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Introductory DataPerfect® Instruction

A Project

Presented to the

Department of Industrial Education

Brigham Young University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

© Frances Jenson Larsen
April 1990

This project by Frances Jenson Larsen is accepted in the present form by the Department of Industrial Education of Brigham Young University as satisfying the project requirement for the degree of Master of Science.

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14 Mar 1990

Date

Garth A. Hill

Department Chairman

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PREFACE

The experience of earning a masters degree is challenging. There are times of disappointment and times of joy and excitement. Seeing this goal become a reality is a source of pride.

I express thanks to Craig, my husband, and our children, Shelly Ann, Hans Peter, and Richard Craig, who have constantly lived with "Mom is going to be late again tonight." I am also grateful to friends who know how to pull together. The assistance of professors and other personnel at Utah Valley Community College, Springville High School, and Brigham Young University is also appreciated. Most importantly, I acknowledge my God for His continual kindness and love.

CHAPTER 1

NEED AND IMPORTANCE

Statement of the Problem

The most common personal computer applications in the business world are word processing, spreadsheets, and database management. ("Integrated Packages," 1990, p. 33) Springville High School, like many other secondary schools, currently has competent and efficient learning materials for word processing and spreadsheets. There are, however, no units of instruction for students to learn introductory concepts using the database program DataPerfect®.

Need

This project was initiated because of the need for high school students to be introduced to a database-type program in business classes. It is also intended to help students become computer literate. To be computer literate, a person should have the skills and knowledge dealing with technology that will allow a person to function successfully in an information-based society. (Upchurch and Lochhead, 1987, p. 152) Therefore, these introductory materials in database management are essential for the curriculum to be complete.

Justifications

Software. Some of the computer programs used by
Springville High School are marketed by the WordPerfect
Corporation of Orem, Utah. These include: WordPerfect®
(word processing); PlanPerfect® (spreadsheet); and
DataPerfect® (database management). WordPerfect®, at
present, dominates the word processing field. Worldwide,
WordPerfect® is the market leader with a market share of
36.5 percent. The domestic market share is even greater and
continues to increase. (WordPerfect--Worldwide, 1989)
Springville High School chose to use this word processing
program together with WordPerfect®'s integrated programs.

One of the benefits of this choice is that each of the integrated programs offers similar basic features. For example, printing is handled with the same command and Help Menus can be found using the same keys. The function structure matches. (WordPerfect, 1990) Whenever old learnings assist the acquisition of new learning, this is referred to as positive transfer. Teachers can utilize this transfer to increase learning. (Hunter, 1971, p. 3)

Another advantage is the ability of the user to move files into other programs. It is a simple operation to bring a database report into a word processing file so they can be printed as one article. The software is fully

compatible. (WordPerfect, 1990) Therefore, DataPerfect® was chosen as the software for this project.

<u>Instructional Units</u>. Learning packages were chosen as the medium to use because the activities encourage student involvement. Student involvement is mandatory to learning computer operations, skills, and techniques.

Grump (1969) found that the level of student involvement in supervised study and independent seat work was seventy-five percent. This is the type of activity that is identified with computer learning packages. A teacher can work with individual students or can conduct small group sessions while the rest of the class is productively working.

The only types of activities that were higher--teacherled small groups (ninety percent) and whole-class
recitations (eighty percent)--do not fit the needs of
technology. (Doyle and Carter, p. 191, 192)

Another perspective on instructional units in the classroom is that these devices allow for differences in the pace at which work is accomplished by students. Therefore, after learning the operation of DataPerfect®, application of this knowledge and skill is applied to personal databases when the student is ready and able to accomplish the task. Students can best learn about the issues of organizing information and retrieval by creating and using their own databases. (Upchurch and Lochhead, p. 155)

Delimitations

This project is limited to use with DataPerfect®.

WordPerfect® has given their consent to use DataPerfect® to complete this project. Located in the appendix are copies of the letters that were sent to and received from WordPerfect®. There is also a copy of the Limited License Agreement.

This project does not cover the entire range of possibilities and functions of DataPerfect®. It does, however, provide a thorough introduction to DataPerfect®.

CHAPTER 2

REVIEW OF LITERATURE

Learning a Computer Database

The question could be asked, "Why does someone need to know about database management?" One reason is that most of us write things down in card files, daytimers, or "little black books". And as information grows, problems arise with keeping information current using traditional methods.

Another consideration is the ability to access information quickly and to keep all information safe. Computer technology accomplishes this task as well as easily solving the problem of what to do if a key notebook is misplaced.

(Patamia, 1990, pp. 35,36)

A computer software program is needed for recording and retrieving details quickly. DataPerfect® is a tool designed expressly to make the construction of a database easy.

(DataPerfect®: User Manual, 1988)

Once the decision is made to collect information in a database many advantages can be enjoyed. It will not take long to learn the different ways that information can be located and retrieved. (DataPerfect®: User Manual, 1988)

Learning Activities as the Medium of Instruction

Students working individually at their desk with supervision are involved and on-task seventy-five percent of the time. (Grump, 1969) While students are working, the teacher is available to help individual students and to instruct small groups of students. Learning activities and separate computer terminals fit this definition and these results can be expected in the classroom.

Informational Books and Applicational Problems

There are several books about DataPerfect® (such as,

Perfecting DataPerfect, by R. Babbit, K. Crutchfield, S.

