Analysis and Initial Ideas

The present system is based on the manual card index system so most of the work is done by hand, however due to the ever increasing growth of technology, and the internet, a wide range of resources are now being made easily accessible.

British Airways has recently introduced booking online, where customers can book a flight and accommodation all over the Internet. Being such a big company as British Airways, most of their bookings are made through travel agents who book the flights and pass the information on to them.

Question 1 – Could you describe the current system being used by

Question 2 – How are these cards stored?

Question3 – What problems do you encounter at the moment?

Software Available

MICROSOFT OFFICE 2000

WORD PROCESSOR - MICROSOFT WORD 2000

British Airways Booking System

A word processing package is a program or set of programs used to edit, format, store and print documents.

Word processors have many important unique features:

❖ **Spelling and Grammar Checker**

Misspelt words, or grammatical errors can be identified and corrected by the words in the computers dictionary. Correct words, identified by the spell check as wrong can be added to the dictionary.

❖ **Automatic creation of index and table of contents**

Any word in the text can be marked for inclusion in an index. Headings and subheadings in a given style can be included automatically in a table of contents, which can be updated at any time.

❖ **Import Files**

Tables, photographs, graphics, video and sound files can be imported from other sources and inserted in a document.

❖ **Mail merge**

A document and a list of names and addresses can be merged to produce personalised letters.

❖ **Creation of templates** with preset text styles. Margins, formatting, letterheading etc.

❖ **WYSIWYG**

This stands for 'What You See Is What You Get', and refers to the ability to display on the screen. And enables the user to see their work on the screen exactly as it will be printed.

~~SPREADSHEET~~ – **MICROSOFT EXCEL 2000**

Spreadsheet packages allow a user to create worksheets (spreadsheets) representing data in column and row form. Spreadsheets are used for any application that uses numerical data, such as budgets, cash flow forecasts, profit and loss statements, student marks or results of experiment.

Spreadsheet features:

❖ Format cells, rows and columns, specifying for example, the alignment of text, number of decimal points, height and width of cells.

❖ Copy cell contents to other locations, with automatic adjustment of formulae from an area to another location.

❖ Determine the effect of several different hypothetical changes of data; this facility is called 'what-if' calculation.

❖ Insert, move or delete rows and columns.

❖ Use functions such as sum, average, max, min in formulae

❖ Create a simple database and sort or query the data to produce a report of, say for example, all males gaining over a 'C' grade, for a list of students.

❖ Write macros to automate common procedures

❖ Create templates – Spreadsheets with formats and formulae already entered, into which new figures may be inserted.

❖ Create 'multi dimensional' spreadsheets using several sheets, and copy data from one sheet to another

❖ Create many different types of chart and graphs

DATABASE – MICROSOFT ACCESS 2000

A database is a collection of data. It may be something as simple as a list of names and addresses or details of the CDs in your personal collection, or it may contain details of all the customers, products, orders and payments in a large organisation. When made reference to, the word 'database' is assumed to be data held on a computer, but manual databases also exist. Some smaller business (a garage) may hold a card index file with details about a customer and their car.

British Airways Booking System

The main difference between a manual and computerised databases is the speed at which data can be accessed.

~~PRESENTATION GRAPHICS~~ – **MICROSOFT POWERPOINT 2000**

Presentation graphics software such as PowerPoint is useful for putting together a presentation which can be delivered using a computer attached to a projection device, using transparencies and an ordinary overhead projector or as a self-running presentation in, say a shopping centre or cinema. The software allows the user to quickly create 'slides' combining text, graphics and pictures and to create animation or sound effects and 'transition' effects between slides.

~~OPERATING SYSTEM~~ – **MICROSOFT WINDOWS 98**

Hardware Available

These are the specifications of the PC I am using at Home:

OPERATING SYSTEM	WINDOWS® 98 PLUS!
CPU	INTEL® CELERON^{TM} / 333MHZ
RAM	64MB FOR WINDOWS® 98
SCREEN DISPLAY	800 BY 600 PIXELS TRUE COLOUR (32 BIT)
CD-ROM SPEED	32-SPEED
AVAILABLE SPACE ON HARD DRIVE	2.4GB
AUDIO	16-BIT SOUND CARD
OTHER	LOUDSPEAKERS

These are the system specifications for the systems at school:

OPERATING SYSTEM	WINDOWS® 98
CPU	433MHZ
RAM	32MB FOR WINDOWS® 98
SCREEN DISPLAY	640 BY 480 PIXELS 256 COLOURS
CD-ROM SPEED	24 SPEED
AVAILABLE SPACE ON HARD DRIVE	10MB
AUDIO	8-BIT SOUND CARD
PRINTER	HP LASERJET

All systems should have Microsoft Office 97/2000.
All systems must have Microsoft Excel 97/2000.

End User's IT Literacy

The end user of my system will already have basic IT skills and will have already had experience with the Microsoft Office Package. As they are working for a big trans-national company, they would have already undergone training in the secretarial sector, of which IT skills are a key part. To even have the job, they would have to be able to type quickly, answer calls and transmit data efficiently. Therefore, training costs will be kept to a minimum.

Final Choice

Having looked at the current system and the software and hardware available, I have decided to use Microsoft Excel, a spreadsheet program to design my booking system. Spreadsheet packages allow a user to create worksheets (spreadsheets) representing data in column and row form. Spreadsheets are used for any application that uses numerical data, such as budgets, cash flow forecasts, profit and loss statements, student marks or results of experiments. Spreadsheets offer a wide range of facilities making the task easier to perform.

SKILLS: Current/To be acquired

I have a good understanding of the Microsoft Excel package. I have done quite a few calculations and performed basic macros. Having looked through the coursework of former students, and reading through the coursework guide, I realise that I need to improve my knowledge of Excel. Excel is a powerful package and can carry out many tasks easily if instructed correctly. I have already started to go through sample projects showing me how to go about certain tasks with a book titled 'Successful I.T. Projects in Excel', written by P.M Heathcote.

End User Requirements

➢ Provide detailed reports showing customer booking for every working day.

➢ Produce summary reports for flight bookings in order of popularity.

➢ Allow data entry for new customers.

➢ Provide easy access for amendments to customer details and flight details.

➢ Automatic backup for all centralised records daily and weekly.

➢ Provide an exception report for outstanding customer debts or extreme bank credit limits.

➢ The system should record financial details concerning money in/outstanding.

➢ Allow queries on the current flight availability.

Quantitative Criteria

➢ Printed tickets are to be generated within 15 minutes.

➢ Accessing and amending customer/Fight/Airport details should be instantaneous.

➢ Queries are processed promptly on customer request.

➢ Backup should occur automatically every 24 hours.

➢ Flight details processed every Friday (1 hour max)

➢ Exception reports are produced quickly on demand within a minute.

Qualitative Criteria

➢ The system should provide a workable Human Computer Interface system according to different users, i.e. simple menu selections or buttons

➢ The company logo is consistent on all forms and reports.

➢ Amount of available screen data is kept to a minimum (increase usability)

➢ Help systems are easily accessible.
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