Indian Institute of Technology, Madras
Chennai

CS6852 : Assignment 3 - Ontology Design

Group - 13

Domain - Hospital Management

Submitted To :
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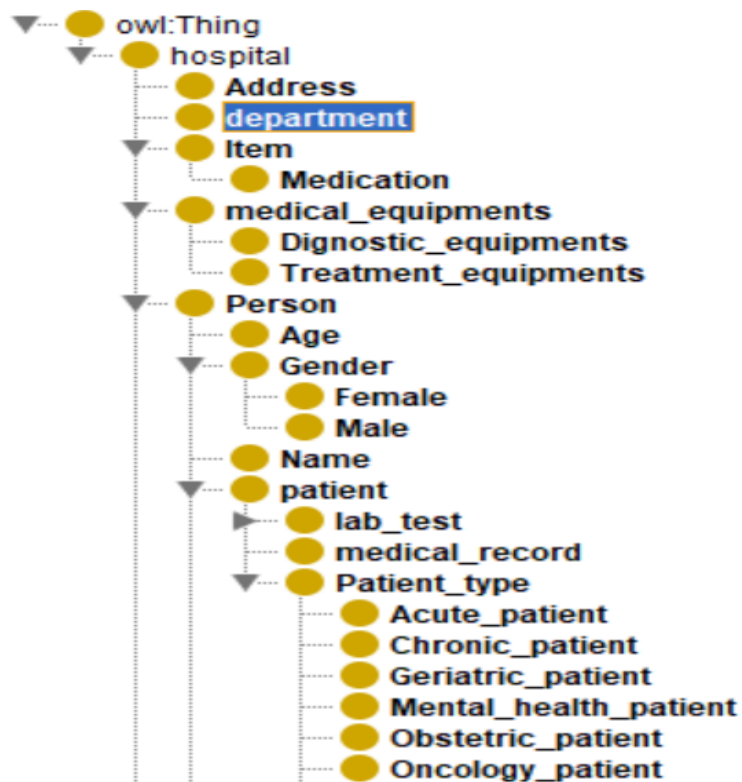**Deepak Kumar Pamba (CS22M038)**
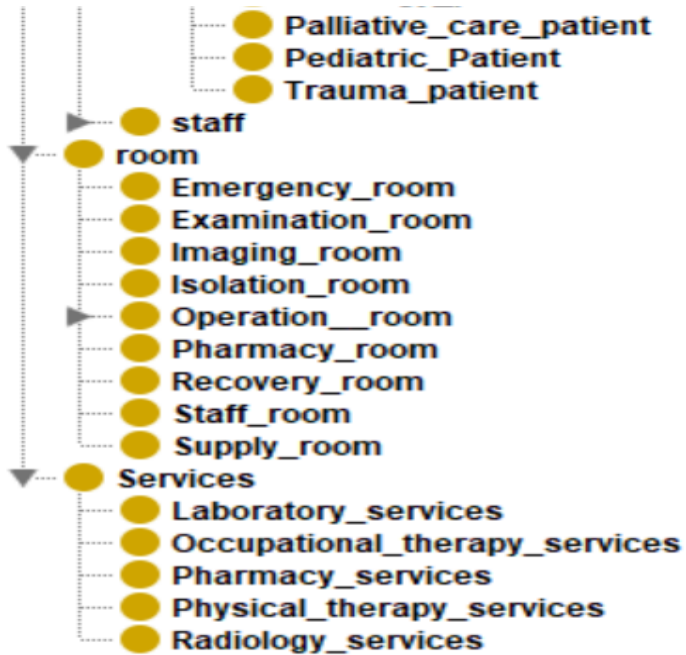**Raj Mahajan (CS22M067)**
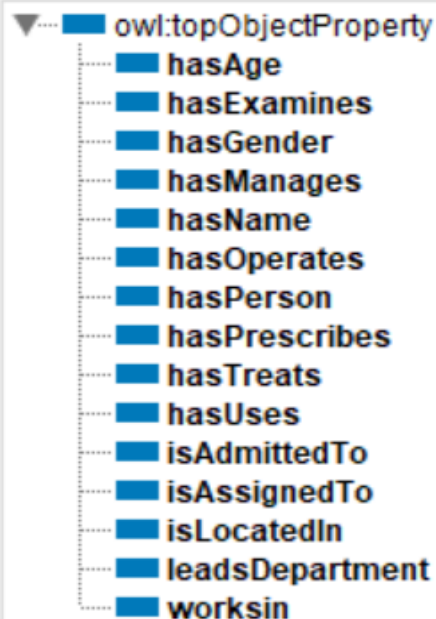**P. Sai Sree Ram(CS22M076)**

Overview

The OWL ontology Hospital is a description of the concepts and relationships that exist within the domain of hospitals. It defines classes as well as properties. The ontology was evaluated for consistency using the Protege Software.

Classes

- owl:Thing
  - hospital
    - Address
    - department
    - Item
      - Medication
    - medical_equipments
      - Dignostic_equipments
      - Treatment_equipments
    - Person
      - Age
      - Gender
        - Female
        - Male
      - Name
      - patient
        - lab_test
        - medical_record
        - Patient_type
          - Acute_patient
          - Chronic_patient
          - Geriatric_patient
          - Mental_health_patient
          - Obstetric_patient
          - Oncology_patient

- Palliative_care_patient
- Pediatric_Patient
- Trauma_patient
- staff
- room
  - Emergency_room
  - Examination_room
  - Imaging_room
  - Isolation_room
  - Operation__room
  - Pharmacy_room
  - Recovery_room
  - Staff_room
  - Supply_room
- Services
  - Laboratory_services
  - Occupational_therapy_services
  - Pharmacy_services
  - Physical_therapy_services
  - Radiology_services

Objects

- owl:topObjectProperty
  - hasAge
  - hasExamines
  - hasGender
  - hasManages
  - hasName
  - hasOperates
  - hasPerson
  - hasPrescribes
  - hasTreats
  - hasUses
  - isAdmittedTo
  - isAssignedTo
  - isLocatedIn
  - leadsDepartment
  - worksin

Individuals

Individuals: Deepak

- Aditya
- Akash
- Amy
- Anesthesia_machines
- Aniket
- Blood_Sugar_Test
- Cardiology
- Chinmay
- CT_scanners
- Deepak
- Divya
- Gynacology
- Hemoglobin_A1C
- Hepatology
- Infusion_pumps
- Lubrex
- MixogramLX
- MRI_machines
- Neha
- Nephrology
- Neurology
- Quadrajel
- Radiology
- Reena
- Sakshi
- Samantha
- Sameer
- Sree_Putta
- Surgical_instruments
- Thyroid_Function_Test
- X-ray_machines

http://www.semanticweb.org/rajma/ontologies/2023/3/assignment3/Aditya

Asserted Hierarchy

Inferred Hierarchy