Harper, D. Harrison, and R. Parry; DataPerfect: Basic

Features by L. Poulsen; The Theory and Practice of

DataPerfect by B. Parello), and there are also applicational

materials for database management (such as, Microtools by W.

W. Allen and D. H. Klooster; Database Applications by W. O.

Drum; Database Application and Exercises by Disk Dictation

Company). There is little material available on the

synergism of these components.

Publishers of high school materials offer limited texts and/or workbooks on this subject. Most of the material is generic in nature. Many general-purpose publishers offer only information publications.

After nineteen years of classroom experience, the author finds that for high school students to learn concepts

they need specific program information and then practical exercises to apply this knowledge. Transfer of learning takes place when the learned software is used and applied to organizing and retrieving a personal database. (Hunter, 1971; Upchurch & Lochhead, 1987)

Decision

The hope is that with the use of DataPerfect®, students' time and energy can be devoted to conceptual considerations, setting up the problem, formatting the file in the database, and producing a usable product. (Richard & Wheeler, 1983, p. 209) Students should thus be freed from concentrating their efforts on lower-level thinking and learning skills.

CHAPTER 3

INTRODUCTORY DATAPERFECT® INSTRUCTION

Today most computers are used in business applications such as word processing, database management, electronic spreadsheets, and graphics generation. (Upchurch & Lochhead, 1987) This project is designed to assist students to learn database management. The software needed is DataPerfect®, a product of WordPerfect Corporation.

These instructional units have been field tested in a secondary classroom and in adult workshops. The results and the feedback are positive and valuable. Students who have not previously studied a computer database have realized the effectiveness and application of this tool.

Before commencing, the student should copy all STATES and NAMELIST files from the DataPerfect® Application Disk to their own data disk. This is the only significant preliminary step necessary.

Activities are written to allow the student the opportunity to advance at a personal pace. Please follow the instructions in the shaded area and read all other information.

DATAPERFECT®

Introductory Instruction

Preface--Thoughts About Learning a DataBase

Facts About Database and DataPerfect®

Lesson 1 States Database

Lesson 2 Namelist Database

Search Reports

Lesson 3 Beginning a Database

Defining a database Defining an index

Lookup

Entering Records

Lesson 4 Pre-Defined Reports

Lesson 5 Utah County Database

Lesson 6 Reports

Lesson 7 Planning a Database

DataPerfect® Reference Sheet

Glossary

Expected Student Outcomes

PREFACE

Thoughts About Learning a Database

(based on articles by David Harrison and Cecily Rasband in The DataPerfect Users' Newsletter by Primary Source)

Many people get started in the world of computers with a word processor, doing the tasks they used to do on the typewriter. After they become competent with their word processor, they begin to look at other ways a computer can help them. Often they become interested in databases as a way to handle their information problems.

There is a definite learning curve that each of us has to pass through in order to use DataPerfect® effectively. Even though DataPerfect® is easy to learn, it will take an investment of time before you will be able to use it easily. WordPerfect Corporation has designed DataPerfect® to make it relatively easy to define a database application. This ease of definition can be a little misleading because even though defining may be easy, **designing** a database is difficult and requires a lot of thought and learning.

If we consider that all of us are using databases constantly in every day life, computer databases might not hold so much mystery and terror. A database is simply a collection of items of information that are

related to each other by some common element.

Some examples of databases that are used every day are telephone books, encyclopedias, file cabinets, and card catalogs in libraries. Any system for categorizing information for quick retrieval and cross-referencing can be considered a database.

If computer databases do the same thing as the databases we already use, why should I switch? answers are the same that made you switch to a word processor from a typewriter. Computer databases are faster and more efficient. They free up valuable time that can be spent working on other They are also more tasks. powerful. Software databases can generate a report quickly and then use the same form to do it again and again as often as needed.

Here is your opportunity to learn another computer application program -- DataPerfect®. Parts of DataPerfect® are exactly the same as WordPerfect® and PlanPerfect®. These include saving, printing, and cursor movements.

FACTS ABOUT

DATABASE AND DATAPERFECT

- I. Database: a collection of information.
 - A. Examples of manual databases.
 - 1. A card file containing client addresses and telephone numbers.
 - 2. A filing cabinet:
 - a. Well-organized database.
 - b. Information can be cross-referenced by filing copies of the same material in different folders.
- II. Computer Database: refers to an entire collection of data.
 - A. Applies the same principles as manual databases but is much faster.
 - B. A computer disk takes up less physical space.
 - C. Information can be retrieved quickly and easily.
- III. Information stored in a computer database is organized into:
 - A. Files: a collection of related records which contains the structure of the database as well as the entered data. Example: the area of the file cabinet for employment applications.
 - 1. Files can contain limited or extensive information.

- B. Records: each file contains records. Records are a collection of information stored in related fields.
 - 1. If a file contains information about employment applications, there is usually one record per employee or one record for each employment application.
- C. Fields: the smallest unit of information in a database, a single item of information.
 - 1. An employee's name, address, telephone number, or social security number would each be considered a field in an employee record in the employment file.
 - 2. The availability of fields is only limited by the capacity of the computer.

