Create a Domain Model on following scenario.

Task 1:

The doctors in the hospital are organized into **teams** (also called **firms**). Each team has a unique name or code (e.g. Orthopaedics or Pediatrics) and is headed by a **consultant doctor** (in the UK, Republic of Ireland, and parts of the Commonwealth) or **attending physician** (also known as staff physician) (in the United States). Consultant doctor or attending physician is the senior doctor who has completed all of his or her specialist training, residency and practices medicine in a clinic or hospital, in the specialty learned during residency. She or he can supervise fellows, residents, and medical students. The rest of the team are all junior doctors. Each doctor could be a member of no more than one team.

Task 2:

A company provides IT Body Leasing. They have some Employees, and also a lot of Freelancers as Subcontractors. Currently, they use Excel sheets to manage their Customers, Freelancers, and Timesheets and so on. The Excel solution does not scale well. It is not multi-user ready and also does not provide security and audit logs. So they decided to build a new web based solution. Here are the core requirements:

- A searchable catalog of Freelancer must be provided
- The new solution must allow to store the different Communication Channels available to contact a Freelancer
- A searchable catalog of Projects must be provided
- A searchable catalog of Customers must be provided
- The Timesheets for the Freelancers under contract must be maintained

Based on these requirements the development team decided to model everything using UML to get a big picture of the new solution.

Task 3:

In 10Pearls (Software House)

There are different rooms, offices and departments. A department has a name and it contains many offices. A person working at the software has a unique ID and can be a developer or an any team member. A developer can be a full, associate or assistant manager and he/she is enrolled in one department as head. Offices and rooms have a unique ID, and a rooms has a number of seat. Every employee works in an office. Generate Domain Model for the above scenario. (also by using Objectaid UML Explorer)

Task 4:

Patient Record and Scheduling System

A patient record and scheduling system in a doctor's office is used by the receptionists, nurses, and doctors. The receptionists use the system to enter new patient information when first-time patients visit the doctor. They also schedule all appointments. The nurses use the system to keep track of the results of each visit including diagnosis and medications. For each visit, free form text fields are used captures information on diagnosis and treatment. Multiple medications may be prescribed during each visit. The nurses can also access the information to print out a history of patient visits. The doctors primarily use the system to view patient history. The doctors may enter some patient treatment information and prescriptions occasionally, but most frequently they let the nurses enter this information. -- Each patient is assigned to a family. The head of family is responsible for the person with the primary medical coverage. Information about doctors is maintained since a family has a primary care physician, but different doctors may be the ones seeing the patient during the visit.

Task 5:

Railway Reservation System is a system used for booking tickets over internet. Any Customer Can book tickets for different trains. Customer can book a ticket only if the tickets are available. Customer searches for the availability of tickets then if the tickets are available he books the tickets by initially filling details in a form. Tickets can be booked in two ways by i-ticket or by e-ticket booking.

In case of i-ticket booking customer can book the tickets online and the tickets are couriered to Particular customer at their address. But in case of e-ticket booking and cancelling tickets are booked and cancelled online sitting at the home and customer himself has to take print of the ticket but in both the cases amount for tickets are deducted from customers account.

For cancellation of ticket the customer has to go at reservation office than fill cancellation form and ask the clerk to cancel the ticket than the refund is transferred to customer account. After booking ticket the customer has to checkout by paying fare amount to clerk.