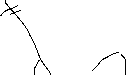
**Learning Activity 3.4: ERD Diagram for Hospital Database**

A doctor can be scheduled for many appointments, but may not have any scheduled at all. Each appointment is scheduled with exactly 1 doctor. A patient can schedule 1 or more appointments. One appointment is scheduled with exactly 1 patient. An appointment must generate exactly 1 bill, a bill is generated by only 1 appointment. One payment is applied to exactly 1 bill, and 1 bill can be paid off over time by several payments. A bill can be outstanding, having nothing yet paid on it at all. One patient can make many payments, but a single payment is made by only 1 patient. Some patients are insured by an insurance company. If they are insured, they can only carry insurance with one company. An insurance company can have many patients carry their policies. For patients that carry insurance, the insurance company will make payments, each single payment is made by exactly 1 insurance company.



**Insurance Company**



**Payment**

**Outstanding**

**Bill**



**Doctor**

**Bill**

**Patient**

**Appointments**