BOOKING SYSTEMS

It is now possible to make book a holiday, a seat on a train or bus, a flight, a room in a hotel, or a theatrical performance on-line! Travel agents have computers in every branch or shop which are all connected with one central administrator where all bookings are recorded (multi-access system). A flight can be easily booked on the internet therefore avoiding the need for the customer to fill in forms. Theatres use computer systems to record seat bookings where the customer phones in their request for the theatre to then enter the booking into their system.

Input

The customer must enter details to make a booking, e.g. name, address, date, numbers etc. This data can be entered on a terminal computer (multi-access system), into an electronic form on a web page, on a paper form, or by typing directly while the customer is on the phone.

Processing

The data is validated during the process to ensure that it is correct and makes sense. The computer will find whether there is a vacancy for the booking, and if so will record the details of the booking in the database. A booking must be recorded and processed immediately so that the same place or seat cannot be taken by anyone else. This is called real time transaction processing. Credit or debit cards are used to pay for on-line or phone bookings.

Output

Receipts are printed and given to the customer as proof to confirm the booking and to record details. This may be in the form of a receipt, or e-mail if the booking was made on the internet. A voucher with the customer's details is printed.

Security Obligations

Secure pages are used to transfer information over the internet, so that personal data cannot be seen or stolen by anyone else.

Advantages

Using a computer reduces the enormous workload of processing paper documents
Bookings can be made or recorded via the internet
A computer system can process a pile of data rapidly
The data is validated at the time
Immediate notification if the booking has been made

Disadvantages

A number of people were unsure to start with about transferring their personal information over the internet due to the possibility of it being intercepted by someone. This is now virtually impossible due to the encryption of secure pages
No proof of a site's authenticity e.g. bogus merchants

- Businesses record bookings on the computer system
- Customers can order by phoning the business or booking on-line
- Information regarding the items booked and the customer's information is validated
- Secure pages are used to transfer booking information over the internet

Booking Systems

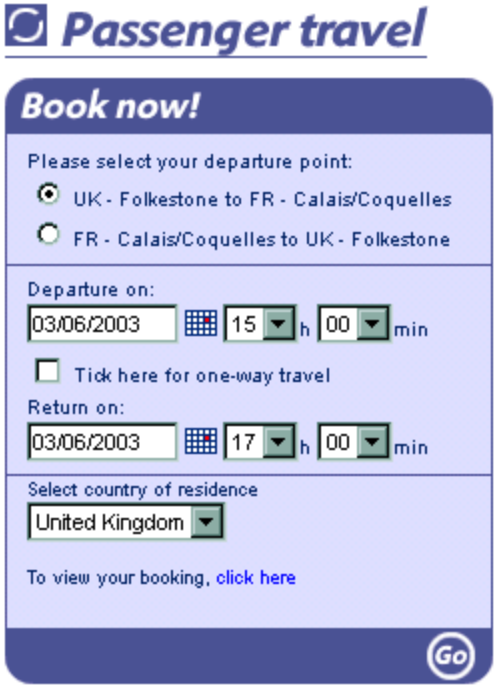
It is now possible to make bookings on-line for holidays, trains, planes, hotel rooms, theatre performances...and many others.

A travel agent for example, may have computers in all its branches directly connected to a central computer where a database of all bookings is stored. This is an example of a multi-access system.

When a booking is made, the customer will need to provide input details (name, date, place, number of people etc).

These details may be entered ...

- at a computer terminal in a multi-access system.
- on a form on an Internet web page.
- by transcribing them from a paper booking form.
- by typing them in when in telephone communication with the customer.



This form (on an Internet web page) is used for collecting details of a passenger's booking on the Eurotunnel. These details are then used as input data when the booking is made.

This data is validated to check if the details are sensible. The computer will check to see if the booking is available, and, if it is, the booking is made and it will then store the booking details in the database. Documents will need to be output to give to the customer, confirming the booking and giving details about it.

As soon as a customer makes a booking it has to be processed immediately, so that no other customer can make the same booking. This means it is a real-time (transaction processing) system. It is essential that no data is lost, so the database will have to be regularly backed up -

possibly using a tape streamer.

If payments for the booking are required, then these can generally be done on-line using a Credit card or a Debit card. If details of these are transmitted over the Internet, the website must be secure so that this information cannot be stolen.

	A theatre booking system uses a booking file which contains information on seats.	
(a)	Name five fields you would expect to find in the booking file. One of these fields must be the key field.	[5]
	• seat and row number (key field) • name of person booking • address of person booking • name of show • date of show	
(b)	Give a reason why the booking agent would need to:	
	(i) delete a record from the booking file	[1]
	• a person cancels a booking.	
	(ii) add a record to the booking file	[1]
	• a new booking is made for a seat at a performance	
(c)	(i) Give two advantages of using a computerised theatre booking system.	[2]
	• there should be no double bookings • information about seat availability is always up-to-date	
	(ii) Other than the cost of the hardware or software, give two problems that might occur when introducing a new computerised theatre booking system.	[2]
	• there may be bugs in the system • the staff may need to be trained to use the system.	