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*
*   MAGAZINE INDEX SYSTEM   *
*   version 1.1             *
*
*   By Bob van der Poel    *
*
*   REFERENCE MANUAL       *
*
*   copyright 1985         *
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REQUIRES
16K RADIO SHACK COLOR COMPUTER
AND DISK OPERATING SYSTEM
WITH 1 DISK DRIVE

* * I M P O R T A N T * *

PLEASE BACKUP YOUR ORIGINAL DISKETTE BEFORE YOU CONTINUE AND PUT IT IN A SAFE PLACE. NEVER WRITE TO THE ORIGINAL.

THIS PROGRAM MAKES EXTENSIVE USE OF RANDOM ACCESS DISK FILES. BECAUSE OF THE LARGE NUMBER OF DISK ACCESSES, A DISK MAY DEVELOP FLAWS OVER TIME. FOR THIS REASON, AS WELL AS NORMAL GOOD OPERATING PRACTICE, MAKE FREQUENT BACKUPS OF YOUR WORKING DISKETTE.

THIS SOFTWARE IS OFFERED FOR SALE ON AN "AS IS" BASIS. NO GUARANTEES ARE MADE OR IMPLIED.

Introduction

Thank you for purchasing MAGAZINE INDEX SYSTEM. We hope it will help you in keeping track of your magazine articles. Please show this program to your friends. If they like it, ask them to buy their own copy. Continued customer support will enable the author to develop more utilities for this program and correct any bugs that may pop up. Continued sales also help to feed the family. Please do your part to stop software piracy . . . it hurts everyone.

To back up your original diskette follow the procedure for the BACKUP command in your disk operating system manual. Once you have made a backup, put the original diskette away in a safe place.

Please note that the programs on in this software package are supplied on a "flippy" diskette. There are programs and data files on both sides of the disk. To access the other side just turn the disk around so that the second (rounded) write-protect notch is facing up. We do not recommend this method of storage for diskettes which are going to have heavy use, but for backup purposes they seem to work well. We have chosen this method of

supplying the programs in this package to you to save you money.

This manual will discuss each menu item, and each sub selection, as they occur. It is advised that you work through the manual with the program running. Enter some dummy data to start. Then when you feel more familiar with the program, make a new working disk and enter your data.

Data for your articles is stored in random access disk files in a compressed format. Data compression results in files that are only 75% the size of normal files; however, files still do grow larger than a disk can hold. For this reason we suggest that you break your magazines into categories. For example, you may wish to enter all your Color Computer articles into a single file (the author's own extensive collection fits into four files, all on one disk with some free granules of disk space still left over). But due to the size problem, why not open a new file each year? Now all your 1984 information will be a single file. On the other hand, if you are cataloguing articles on coin collecting and dog grooming, (and the total number of articles will never be all that great) you might want to have a file called "COINS" and another called "DOGS."

Input conventions

This program contains three specialized input routines. The first is for entering string data (eg. a line of text). This string entry routine is different from the one contained in BASIC. Any letter can be entered by typing it from the keyboard, just like in BASIC, but the cursor is non-destructive. It can be moved over the entered text, without affecting it. To move the cursor, use the <LEFT ARROW> and <RIGHT ARROW> keys. If you wish to delete a character, position the cursor over it, and press <BREAK>. To insert a space at the cursor, press <CLEAR>. Note that the last character (the 60th character) will be lost when inserting blanks. A typamatic feature has also been incorporated into the entry routine. Any key held down for more than about a second and a half will start repeating. This is particularly useful for moving the cursor and inserting or deleting characters. To end data entry, press <ENTER>. The position of the cursor is not important when you press <ENTER>, all the data in the block will be accepted.

Whenever you are asked to enter a number, you will see a flashing black cursor. You will only be able to enter numbers in this mode. If you make a mistake, use the <LEFT ARROW> to back up over the number. When you have finished typing in the number, press <ENTER>. The number will now be checked to make sure it is within the specified parameters. If it is not, a tone will be sounded, and you will be prompted to enter the number again.

