CS5200: ASSIGNMENT 2: DATA MODELING
UML DIAGRAM FOR MEDITRACK LLC
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◄ generated for

◄ generated for

HealthCareProvider

«key» hcp_id : Number
name : Text
contact: Number
license: Number
joining_date: Date

Visit

«key» visit_id : Number
date : date
time: time
hcp_id: list<Number>

◄ examines patient

Nurse

«key» nurse_id : Number
specialization: Text
degree: Text

Physician

«key» physician_id : Number
phy_specialization: Text

Patient

«key» patient_id : Number
name : text
gender: text
date_of_birth : date

is taken by ►

reports ►

conducts ▼

PatientReadings

<<key>> reading_id: number
nurse_id: Number
patient_id : Number
visit_id: Number
weight: Number
height: Number
temperature: Number
blood_pressure: Number
created_date: Date
last_updated_Date: Date

DiagnosisTests

«key» physician_id : Number
patient_id : Number
visit_id: Number
diagnosis_tests: text
date: Date

Diagnosis

«key» diagnosis_id : Number
patient_id: Number
visit_id: Number
diagnosis_details : Text
date: Date

◄ applies to

prescribes ▼

Medecines

«key» medecine_id: Number
med_name: Text
med_dosage: Number
med_frequency: Number
expiration_date: Date
manufacturer: Text

Prescription

«key» prescription_id: Number
physician_id: Number
diagnosis_id : Number
date: Date

◄ prescribed to

◄ prescribed to

List Of Assumptions:

1. A patient can give multiple visits.
2. During each visit, a nurse will record patient readings
3. Health Care providers consists of following 2 types:
   a. Nurses - records patient 's height, weight, etc.
   b. Physicians - diagnoses and prescribes patients
4. Patient can be assigned no prescriptions (a scenario where patient was diagnosed to be fit)
5. There can be a scenario where physician does not need to conduct any test.
6. If a prescription exists, it needs to have atleast one medecine prescribed on it
7. Physician generates the Diagnosis and prescribes the prescriptions to Patient

Note:

Generalization
 - HealthCareProvider has two subclasses nurse and physician

Aggregation
 - Prescription is an aggregation of drugs

Composition
-Prescription cannot exist without diagnosis
-Patientreadings cannot exist without Visit

Association
-Examples of Patient - Visit, Visit-HealthCareProvider, Physician-DiagnosisTests etc