IV. DataPerfect®

- A. Uses files, records, and fields to divide information into manageable units.
- B. Each file in the database has its own "panel" (box) on the screen so you can visually distinguish one file from another.
 - 1. Create up to 80 panels, each representing a different type of record.
 - Fields may have formats for dates, numbers, letters and numbers, and large amounts of text.
 - 3. Fields are used as part of an index. Design one or more indexes to sort the records by fields.

V. DataPerfect® applications

- A. Small business, insurance agent, payroll office, school secretary, law office, and seemingly endless others.
- B. Integration with WordPerfect® and other software programs make it easy to move information from one program to another, opening up even more possibilities.

LESSON 1 -- STATES DATABASE

There are four options available to you after DataPerfect® has been loaded.

- 1 You can create a new database
- 2 Change the directory
- 0 Exit, finished using DataPerfect® for now
- ↑↓ Enter Move the cursor to an existing database for loading

2--Change Directory to be A: (Enter). This drive should hold your data disk previously loaded with STATES files.

Move cursor with ↑ or ↓ to highlight the database named STATES, press enter.

Database names are used to identify the major database categories.

On your screen now will be a list of panels used with STATES.

Panel names are used to identify a specific part of the larger database.

Example: Database: States

Panel: Cities

Products

Topography

Information can be shared between panels.

Highlight STATES and return.

The STATES panel is displayed on the lower half of your screen. Your options are displayed on the top half of your screen.

The panel contains fields and field labels.

Complete the matching exercise by trying the different options. Ctrl -> Α. Move to the next field Move to previous field End В. Character right within a field _PgUp c. Character left within a field D. Home Word left within a field E. Word right within a field PgDn F. Beginning of field Shift-Tab G. End of field Ctrl <-Н. Displays the next record I. <-

J.

Tab

Displays the previous record

F8 lookup or † is used to look through, locate, and retrieve records in the database.

Move the cursor to the first field and press † or F8 Lookup.

Look at the sorted list of states and abbreviations at the top of the screen.

These commands should be familiar to you from your study of

End of the list

Beginning of the list

You can keyboard the first few letters of a field to quickly move to a required record.

move to a required record.

Type cal to move the cursor to California.

Press any arrow key. (If you don't use an arrow key DataPerfect® will add your next letter to the previous search-cal)

Type **nev** to move to Nevada. Find Utah.

Home Home ↓

Home Home t

WordPerfect*.

To retrieve a record from the Lookup list press Enter

Move to Mississippi and retrieve by pressing Enter

Using cursor movements, move to the extra s and Del (delete)
Mississippi is the correct spelling.

Press Tab to enter the change in the field.

Notice that you are now in edit mode.

Press Save (F10) to save the change.

You may have noticed that Idaho is missing from the list of states.

From the options available, press Create F9

A blank panel is now displayed ready for you to enter the information about Idaho.

Keyboard Idaho then press Tab or Enter Keyboard id press Tab

id is automatically changed to ID because of the way the field was defined earlier.

If you make a mistake while creating a record, you can use Cancel (F1) to clear the panel and leave create mode.

Fix Kemtucky now. It should be Kentucky. Return to the panel list. Exit F7 back to the beginning.

You have learned to

- * Start DataPerfect®
- * Move from field to field
- * Move from record to record
- * Do Lookup
- * Create and edit a record
- * Exit the program

Lesson 1

You may use this lesson to help find the answers.

- 1. What is a database?
- 2. What are the reasons you would use a computer database?
 - A.
 - В.
 - c.
- 3. Define field.
- 4. Define record.
- 5. Define file.
- 6. How do field, file, and record relate to each other?
- 7. How do panel and database relate to each other?

LESSON 2 -- NAMELIST DATABASE

Load DataPerfect®
Change Directory to A:
Retrieve NAMELIST database
Retrieve Name List Panel

Read through the panel on your screen.

Review cursor movements

Tab Home †
Shift Tab Home ↓
<- ->
Ctrl <- Ctrl->
Home End
PgDn PgUp

Some fields in a database may contain a combination of numbers,

uppercase letters lowercase letters, or only numbers, or only uppercase letters

As you create a new record in the Namelist database you will learn about these different field formats.

Press Create F9

Keyboard Mrs. Tab
Fran Tab
j (automatic capital and tab)
Craig Tab
Mrs. Craig Tab
WP Consultant Tab
continued . . .

Larsen Law Firm 800 555 1000

Tab

(automatic Enter and only numbers may be typed)

801 489 0000 Tab 1205 East 900 South Tab Springville Tab

ut 84660 Tab (auto capitals and enter)

Affiliated with Springville High School and Brigham Young University Tab

F10 Save

You do not always have to put information in every field. If a field is left blank and information is required, a message will appear when you try to save the record.

When you want to create more records, press Create F9. Enter the information for your own name and company. Save F10

To remove an unwanted record:

Use 1 Lookup and move cursor to desired panel--Mrs. F. Craig Press Shift F5 (remove) or DEL

A quick way to enter information:

Display the panel that has the information that will be repeated.

Create F9

Type new name

F4 Select will duplicate the information that was shown on the previously displayed record. Try it.

Save and exit F7

In this lesson you learned about--

- * Cursor movement
- * Create records F9
- * Delete records F5
- * Lookup † F8
- * Select F4
- * Results of automatic enter
- * Results of automatic capitals
- * A quick way to enter duplicate information

Lesson 2

You may use the lessons to help find the answers.