The third routine is used to answer prompts that only require one character answers. The routine uses a cursor that blinks in an up/down fashion. Whenever you see this cursor, you must press one of the keys indicated. All other keys will be ignored. Do not press <ENTER> after pressing the key.

Getting started

To operate this program, insert your backup disk into drive 0 and type:

PCLEAR 1 <ENTER>

RUN "INDEX" <ENTER>

NOTE: The "PCLEAR 1" is only required for those customers with 16K systems.

After a few seconds, the title screen will appear. Press any key to continue the program's operation.

The first thing you will see is a prompt asking you for the working drive number for your data files. This can be any number from 0 to 3 -- so long as you have these drive numbers in your system. Also note the warning in the prompt. Never change diskettes at any other time. Files are left open and if you were to switch disks at another time serious data loss on both the old and new disks could occur.

The disk drive will now turn on again. The disk is being checked for INDEX data files. These are any files with the extension "Idx" (~~note the lowercase letters~~). If no files are present you will be prompted for a filename to open. For details on this see "Opening new files," below.

A listing of the various files on the disk will now appear. If you are using the backup copy of the program, you should have 3 entries:

- 1> 1984
- 2> 1985
- 0> CHANGE DATA DISK

Item 0 is not a file, but a option for those who have more than one data disk. This option will be discussed latter. For now, just type:

1 <ENTER>

1984 will be opened and you will see the main program menu.

1984 is one of 4 sample data files provided to make you more familiar with MAGAZINE INDEX SYSTEM. (The other two files are on the flip side of the disk.) These files are the author's own index files (complete with errors and spelling mistakes). They contain information on various Color Computer magazine articles including Chromasette, The Rainbow, Color Computer News (CCN), Hot CoCo, The Color Computer Magazine (TCCM) and some others. This is not meant as a comprehensive index -- it's just a sample to get you started.

At the top of the menu a status display is provided. The first item is the total number of records (entries) in the file that is currently open, next is the name of the current file. The third item is the number of free granules remaining on the disk in drive 0.

Next are the six menu choices. Each choice can be selected by pressing the key corresponding to the first letter in the option. For example, to select the "Search" option, press <S>. Each menu choice will now be discussed.

Add new data

This option is used to add new records to the file that is currently open. When selected, a new screen will appear with a green block on a black screen. The flashing black block is the cursor. At the top of the screen you will see the record number of the new entry and a prompt to "enter the description."

The data is stored on the disk in a compressed format. Even though there is nothing to prevent you from entering lowercase letters, don't. When lowercase letters are compressed, they will be changed to uppercase ones. No data will be lost when this happens. This applies only to lowercase (inverse video) characters. Symbols and numbers are not affected.

To enter a description, just type in a brief review of the article. You are limited to 60 characters, but this should be enough for any situation. Quite often, the title of the article contains enough description in itself. For example an article on sorting may be entitled "Put Strings in Order with a Bubble Sort." In this case, the title may be an adequate description. On the other hand, the title "String, String, Where's the String", would be next to useless. In the case of the latter an entry like "BUBBLE SORT FOR STRINGS IN ML" may be more appropriate.

When typing in descriptors, use as many keywords as you can think of at the time. For example, an article on the dangers of trout fishing in Alaska, might read "TROUT, ALASKA. DANGERS & USING GUIDES." Now whenever you search for "DANGER" or "TROUT" this record will be listed. Note that "FISH" and "FISHING" were not included. This is deliberate -- either of these words would be superfluous in a file dealing with fishing articles.

When you have finished typing in the description, press <ENTER>. You will now be prompted to enter the source. This field contains 20 characters. It should include the page number, month, year and name of the magazine or periodical. Again, press <ENTER> when the description is complete.

You will now be asked "Is data correct?" If you wish to change anything, press <N> and you will be returned to the "Enter description" mode, with the entered text intact. <ENTER> again takes you to the next step, and eventually the "correct?" prompt. If you answer <Y>, the entered data will be filed.

You will now be asked for another description. After entering it, the last source will be redisplayed. Presuming the next

article is from the same magazine, all you need do is change the page number. For this reason it is suggested that page numbers be at the beginning of this field.

