**Hospital Madical Recode System**

A community doctor refers the patient to the hospital. The hospital checks the patient’s name, address.. date of birth, and patient number in its patient file. Each hospital admission is known as an admission episode it begins with a reason for admission and a planned admission date being recorded. when a community doctor refers the patient The patient as sent an admission card and *this* card is copied to the community doctor Each admission episode ends when the patient is discharged: the reason for discharge arid the discharge date are recorded on the admission episode file, The community doctor Is sent discharge notes prepared by the hospital doctor. The patient receives discharge advice. A hospital doctor supervises each admission episode and a hospital doctor supervises many admit ion episode. The hospital doctor reports any treatment that is to be undertaken by the patient and this is recorded for the episode.   
An admission episode is created when a community doctor refers the patient: this is called a planned admission. If the corninwiity doctor reports that the patient’s circumstanêes have changed (eg the patient recovers) then the chnission can be cancelled and this becomes a cancelled admission the canceliation date and r’.t’n arL   
recorded. Upon reading the patient details, the hospital doctor otkrs a planr.ed admission date to the pii rt. !f   
the hospital doctor reports the need . alay a planned episode *it* bcomes a deferred adnits’ion aid the nit iint is’advised of the delay *as* is the comnunity doctor; the length of delay is recorded. A delayed admission can k cancelled. When a patient enters hositai the admission Is regarded us being activated and the udmh.sion dale recorded. [f no diagnosis is made or ithe diagnosis is not treatable then the patient Is discharged from hospftal;   
the admission episode is completed And called a discharged admission. If the patient has treatable diagnoses then the admission is regarded as treatable and the admission episode is marked accordingly. While different treatments are carried out the admissiàn continues to be called treatable. When the treatment cycle is completed ‘the patient is discharged; the discharge date and reason for discharge are written on the episode. The discharge   
is the final state of admission episode.

**Holyday Booking System**

You have been asked to analyse and dcsign a system for ‘World Traveller’. You have been gi n the following requirements from the staff of World Traveller. World Traveller is a travel agency, vhich arranges a variety of travel arrangements. All customers are egistercd with a sales consultant who i ‘cords   
their requirements. The sales consultant has to refer to many diftirent flight timetables, hotel locations and holiday agencies. The sales consultant trios to match the customer requirements as closely as possible If the   
specific requirement is not available, then the sales consultant *advises* the customer on a variety of alternatives to meet their choice and makes bookings on their behalf. The sales consultant also asks the customer if they would like World Traveller to organise the holiday insurance and car hire at the same time. Once an itinerary schedule is completed, it is given to the customer in a form of a printout. Om   
itinerary Is accepted, the customer is billed. Complete payment must be received from the custoner ., confirm the booking. If the customer would like to pay later, then a not-refundable deposit must be çid .o provisionally book the holiday. Full payment must be received at least oiic week before the date oftr;ecl.   
the customer would like to pay by credit card a 1.5% commission is added to the total bill. Onc the customer has paid the full invoice they are provided with a receipt.   
You are required to produce models to represent only the description provided above. ‘iiiis requn neat specification is a partial and incomplete description of the problem and you are asked to model it in a way that allows for further classes to be added when required. For example Worl4.Travclter only prcwide package holidays at present and th company may expand to provide other forms ofholida s such as ci uises, repeat business trips, trips to multiple destinations, specialised holidays, and other types of travel, which may be developed in the future. Another example may be that their billing and collection of puymct may change. The model should be designed so it can be easily adapted to meet any changes.