- 1. What cursor movements are the same as and + ?
- 2. What does F9 Create mean?
- 3. How do you save?
- 4. How do you delete a record? (2 ways)
- 5. For what is lookup F8 used?
- 6. Explain an easy way to duplicate some information from a previous record.

LESSON 3 -- BEGINNING A DATABASE

A Lookup is usually the easiest and quickest way to find a record. In some cases, however, a search is more useful.

Get into NAMELIST and NAME LIST. The panel record should display Mr. George N. Anderson (Enter).

to search for something specific:

Press Search F2
move cursor to Address Field
from the menu at the top--Press 2
type *East* (Enter) This will locate all records that
have East in the address.
press Search F2 to begin Search.

Press Search F2 to search for the next matching record.

You can press <-Search (Shift F2) to change the search direction.

Other Search Options:

- 4 Display Options
 shows current search conditions
- 5 Reset conditions for the search

When you enter two or more search conditions, DataPerfect® assumes that you are looking for only those records that match all conditions. If you want to find all records that match any of the conditions you select

6 Match Any/All Conditions

Search for 4 different items in the Name List Panel. Record item Searched for and any number of panel that matches.

Searched for:	Met the Specification of the Search:
East	2, 5, 7

In this lesson --

- * Search
 - Conditions
 - Specify Range Temp

Lesson 3

- 1. Explain Search.
- 2. How do you get DataPerfect® to search for only the panels that match two conditions?
- 3. How do you get DataPerfect® to search for panels that match one or the other or both conditions?

LESSON 4 -- PRE-DEFINED REPORTS

For a database to be useful you must be able to also print, display, or send to another disk the information in readable form--thus Reports.

DataPerfect® contains pre-defined reports that are very easy to run.

Load NAMELIST database and Name List panel.

Shift F7 Reports/Export

Move cursor to Invitation to Open House (Enter)

Look through the settings on the screen.

Shift F7 to Display the invitation on the screen.

Scroll Lock and then any other key will help you to see a full screen at a time.

Printing a Report:

Select Report named Names and Addresses

Look and note the specifications. Destination should read Printer LPT1

Shift F7 to begin printing

Cancel F1 or ESC will stop the report from running if you need to use it. Enter to return to Report List.

Search can also be done from the Report Menu. Then the report will contain only those, or everything but those, conditions specified in the search.

Lesson 4

- 1. What is a report?
- Where can you send a Report?
 - 1.
 - 2.
 - 3.
- 3. How do you stop the printing process once it has started?

LESSON 5-- UTAH COUNTY DATABASE

Defining Your Own Database from the BEGINNING

Change Directory (2) to match your personal data disk--A:

Define a New Database (1)

Type UTAH as the name of the database.

Wait for a moment while the three database files are created:

Utah. STR (Structure file)
Utah. IND (Index file)
Utah. TXX (Text file)

When prompted for the panel file name type City

This is the name of panel (box) where the record information is stored.

Read the Define Panel instructions on your screen.

You must label and define the field format.

Type Utah County City space bar once

Press F9 CREATE a field

Type A15 (return) Alphanumeric, 15 blanks for letters

Press return and space bar six times

Type Population space bar once

Press F9 Create

Define format NZZ 999 (Enter) Numeric, largest number will be 79 683

Return, space bar 13 times

Type Zip space bar

F9 Create

continued . .

Define field format, type N99999::E (enter) return and 17 spaces, F9 type NZZZZZ

Provo and Orem have two different zip codes

Alphanumeric example A20 up to 78 characters

Uppercase U2

Variable length

text fields A60A3 60 characters on each of three

lines

Date D99/99/9999 General Date DDMY99/99/99

Time TZ9:99

Numeric N(999) 999-9999 General Align numbers G., \$ZZ, ZZ9.99

Z means without leading and ending zeros.

Automatic Enter :: E placed at the end of any other

code

;;E do not print a subfield of

trailing zeros

Change the shape and location of the box panel.

Hold the Shift key down while using $\uparrow \downarrow -> <-$ to change the size of the box. Try it.

Press F2 then † | -> <- with the Shift key to change the location of the box. Move it.

Make the panel smaller and move it to the lower left of the screen.

PART 2 OF LESSON 5

Once the structure of a panel is made, you must create an index before you can exit the panel definition.

Define an Index Ctrl F8

An index determines how the records are to be sorted.

We could create an index to sort by

City or by Population or by Zip Code

You should select fields which will create a unique "key" for sorting the records. You should carefully think of the different ways you would like to have the records sorted in the lookup list and in reports.

Press Ctrl F8 Define Index, notice the menu and the template.

Read directions on the screen

Move the cursor to the first space of the city shaded area, then

Press F4 Select

City 1

Population 2

Zip 3

(Ignore the second zip code line)

If you make a mistake, you can choose 1 to delete the entire list or 2 to delete the last entry in the list.

Exit F7 or 0

You should have the Define Index menu on your screen.

Press 1 to create another index
City 3
Population 1
Zip 2
F10 Save

Return moves cursor forward without placing a number for the index. ESC moves it backwards.

Create another index with
City 2
Population 3
Zip 1
F10 Save
0 Exit from Define Index

Define Panel is on the screen now.

PART 3 OF LESSON 5

Lookup List is a sorted list of records that appear when F8 Lookup is pressed.