When you are finished entering data, press <ENTER> without entering any data in the description field (if you've already entered something, and you want to quit, position the cursor to the first position and hold down <BREAK> until all the text has been cleared). This will return you to the main menu.

Edit current file

Since we're all only human -- not perfect like our computers -- we sometimes make mistakes. For this reason a edit facility has been included in the program. Edit can also be used to review the entries you added during the last session.

When you first select Edit, the screen will show the last record in the file. To scan through the file, use the <UP ARROW> and <DOWN ARROW> keys to flip from one record to the next. To view a specific file, press <J>, followed by the record number.

To edit a record, press <ENTER>. You will now see the cursor positioned over the first character of the description. Make any changes you want, press <ENTER> and do the same for the source. You will now be returned to the scan mode of Edit.

When you are finished editing, press <BREAK> to return to the main menu.

Search files

This mode will allow you to retrieve the data you spent all that time entering. If there is more than one INDEX file on the disk in the current working drive, you will be asked if you wish to check all the files or only the current one. If you press <A>, all the files on the diskette will be scanned for the target data. When the search is complete, the original current file will be reopened.

Next you must enter the keywords you want the computer to search for. You can enter up to any number of keywords you wish, so long as the total size of the resulting string does not exceed 255 bytes.

To enter the subjects to search for, type a number of keywords you think will access your article. Separate each keyword (or phrase) from the next with a comma. (The use of a comma between keywords means that commas can not be part of your word or phrase.) The up arrow can be included in any word as a wild card character.

There are a few peculiarities in this method of inputting data you should be aware of. First, if you put in 2 commas by mistake any terms after the comma pair will be ignored. Eg. "HELLO,GOODBYE,,TEST" will only search for HELLO and GOODBYE. No search will be done for TEST. Second, you can input your data in

upper or lowercase. The routine will convert all lowercase to upper for matching purposes. Third, if you enter this routine after an initial search you will see your pervious data already in the input window. This is convenient if you have misspelled something or if you wish to check another file. This data can be edited in the normal manner.

When you have finished typing your terms press <ENTER>. You will now be asked if you wish the data to be displayed on the screen or the printer. If you select <P>, make sure the printer is ready and on line. The program does not check to see it is ready.

Try to be as specific as possible when entering words. For example, let's say you were looking for information on creating multiple choice exams. If you were to enter "TEST" as a target, all of the following records would be displayed:

1. MULTIPLE CHOICE TEST MAKER IN BASIC
2. TESTING 64K RAM CHIPS
3. PRETESTING COLLEGE APPLICANTS

and if "EXAM" were to entered as the second target string:

4. HOW TO USE THE COMPUTER IN MAKING EXAMS
5. EXAMINATION RESULTS CAN BE COMPUTERIZED

would also be found.

Note that "TEST" and "EXAM" were entered as seperate words by using commas between them, ie. TEST,EXAM. If you entered "EXAM TEXT" as one term, only those records with this exact wording (including the one separating blank) would be displayed. In general, the shorter the target, the more records will be found containing it.

If you can't find a record you know is in the data base, try a different spelling or an alternate keyword. Some persistence and imagination usually pays off in finding the information you want.

While the search is going on, the top of the screen will show the record being checked and the filename. When a match is made, the record will be displayed on the screen or printed, depending on the option chosen. If the printer was selected, the search will continue to the end of the file (or to the last file if multiple files are being searched). If the screen option was selected, the program will pause for you to read the data. You can now continue the search by pressing <ENTER>, print the record on the printer by pressing <?> (again, make sure the printer is ready first).

You can end the search at any time by pressing <BREAK>.

When the search is complete, a report will list the number of matches found. Press <ENTER> to return to the main menu.

Change current file

You can change the current file at any time by selecting this option from the main menu. Then, just select the number of the

file you wish opened, and the program will continue.

Be careful with disks that contain multiple files. Once you add data to a file, it can not be deleted (it can only be edited). Nothing is more frustrating than adding data to the wrong file -- so: BE CAREFUL WHEN OPENING FILES!

