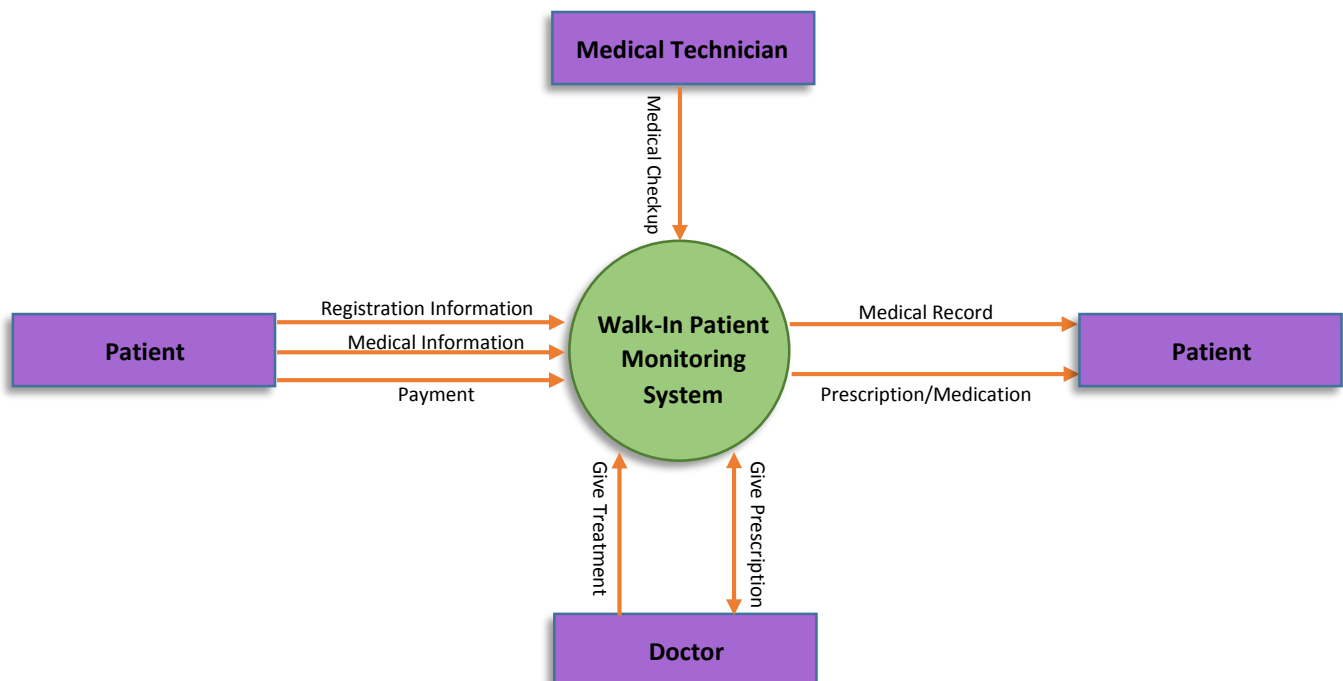
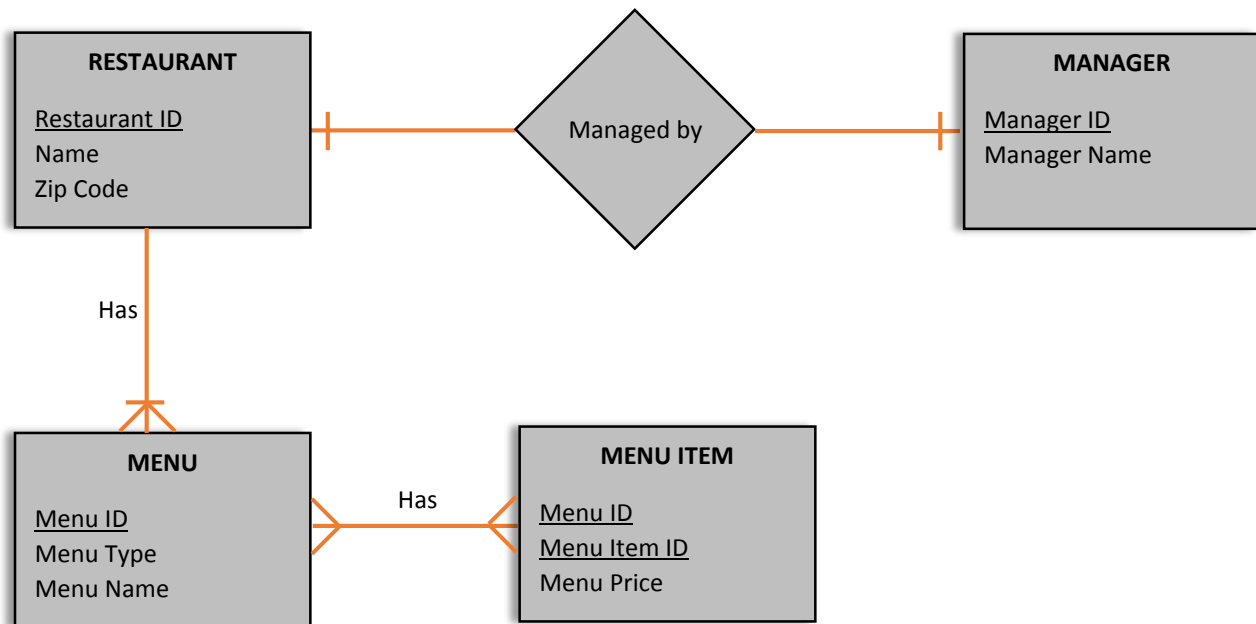


CSC 302 (Systems Analysis) Assignment

Question 1: Starting with a context diagram, draw as many nested DFDs as you consider necessary to represent all of the details of the patient flow management system described in the following narrative. Dr. Frank's walk-in clinic has decided to go paperless and will use an information system to help move patients through the clinic as efficiently as possible. Patients are entered into the system by the front desk personnel. If this is the first time the patient has been seen, insurance record is started. The patient is then entered into a queue to wait for a medical technician who will collect health history, weight, height, temperature, blood pressure, and other medical information, placing it into the patient's medical record. Next, the patient is placed into the queue to see a doctor. The first available doctor sees the patient, prescribes medication or treatment when appropriate, and sends the patient to checkout. The person at checkout collects the payment for the services, prints out any prescriptions for medications or treatments, and provides a printed record of the health services received



Question 2: Representation of a restaurant situation with an E-R diagram.



Question 3:

- a. One or More employees can work on a project
- b. The degree of the Used_on relationship is a Binary relationship
- c. No associative entity appears in the diagram
- d. Skill could be modelled by making it a composite attribute
- e. The attributes
 - i. "Work start date"
 - ii. "Work end date"
 - iii. "Work name"
 - iv. "Work ID"
 - v. "Work Description",
 could be attached to the Work_on relationship.
- f. Yes, TOOL can be modelled as an associative entity because TOOL can deal with many-to-many relationship with Task (i.e. many tools can be used to perform many task). More so, TOOL also has some attribute such as "Tool name", "Tool ID", and so on that can be added.