Define Panel menu should be on the screen.

To define the list, decide which fields are to be displayed across the screen for each record and which index is to be used for sorting the records list.

Move the cursor to the first space in the shaded area of city.

use arrow keys
Press Define Field (Shift F8)

Read through menu on the screen

Press 1 - Lookup Field List
Read menu on the screen
Press F4 Select

1 on City

2 on Population

3 on Zip

Exit F7

Options for Alphanumeric and Text fields

) Exit

This may seem redundant, but these indexes are used in different locations.

PART 4 OF LESSON 5

To enter the records:

Exit F7 to leave Define Panel

Type Springville press Tab

Type 14 651 press Tab

Type 84663

Press create again F9 to save the record and clear the panel for the next records or F10 Save, then F9 Create.

Provo	79	683	84601	84606
Orem		884	84057	84058
Alpine	TATES	577	84004	
Pleasant Grove		929	84062	
Spanish Fork		883	84660	
Payson		303	84651	
Mapleton	1 - d (v) (T. T.)	346	84664	
American Fork		178	84003	
Lehi		713	84043	
Lindon		780	84042	경, 경영 현실 가게 보고 있는 경영 등을 보고 있는데 보고 있다. 2002년 전 - 100명 등을 하고 있는데 이글로 1992년 이 기교
Highland	Professional Communities of	884	84003	
Salem	2	773	84653	
Santaquin		855	84655	
Genola		754	84651	
Goshen		759	84633	
Cedar Hills		719	84062	
Elk Ridge		550	84651	
Unincorporated	15	016		

After entering the last record:

Save F10, instead of create

To display the lookup list:

Press Lookup F8 or t

Notice how the cities are displayed in a sorted format. When you want to change or correct a field press enter. Use Shift F5 to remove any unwanted panels/records

Press F7 Exit to return to panel list.

LESSON 6 -- REPORTS

Reports: One of the most important aspects of keeping a database is being able to get a report of needed information quickly and easily.

In fact, getting a report that will satisfy your requirements is one of the most important considerations when defining a database.

```
Enter DataPerfect®
Cursor or UTAH (enter)
Panel City (enter)
Press Shift F7 Report/Export
With cursor on Built-In Short Reports, Press Ins
1 - Printer
  1 - LPT1
3 - Index Number
    Choose Index 1 (return)
7 - Print Margins
           Top 12 (return)
        Bottom 6 (return)
          Left 10 (return)
    Text Lines 54 (return)
8 - Edit Report Form (read top of screen)
    -----First Page Header-----
         visually center Utah County Cities
                             1990
         3 returns
    -----Two-Level Report Headers-----
     City
                 Population Zip Code(s)
    2 returns
    -----Report Body-----
    Select F4 (cursor by Utah County City) Select F4
    space until cursor is under Population
continued . . .
```

Select F4 (return to get cursor on Population) Select F4
space until cursor is under Zip Code
Select F4 (cursor on first Zip Code) Select F4
space a few times
Select F4 (cursor on second Zip Code) Select F4
adjust spacing if needed
Save F10

9 - Edit Report Name - use your first name
Press Shift F7 to begin the report
Print again sorting by population
Print again sorting by first zip code

Print two more times using two different searches

LESSON 7 -- PLANNING A DATABASE

Planning a Personal Database

Step 1 Why or what is the purpose? What is the goal when all information is entered?

Step 2 Topics Field Name Field Type Field Length

Example:

Purpose: to develop a telephone directory of friends where information can be accessed by name, phone number, or address.

Topics	Field Name	Field Type I	Length
Last name First name Street Address City State	CITY STATE	alphabetic alphabetic alphabetic alphabetic alphabetic-upper	10 8 25 10 2
Area Code Telephone No.	AREA CODE TEL.NO.	numeric-auto ente numeric	er 3 12

Do:

Plan a Database for Report Card or Class Schedule.

Plan a Database for Records or Videos.

Plan a Database for Athletic Contests.

Plan a Database for Buying a Car or House.

Plan a Database for Telephone Directory.

Report Card; consider such things as:

Subject Grade Teacher Counselor

```
Class Schedule; consider such things as:
     Name
     Year in School
     Semester
     Room Number
Records or Videos; consider such things as:
     type of music or video
     artist or group
     rating
     personal comments, reviews
     year
     stars
     length
Athletic Events; consider such things as:
     teams
     opponents
     location
     time
     coach
     other important information
Buying a Car; consider such things as:
     make
     model
     mileage
     purchase price
     options
     dealer
```

Print Reports in a variety of formats and sorts.

Please do not limit your fields to those mentioned.

GOOD PLANNING BRINGS GOOD LUCK

YOU WILL BE MUCH HAPPIER IF YOU GATHER ALL OF THE INFORMATION YOU WILL NEED BEFORE YOU BEGIN.

