
                .

The window shows a list containing all the files and directories
whose name matches the pattern given on the
                command line
                .

1.17   The Gadgets

```
                    The Gadgets
~~~~~~~~~~~~
```

Select's window contains:

– A big
                list
                 of names on the left;

– Several gadgets on the right:

                All
                        Selects all the names in the list;

                None
                        De-selects all the names;

                Invert
                    Invert the selection;

                Separate/Together
                  Mode of execution;

                EXECUTE
                    Execute the command;

                ?
                        Calls the ASL filerequester;

– A
                string gadget
                 at the bottom with the command to execute.

1.18 The names list

```
                The names list
~~~~~~~~~~~~~~~
```

This list contains all the names matching the given pattern, or
added later with the
```
                ?
                 gadget.
```

Selected names are shown with a "»" near to them. You can select
a name by clicking on it, or by using the
```
                All
                ,
                None
                 and

                Invert
                 gadgets.
```

Keep in mind that the command you indicated will be executed only
on the files and directories you selected !

1.19 The All Gadget

```
                The "All" Gadget
~~~~~~~~~~~~~~~~~
```

By clicking on the All gadget, you will select every name in the
```
                list
                 .
```

1.20 The None Gadget

```
                The "None" Gadget
~~~~~~~~~~~~~~~~~~
```

By clicking on the None gadget, you will de-select every name in
the
```
                list
                 .
```

1.21   The Invert Gadget

```
                  The "Invert" Gadget
~~~~~~~~~~~~~~~~~~~

By clicking on the Invert gadget, you will invert the selection:
every selected name in the
              list
               will become unselected, and
every unselected name will become selected.

Clicking again on the Invert gadget will restore the original
selection.
```

1.22   The Separate/Together Gadget

```
                  The "Separate/Together" Gadget
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

This one is a two-state gadget.

When it indicates "Separate" a different instance of the command
you specified will be run for every selected name; when it
indicate "Together" all the selected names will be jammed together
in a single command line.

For example, if the
              list
               shows that "a", "b" and "hello"
are selected, and the
              command
               gadget shows "echo #?", the
two options are:

Separate: echo a
    echo b
    echo hello

Together: echo a b hello

When in Separate mode, you can use several
              Special symbols
                in your command line.
```

1.23   The Execute Gadget

```
                  The "EXECUTE" Gadget
~~~~~~~~~~~~~~~~~~~~~

After selecting the names you want and choosing a mode of execution
with the
              Separate/Together
```

```
                gadget, you can click on EXECUTE
to start actually executing the command.

After clicking EXECUTE, Select's window will go away and your
command (or commands) will be executed.

Please note that the order of execution is the same as shown
in the
                list
                . You can use the
                Sort by
                 menu to change this order.


Every command executed will be echoed to the
                Shell
                 window you
issued the select command from.
```

1.24 The ? Gadget

```
                The "?" Gadget
~~~~~~~~~~~~~~~~

When you click on the "?" gadget, you will be presented with the
standard ASL file requester.
You can select one or more names from it; any selected name will
be added (in selected state) to the
                list
                .
```

1.25 The Command String Gadget

```
                The Command String Gadget
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

This string gadget contains a copy of the command you indicated
when you ran Select or Except. You can change the contents of the
gadget; the effect is identical to quitting Select and restarting
it with the new
                command line
                .
```

1.26 Select's Menus

```
                Select's Menus
~~~~~~~~~~~~~~~~

Select (or Except) offers two menus:
```

```
                    Project

                    Sort By
```

1.27 The Project Menu

```
  The "Project" Menu
  ~~~~~~~~~~~~~~~~~~

  The Project menu contains only two items:

    About    Usual stuff...
    Quit     Quits Select
```

1.28 The Sort By Menu

```
                   The "Sort By" Menu
  ~~~~~~~~~~~~~~~~~~

  The Sort By menu lets you sort the names in the
                list
                 in the
  order you specify.

  The items are:


                Disk Order

                Alpha Order

                Numeric Order

                Extension

                Numeric Extension

                Ascending Order

                Descending Order

                Save Settings
                   The first five items are mutually exclusive; so are the sixth  ←
                       and
  seventh ones.. The order selected is preserved across different
  executions of Select.
```

1.29 Sort By: Disk Order

```
                 Sort By: Disk Order
~~~~~~~~~~~~~~~~~~~~

 The names are sorted in the order they came off the disk (i.e.,
 no recognizable order at all).

 It's faster than the other modes, and may be useful to minimize
 disk trashing on fragmented floppies.

 Please note that choosing this mode will clear any selection
 you may have made in the
               list
               ; any name added
 via the
               ?
                gadget will be lost.
```

1.30 Sort By: Alpha Order

```
 Sort By: Alpha Order
~~~~~~~~~~~~~~~~~~~~~

 The names are sorted in lexicographic order (the usual ASCII
 order, but case insensitive).
```

1.31 Sort By: Numeric Order

```
 Sort By: Numeric Order
~~~~~~~~~~~~~~~~~~~~~~~

 The names are sorted taking into account their numeric value, in
 ascending order.

