

PC Passport

DATABASE — Advanced Instructor's Guide (Macintosh)



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This guide makes up part of a suite of three documents designed to deliver the PC Passport course at Advanced level for Database

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Welcome

Welcome to the Advanced Database course. The Student Workbook for this course is designed to teach the topics required for the assessment of this Unit. The companion Exercise Booklet contains practical exercises that will reinforce the topics taught in the Workbook as well as Summary Tasks for each Learning Outcome. It is expected that the tutor leading the learner will supplement these materials with some practical assignments that are appropriate to their group.

This Instructor's Guide explains the layout and use of these manuals and gives the answers to the questions and tasks included in the Exercise Booklet.

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Using the Student Workbook

The workbook has been organised into the three Learning Outcomes for this Unit. Each of these 'sections' contains the topics to be covered along with references to the practical exercises that the learner should complete at specific points. At the end of the 'section' there is a reference to that Learning Outcome's *Summary Tasks*, which usually take the form of small projects, to help the learner consolidate what they've learned.

The references to the exercise booklet look like this:

Exercise 1.1

Now do Exercise 1.1 in the Student Exercise Booklet.

Summary Tasks

Now do the Learning Outcome 1 Summary Tasks in the Exercise Booklet.

Using the Exercise Booklet

The Exercise Booklet contains the practical sessions that the learners should undertake to consolidate their learning. Throughout each of the Learning Outcomes there are a number of exercises that will cover the topics most recently taught, and at the end of each Learning Outcome there is a Summary Tasks section. Here is a sample Summary Task from this Unit:

Task 3

1. Use the search facility in Windows Explorer to find the **Salary Analysis** file.
2. Choose to cut this document from the folder in which you find it.
3. In your **PersonalStuff** folder, create a new folder called **Salary** and paste the **Salary Analysis** file into it, using whatever method you prefer.
4. Rename the **Salary** folder as **Financial Documents** and move the **Loan Calculator** and **Credits** workbooks from the **Financial** folder in your **WorkStuff** folder into it.

Answers to Written Exercises

Learning Outcome 1

Exercise 1.1

Complete the following questions:

1. What is a database?

A collection of information organised in records containing information identified by fields.

2. What are records?

All the information that belongs to a particular entity such as a customer, employment or an object.

3. What is a field?

A single piece of information that is of the same type of all records.

4. Describe the purpose of the four modes in FileMaker® Pro.

- ◆ **Browse mode for entering data and viewing records.**
- ◆ **Find mode for locating a record or group of records quickly.**
- ◆ **Layout mode for specifying how information will appear on the screen or when you print it.**
- ◆ **Preview mode for seeing what the pages will look like when you print them.**

5. What three ways can you use to move from one mode to another?

- ◆ **Mode buttons.**
- ◆ **Mode pop-up menu.**
- ◆ **View menu.**

6. How can you get help in FileMaker® Pro?

- ◆ **Click on the Help button and use the hyperlinks.**
- ◆ **Key in a question in the Ask a Question box.**
- ◆ **Use the Help menu.**

Exercise 1.2

Complete the following questions:

1. What is a Template?

A sample file provided to help you get results quickly with FileMaker Pro.

2. List three of the templates available in the Education section.

Three from:

Contact Management, Document Library, Event Planning, Expense Report, Faculty Staff, Field Trips, Inventory, Lending Library, Registration, Research Notes, Student Emergency Card, Student Record, Task Management, To Do List.

3. What button would give you details of all available templates?

Template Info.

4. Give two reasons why you might want to separate the first name and last name fields when creating a database.

- ◆ **To sort on Last Name.**
- ◆ **To print badges using First Name only.**
- ◆ **Any other reasonable answer.**

5. What do you need to create between two tables to enable them to share information?

A Relationship.

6. What is the difference between a one-to-one relationship and a one-to-many relationship?

- ◆ **In a one-to-one relationship, a record in one table can have only one related record in the other table.**
- ◆ **In a one-to-many relationship, a record in one table can have multiple matching records in another table.**

7. List four fields you might want to have in a database to store details of your book collection.

Book Name, Author, Date Published, Genre, ISDN Number, Review etc.

Exercise 1.9

Complete the following questions:

1. How do you delete a header section from a layout?

In Layout View, click on the Header tab, and then press the Delete key.

2. What does Validation do?

Ensures that users can't enter incorrect data in a field.

Why is it a good idea to select an item from a list rather than key in the required data?

Less chance of error.

Learning Outcome 1 — Summary Tasks

None of the Summary Tasks in this section require answers.

Learning Outcome 2

Exercise 2.1

1. Find the names of all the employees who work for DEF Ltd. and who live in the USA.
Mary Smith, Juanita Alvarez.
2. Who works for XYZ and lives in either Finland, Germany or Denmark?
Matti Virtanen, Jens Jensen, Jutta Schmidt.
3. How many of DEF's employees don't live in the UK?
10.
4. Change to the List of Members layout and sort the Found Set by Membership Type and then by Last Name.
5. How many people paid their membership fee between July and December 2004?
6.

Exercise 2.2

1. What is the purpose of a wildcard character when searching a database file?
It makes it easier to search by returning records that fit a profile rather than an exact value.
2. What is a calculated field?
Any field that contains an expression.
3. Explain the difference between an Operator and an Operand in a calculated field.
An Operator is the symbol representing the tasks to be carried out. An Operand is the value you want the expression to evaluate.
4. Give three examples of an arithmetic operator.
+, -, *, /, ^
5. Find the full name of the employee whose surname is either Johnston, Johnstone or Johnson. Use a wild card (*) to help you.
William Johnson.

Learning Outcome 2 — Summary Tasks

None of the Summary Tasks in this section require answers.

Learning Outcome 3

Exercise 3.1

1. What is a report?

A report is a selection of data printed in an attractive and easy to understand fashion.

2. What six things should you consider when designing a report for a client?

- ◆ **Who will be using the report?**
- ◆ **What report format will best suit their needs?**
- ◆ **Are subtotals required?**
- ◆ **Does the client need all the data in the report, or just summarised data?**
- ◆ **Are any headings or graphic elements required to aid understanding?**
- ◆ **Is it necessary to replicate current paper reports?**

3. What is the difference between a summary report and a subsummary report?

Summary reports present the totals of your data, whereas subsummary reports categorise data by a particular field or fields.

Learning Outcome 3 — Summary Tasks

None of the Summary Tasks in this section require answers.