DATAPERFECT® REFERENCE SHEET

I. To create a new database:

- A. Select 1, then type in database name (no extension)
- B. Type in first panel name (can have extension)

II. To format panel template:

- A. Type field text
- B. With cursor on starting point of field, press F9
- C. Type in desired format:
 - 1. Letter indicating type (A, U, N)
 - 2. Number indicating length, or 9s for number placeholders
- D. Continue the above steps until all fields have been defined

III. To change size of panel:

- A. Press Shift-Arrow keys to size panel
- B. Press F2, then Shift-Arrow keys to move panel

IV. To define index

- A. Press Ctrl F8
- B. Move to first (primary) field, press Select F4
- C. Move to second field, press Select F4
- D. Continue until you have selected all desired fields

V. To define lookup:

- A. When on a field, press Shift F8
- B. Press 1
- C. Move to desired lookup field, press F4
- D. Continue selecting all fields you want to be displayed
- E. Press exit (F7 or 0)
- F. Use cursor keys to select index, press F4
- G. Press exit

VI. To change colors (color monitors only):

- A. Press Alt-F8
- B. Press 5
- C. Change colors as you wish

VII. To create a report:

- A. Select desired panel, press Enter
- B. Press Shift-F7 to go to report menu
- C. Press Insert to create a new report format. To define a New Report, the cursor must be on Built-In Reports before pressing Ins.
- D. Press 1 or 2 to change output destination
- E. Press 4 to set search conditions (see below)
- F. Press 7 to change margins
- G. Press 8 to go to report setup screen
- H. Type in header, footer, and body lines as desired (see below)
- I. Press 9 and type in report name
- J. Press F10
- K. Press Shift F7 to begin the report

VIII.To set search conditions:

- A. Move to field you want to set conditions for
- 3. Press 1 or 2 to specify range or template
- C. Type in criteria, press Enter
- D. Press F2 to execute report
- E. Be sure to press #5 Reset Conditions before starting a new search

IX. To set up report format:

- A. To insert text, move to appropriate line and position, type text
- B. To insert field, move to appropriate line and position
 - 1. Press F4
 - 2. Move to desired field
 - 3. Press F4
 - 4. Change formatting if needed (see below for extensions)
- C. For special formatting if needed, press Ctrl-F7
- D. To insert date, time, or page number, press Ctrl-F7, then 1
- E. When ready to execute report, press F10 to save, then Shift-F7
- :: E move to next field when full
- ;; E ignores zero subfield
- ;;T truncates field, eliminating spaces
- ;;1 truncates field, putting 1 space before and after

GLOSSARY

CREATE

When you want to add a new record to a database panel, press Create F9. Type the information for the first field and press Tab to go to the second field. Continue entering data in this manner. Once you have entered information in all of the fields, press Tab to move the cursor to the first field in the record. Press Create to save the record and enter another record, or press Save F10 to save the record without creating another.

If you make a mistake while entering data, move to the field you want to correct, edit it, and save the record. If you save a record with a mistake, you can edit the record.

DATABASE

A collection of related information that can be retrieved in a variety of ways for various applications. Examples of common databases are a telephone directory, a library card catalog, and an address book.

- DATABASE MANAGEMENT SYSTEM A software package like DataPerfect® that allows the user to create and manage a database in an organized manner on a computer.
- DOORS/DOORWAYS Software that allows information from more than one file to be linked together by the contents of data field where the fields may be common to both database files.

FIELD FORMATS The field format is the description of a field, including the size of the field and the way the field is displayed and printed. The field format determines the type of data you can enter in a field. A field may have a different format in a report from the format you see on the screen.

Alphanumeric A20 (20 spaces long) Uppercase U20 (all will print uppercase) Variable Length Text Fields A60A3 D99/99/9999 General Date DDMY 99/99/99 Time TZ9:99 Numeric N(999) 999-9999 G.,\$ZZ,ZZ9.99 General align number

Z means without leading or ending zeros
Automatic Enter ::E

HELP General Information about each feature in the program is available when you press Help F3.

Additional help information can be added by the database designer to give more specific instructions about each application.

There are four levels of help messages: (1) an optional message from the designer of the application, (2) information concerning the feature you are using, (3) the function keys with template labels, and (4) a list of DataPerfect®'s features and where they are found.

LOOKUP Lookup F8 or t is used to look through, locate, and retrieve records in the database. When you press Lookup, you see a sorted list of records at the top of the screen. The record the cursor is on is highlighted.

Only a few of the fields in the record are displayed so that each appears on one line. The designer of the application decides which fields are displayed.

REMOVE RECORDS To remove the record displayed in a panel, (1) press Remove--Shift F5, (2) Type y to confirm the deletion. If you press Remove by mistake, type n.

Multiple-Remove (Alt F5) lets you remove many records from the database at one time. (1) Press Multiple-Remove and pick the appropriate options that applies to the current situation.

Be careful using this feature. Once the records are removed, you cannot restore them without a backup copy of your database or by re-entering the information.

REPORTS

A report is a summary of information from the database. If you run a report, the report appears on screen, and can also be printed, and/or saved to a file on disk. You choose the report you want to run from the report list. The first report in the list is Built-in Short Reports. Other reports in the list have been created by the database definer.

With either type of report (built-in or predefined) there is a set-up menu with options you can change.

- 1/2 Destination Depending on the option you select, the report goes to the screen only, printer and screen, to disk and screen, or to printer, disk, and screen.
- 3 Index Number The first index defined in the panel will automatically be used to sort the records in the report unless you change to another index. To make a change, (1) choose option 3 for Index number; (2) use ↑ and ↓ to move through the indexes, then press Select F4 when you reach the desired index.