 For example,

   124.msg   yelds   124
   Select15.lha  yelds    15
   Hello.c   yelds     0
```

1.32 Sort By: Extension

```
 Sort By: Extension
~~~~~~~~~~~~~~~~~~~

 The names are sorted following the lexicographic order (the usual
 ASCII order, but case insensitive) of their extensions (the
```

```
part after the last "." in the name).
```

For example,

```
  124.msg   has extension   msg
  Select15.lha  has extension   lha
  Hello.c   has extension   c
  Hello.c.info  has extension   info
```

1.33 Sort By: Numeric Extension

```
                Sort By: Numeric Extension
~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

The names are sorted following the numerical value of their extensions.

See also

```
          Sort By Numeric Order
           and
          Sort By Extension
           .
```

1.34 Sort By: Ascending Order

```
                Sort By: Ascending Order
~~~~~~~~~~~~~~~~~~~~~~~~~
```

The names are sorted in ascending order: "A..." comes before "Z...", and 1 before 2.

See also

```
          Sort By: Descending Order
           .
```

1.35 Sort By: Descending Order

```
                Sort By: Descending Order
~~~~~~~~~~~~~~~~~~~~~~~~~
```

The names are sorted in descending order: "A..." comes after "Z...", and 1 after 2.

See also

```
          Sort By: Ascending Order
           .
```

1.36 Save Setting

                    Sort By: Save Setting
~~~~~~~~~~~~~~~~~~~~~~

Usually, the sort order you chose is remembered for an entire
session (until you reset or power down your Amiga).

You can use the "Save Setting" item to have the current sort type
selection saved permanently.

Note that this also applies to the
                Separate/Together
                 state.

1.37 How to make a link

                    How To Make A Link
~~~~~~~~~~~~~~~~~~~

      Since Select and Except share the same code, a single copy of the
      executable is enough.

You can use the
                AmigaDOS
                 command MAKELINK, whose
syntax is

  MAKELINK <from file> <to file>

In our case, you must issue

  makelink Except Select

You could also make a copy, by using

  copy Select Except

but by using the link you save almost 20k on your disk.

Please note that you can use the makelink command only if the

                file system
                 you are using supports links; otherwise,
you should make a copy of Select named Except, as described
above.

All the AmigaDOS-supplied file systems support links; most
thirdy-part ones don't.

1.38 About File Systems

```
About File Systems
~~~~~~~~~~~~~~~~~~

A file system is a software module that lets you store and
retrieve files on some media (usually, a magnetic disk).

The Amiga can use multiple, different file systems.
Some of the most common ones are:

- OFS, the original Amiga file system;
- FFS, the Fast File System introduced in OS 1.3;
- RAM-FS, that handles the RAM: device;
- DCFS, the Directory Caching File System, introduced in OS 3.0;
- Cross-DOS, an MS-DOS compatible file system (in the OS since 2.1);
- Messy-DOS, another MS-DOS-like file system.
```

1.39 Using the Install script

```
                  Using The "Install" Script
~~~~~~~~~~~~~~~~~~~~~~~~~~~

To automatically have Select/Except installed, you only need to
open a
             Shell
              window and type

  install <directory>

substituting to <directory> the path of the directory where you
want Select/Except installed. It is better to use a directory
that is in your usual command path (C: always is).

The Install script will copy Select to your <directory> and make
a link to it as Except, if possible, or copy it as Except, if not.

You could prefer to have an alias to Select as "sel", or something
similar.
```

1.40 index

```
                  Index
~~~~~

    o
             Introduction
               What is it all good for ?

    o
             The Install Script
```

How to install Select on your system.

○

Patterns
    What you need to know on AmigaDOS patterns.
_

#
,
?
,
(..|..)
,
[..]
,
~
 and
%
.

○

Select's Syntax
    How to use Select from the CLI or the Shell.
_

% codes
:
%p
,
%n
,
%b
 and
%e
.

○

Select's GUI
    How to operate Select.
_

Gadgets
:
list
,
All
,
None
,
Invert
,
Separate/Together
,

EXECUTE
,
?
 and
command string
.

```
    _

                   Menus
                   :
                   Project
                    and
                   Sort By
                   .

    o
                   The Author
                     Who did it ?
```

1.41 The Author

Select/Except was written (and is copyrighted) by Vincenzo Gervasi,
from ICARUS.

The Author can be reached on

  Internet: vigi@icarus.adsp.sub.org
      vigi@wolf.sublink.org
      gervasi@cli.di.unipi.it   (before Jan '94)

  FidoNet: 2:33/800.21
      2:332/602.21

Any and every bug report or suggestion is welcome.