This option can also be used to change disks if you have more than one data disk. Select item 0 from the choices offered. You will be prompted to enter the number of your working drive. Change disks if necessary and input the correct number and <ENTER>. The new disk will be read for files, and program execution will continue.

CAUTION: ALWAYS USE THIS OPTION TO CHANGE DISKS. ANY OTHER PROCEDURE MAY RESULT IN DATA BEING WRITTEN TO THE WRONG FILE, OR FILES AND DIRECTORIES BEING DESTROYED!

Open new file

When you select this option, you will first be asked if you are sure that you want to open a new file. If you answer <Y> you will next be prompted for a filename. The filename can be up to eight characters long. If the filename is one that already exists on the disk, or if it contains a ".", "/" or ":" you will be shown an error message, and prompted to enter the name again.

Note that only 12 INDEX files are allowed on a disk.

When the program is run with a disk that does not have any INDEX files on it in drive 0, you will be asked for a filename before continuing to the main menu.

Basic (end program)

When you are done using the program, use this option to end. The option will make sure all the files are closed, resets your disk drives to track 0 (this avoids the thunking you often get when loading a new program after a cold start), and erases the program from memory by doing a cold start.

When you select this option, you will first be asked if you are sure you want to end. Pressing <N> will return you to the main menu. <Y> will return you to BASIC.

Always use to end the program. Never press RESET -- files will not be closed and data losses may result.

Errors

This program has been extensively tested and debugged. The only errors which should ever occur are of the I/O type (eg. write protect, disk full, input/output, etc.) If any error should occur the program will execute the following series of commands:

1. Close any open data files.

2. Print the error type (using the standard abbreviation) at the bottom of the screen.
3. Wait for a key to be pressed by the operator.
4. Restart the program operation.

Transfer

As you use MAGAZINE INDEX SYSTEM you will create a sizable data base. Unfortunately, this data base cannot be read by other programs. For this reason a utility program has been included. TRANSFER will convert an INDEX file to standard ASCII, or convert an ASCII file to INDEX format.

Transfer is self prompting and easy to use. Files can be located on any drive in you system. To run it simply type:

```
RUN "TRANSFER" <ENTER>
```

With this utility you can now use a word processor or data base program to change INDEX files, or you could convert another data base to INDEX. You could also use TRANSFER to restructure your INDEX files. For example, you may want to create a new file from the sample files supplied with only data on Chromasette Magazine in it. The following procedure would accomplish this task:

1. Convert all the data files to ASCII format using TRANSFER.

2. Scan each file for CHROMASETTE enteries and write any entries found to a new file. Following is the short BASIC program which might be used:

```
10 OPEN "O",#1, "CHROMAS.DAT:0"  
20 INPUT "FILE NAME";F$  
30 IF F$ = "" THEN CLOSE:END  
40 OPEN "I",#2,F$ + ".DAT:1"  
50 IF EOF (2) THEN CLOSE#2  
   :GOTO 20  
60 LINE INPUT #2,D$  
  70 LINE INPUT #2,S$  
80 IF INSTR (S$, "CHROM") = 0 THEN 50  
90 PRINT #1,D$  
100 PRINT #1,S$  
110 GOTO 50
```

3. Finally, create a new INDEX file using TRANSFER.

A few cautions when using TRANSFER:

First, when converting INDEX files to ASCII, the new files will be 133% the size of the original. This means a 30 granule file will grow to about 40 granules. Make sure the destination disk has enough room on it.

Second, when converting ASCII files to INDEX format, make sure the data is in the correct order. Files to be transferred should contain the data in the order DESCRIPTION, SOURCE, DESCRIPTION, SOURCE, etc. If any descriptions are longer than 60 characters, or sources are longer than 20 characters, they will be truncated. Note also that lowercase characters will be converted to uppercase.

A_BASIC_Bug

If you are a user with 4 disk drives and DOS 1.0, do not use the third drive to save file data on. If you do, you will find that entire system crashes will occur from time to time. It seems that you can read, copy, etc. to drive 3, but if you write to it with PRINT# commands the system crashes. This is not a fault with INDEX, it is a bug in the ROM which has been corrected in DEB 1.1.