- 4--Search Conditions You can search for records to be included in or excluded from the report. If you specify search criteria you will then be asked whether to include or exclude the records that match the search conditions.
- 5-Sort Direction Select option 5 to change sort direction. Normally, the records in the report are sorted alphabetically, numerically, or chronologically. You can reverse the sort order with this option if you wish.
- 7-Print margins You can enter the desired settings for the left margin, top margin, bottom margin, and number of text lines for a printed report. If the text lines setting is 0, continuous printing occurs, with no pagination.
- 8-Report/Export format This option is available only on the Built-in Short Reports menu. There are six different types of built-in reports: Columns, single line; Columns, test wrapped; List; WordPerfect List; WordPerfect Merge; and Export Delimited DOS Text.

The "Columns, single line" report is much like a lookup screen. Each record is displayed on one line and spaces are placed between each field, giving the report a columnar look.

The "Columns, text wrapped" report is like the single line report, except that all text in a text field is printed, not just the first line of the field. Also, the text is double spaced between records.

The List report contains one field per line, except for text fields which may have many lines.

The WordPerfect List report creates a WordPerfect® file. This file looks like a List report, but it can be used in WordPerfect®. The List report cannot be printed; it can only be sent to disk.

You can search for records using Search F2. When doing a Report, Import, or Remove, you can also choose to search for records to be included or excluded.

Specify Range A range consists of a low value and a high value for a field. If the field value for a record is found within the specified range, than a search will find that record. You can specify any number of ranges for each field in the panel. To specify a range, (1) move to the desired field; (2) type 1; and (3) enter the low value and the high value of the range.

Specify Template A template is a word or number pattern. You can use wildcard characters when specifying a search template. An * represents any number of characters in succession while a ? represents only one character.

To specify a search template, (1) move to the desired field; (2) type 2, and (3) enter the template.

For example, *MIT* would search for those records that contain the letters MIT anywhere in that field. MIT* would find only those records where that field begins with MIT.
*J*ns?n* would find Jensen, Johnson, Johnsen, and Jansen. New York without any *s would match only those records containing exactly "New York" in that field and not New York City or some other value in the field. The template *New York*J*ns?n* would match "The New York resident, Mr. Johnson, lives near Times Square." It would not match "Mr. Johnson, a New York Resident, lives near Times Square."

Search formula A formula statement can be used in a search. Each record is examined during the search. If the formula statement is true, the record is a match. If the statement is false, the record is not a match. An example of a formula statement is:

P1F3*P1F4+18000 where P1F3 means Panel 1, Field 3. To specify a formula; (1) move to the desired field; (2) type 3; (3) enter the formula, using Select F4 to include a field in the formula; and (4) Press Save when the formula is correct.

When you are creating a record, pressing Select F4 will enter the value of the same field from the previously displayed record or "background record" by performing a lookup and pressing Enter on the desired record.

When you are creating a formula or report, Select allows you to insert a field in the formula to report.

Select can also be used to select a field for any type of field list.

Assembling records in file, grouped on a particular field, either in alphabetic or numeric order, ascending or descending.

When entering data, pressing Tab moves the cursor to the next field. Enter can also be used to move to the next field. However, in a text field, pressing Tab saves the text field and moves the cursor to the next field, while pressing Enter simply inserts a carriage return.

When entering data, pressing a Shift key in combination with the Tab key (Shift-Tab) moves the cursor to the previous field. ESC can also be used to move to the previous field.

EXPECTED STUDENT OUTCOMES

Matching Exercise, page 14

- __<u>E</u>__Ctrl ->
- A. Move to the next field

<u>H</u>End

B. Move to previous field

__J__PgUp

C. Character right within a field

<u>C</u> ->

D. Character left within a field

G Home

E. Word left within a field

__<u>I</u>__PgDn

- F. Word right within a field
- <u>B</u> Shift-Tab
- G. Beginning of field
- H. End of field

___D__<-

I. Displays the next record

A Tab

J. Displays the previous record

Lesson 1, page 17

1. What is a database?

A collection of related information that can be retrieved in a variety of ways for various applications.

- 2. What are the reasons you would use a computer database?
 - A. Faster
 - B. More efficient
 - C. More powerful
 - D. Generate reports quickly
 - E. Less physical space
- Define field.

Smallest unit of information in a database, such as a person's last name

4. Define record.

A collection of fields that relate to one person, one company, or one area. All field about one employee would be a record.

5. Define file.

A collection of related records which contain the structure of the database as well as the entered data. A database is divided into files.

6. How do field, file, and record relate to each other?

Files contain records, records contain fields.

7. How do panel and database relate to each other?

The database is made up of panels (files).

Students should have added Idaho to the STATES database fixed Mississippi fixed Kentucky

Lesson 2, page 20

1. What cursor movements are the same as - and + ?

Home, Up Arrow

PgUp

all move up a few records

Home, Down Arrow

PgDn

all move down few records

2. What does F9 Create mean?

More records need to be added to the file

3. How do you save?

F10

4. How do you delete a record? (2 ways)

DEL

Shift F5

5. What is lookup F8 used for?

To view the records previously saved Locate Retrieve records

6. Explain an easy way to duplicate some information from a previous record.

Display the panel that has the information that will be repeated

Create F9

Type whatever is different

Use Select F4 for whatever is the same

In NAME LIST students should have added a panel containing personal information

deleted the panel for Mrs. Fran J. Craig
added a panel using the quick method of entering
information

Lesson 3, page 22

Page 22, students should have completed the chart of searches

1. Explain Search.

Using the computer to locate specific files

2. How do you get DataPerfect® to search for only the panels that match two conditions?

DataPerfect® assumes this unless option 6--Match Any/All Conditions is chosen.

3. How do you get DataPerfect® to search for panels that match one or the other or both conditions?

Option 6--Match Any/All Conditions

Lesson 4

Students should print the names and address report.

Lesson 6

Students should print the Utah County Cities report.

Sort by city Sort by population Sort by zip code

Two more printouts using two different searches.

Lesson 7

Students should print a variety of reports from each database.

BIBLIOGRAPHY

- <u>DataPerfect for IBM Personal Computers and PC Networks:</u>
 <u>Definer Manual</u>. (1988). Orem, Utah: WordPerfect
 Corporation.
- <u>DataPerfect for IBM Personal Computers and PC Networks: User</u>
 <u>Manual</u>. (1988). Orem, Utah: WordPerfect Corporation.
- Doyle, W. & Carter, K. (1987). Choosing the Means of Instruction. Berliner, D. D. (Ed.), <u>Educators' Handbook A Research Perspective</u>. Richardson-Koehler, V. (Sr. Ed.) New York: Longman, Inc.
- Grump, P. V. (1969), Intra-setting analysis. Williams, E. & Rausch, H. (Eds.), <u>Naturalistic viewpoints in Psychological Research</u>. New York: Holt, Rinehart and Winston.
- Harrison, D. & Rasband C. (1989). Thoughts About Learning a Database: DataPerfect. <u>The DataPerfect Users'</u>
 Newsletter, 1(4), 1-2.
- Housman, J. (1989, September). dBase Conversion to 5.0. WordPerfect the Magazine, p. 14-17.
- Hunter, M. (1971). <u>Teach for Transfer</u>. California: Tip Publications.
- Integrated Packages Lend Easy Versatility. (1990, January 22). PC Week, 6(3), 33, 36, 45.
- Patamia, S. (1990, January). Organizing Client Records WordPerfect the Magazine, pp.35, 36, 39.
- Rasband, C. (1989, November) Database Design and Development. The DataPerfect Users' Newsletter, 1(3), 1-2.
- Rasband, C. (1989, December) Database Design and Development Part 2--Getting Started. The DataPerfect Users' Newsletter, 1(4), 1-2

- Richards, J. & Wheeler, F. (1983) Integrated software for Problem Solving. Bergeron, J. C. & Herscovics, N. (Eds.), Proceedings of the Fifth Annual Meeting of PME-NA. Montreal.
- Upchurch R. L. & Lochhead, J. (1987). Computers and Higher-Order Thinking Skills. Clark, M. C. (Ed.), Educators'

 Handbook A Research Perspective. Richard-Koehler, V.
 (Sr. Ed.) New York: Longman, Inc.
- WordPerfect --Worldwide Market Leader. (1989, October). WordPerfect the Magazine, p. 52.
- WordPerfect (1990, February 14), [Interview with Susan in the General Information Department, permission granted].

APPENDIX

Limited Licence Agreement

Correspondence from WordPerfect

Correspondence to WordPerfect



January 4, 1990

Ms. Frances Larsen
Department of Secondary Education
110 McKay Building
Brigham Young University
Provo, Utah 84602

Dear Ms. Larsen:

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Very trally yours.

K. Duff In mpson Vice President and General Counsel

ACKNOWLEDGEMENT AND CONSENT (Please sign and return the enclosed copy)

The undersigned hereby acknowledges the conditions set forth above and consents to these conditions when using WordPerfect trademarks or copyrighted materials.

By. J. Mines Villa

Title: Kusiness So

Date: \mu 8. 1990



January 4, 1990

Ms. Frances Larsen
Department of Secondary Education
110 McKay Building
Brigham Young University
Provo, UT 84602

Dear Ms. Larsen:

Enclosed please find two signed copies of our Limited License Agreement. Will you sign both copies and return one of them to us to complete our files.

Best of luck to you with your DataPerfect manual.

Very truly yours,

R. Duff Thompson
Vice President and
General Counsel

Enclosures

BRIGHAM YOUNG UNIVERSITY

THE GLORY OF GOD

IS INTELLIGENCE

December 21, 1989

WordPerfect Corporation 270 West Center Street Orem, UT 84057

Ladies and Gentlemen:

As part of my masters degree program at Brigham Young University, I am writing DataPerfect Introductory Lessons for high school students at Springville High School.

These lessons will not be sold. Some of the lessons are based on your lessons in the DataPerfect Manual. Other lessons are original.

WordPerfect Corporation will be given credit at all appropriate opportunities.

Are there any problems with doing this project?

Sincerely,

Frances Larsen

Introductory DataPerfect® Instruction

Frances Jenson Larsen

Department of Industrial Education

MS Degree, April, 1990

ABSTRACT

The project should be used in a beginning computer class. These units contain projects from simple to complex. The first instructional unit uses a database that comes with the DataPerfect® program. The students build and manipulate a small database. Reports are prepared, and finally the students design an original database.

These instructional units are intended to be used in a high school classroom with the DataPerfect® computer program. DataPerfect® is a copyrighted program marketed by WordPerfect Corporation of Orem, Utah.

COMMITTEE APPROVAL:

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