

**BENAZIR BHUTTO SHAHEED UNIVERSITY
LYARI, KARACHI**

WEB SEMANTICS ASSIGNMENT 03

Submitted to:

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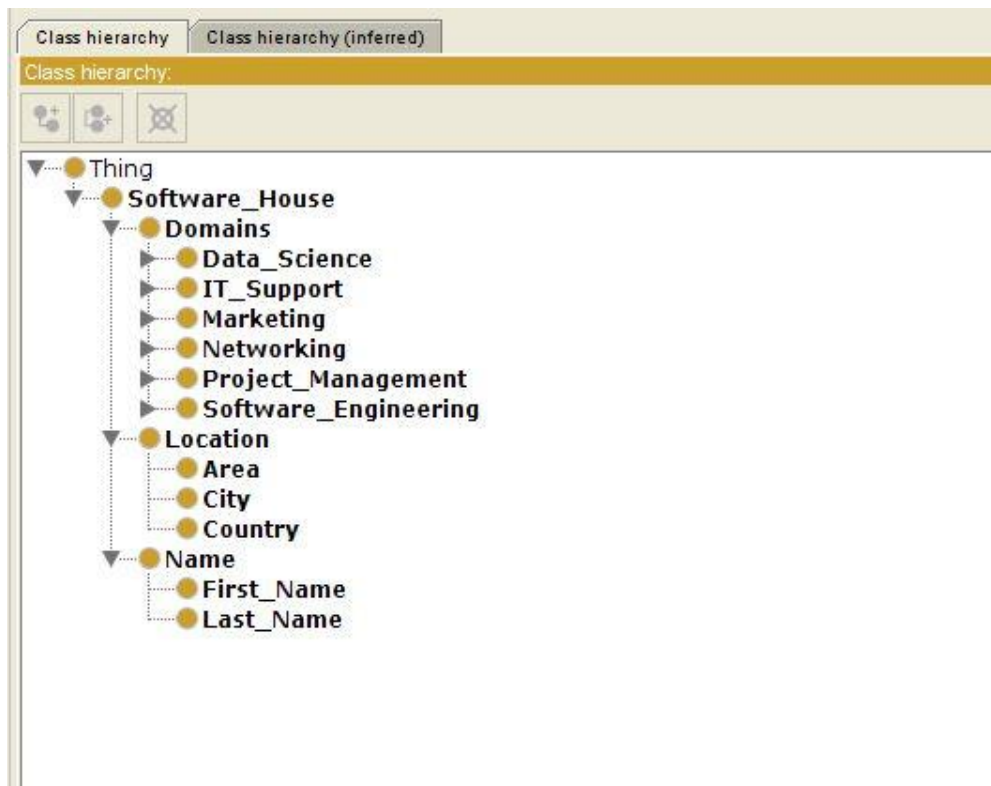
Roll #: 616

SOFTWARE HOUSE

STATEMENTS:

1. Software Engineering is depart of Software House
2. A name is possessed by Software House
3. Data Science is domain of Software House
4. Location is of Software House
5. Marketing is depart of Software
6. IT Support is domain of Software House
7. First Name is of Software House
8. Last Name is possessed by Software House

CLASSES:



OBJECT PROPERTIES:

Object property hierarchy: is_of

Annotations Usage

Annotations: is_of

Annotations +

Characteristics: is_of

- ☒ Functional
- ☒ Inverse functional
- ☒ Transitive
- ☒ Symmetric
- ☒ Asymmetric
- ☒ Reflexive
- ☒ Irreflexive

Description: is_of

Equivalent To +

- ☒ possessed_by

SubProperty Of +

Inverse Of +

Domains (intersection) +

- Name
- Location

Ranges (intersection) +

- Software_House

Disjoint With +

SuperProperty Of (Chain) +

Object property hierarchy: is_depart_of

Annotations Usage

Annotations: is_depart_of

Annotations +

Characteristics: is_depart_of

- ☒ Functional
- ☒ Inverse functional
- ☒ Transitive
- ☒ Symmetric
- ☒ Asymmetric
- ☒ Reflexive
- ☒ Irreflexive

Description: is_depart_of

Equivalent To +

- ☒ is_domain_of

SubProperty Of +

Inverse Of +

Domains (intersection) +

- Networking
- Software_Engineering
- Data_Science
- IT_Support
- Marketing
- Project_Management

Ranges (intersection) +

- Software_House

Disjoint With +

DATA PROPERTIES:

The screenshot shows the Protege interface with the 'Data Properties' tab selected. The left pane displays the 'Data property hierarchy: Location' with a tree structure: **topDataProperty** (expanded) containing **Location** and **Domains**. The main area is divided into three panes:

- Annotations: Location**: Contains a single '+' icon for adding annotations.
- Characteristics: Location**: Contains a checked checkbox for **Functional**.
- Description: Location**: Contains fields for 'Equivalent To', 'SubProperty Of', and 'Domains (intersection)'. The 'Domains (intersection)' field lists **Area**, **Country**, and **City**. The 'Ranges' field is set to **string**.

The screenshot shows the Protege interface with the 'Data Properties' tab selected. The left pane displays the 'Data property hierarchy: Domains' with a tree structure: **topDataProperty** (expanded) containing **Location** and **Domains**. The main area is divided into three panes:

- Annotations: Domains**: Contains a single '+' icon for adding annotations.
- Characteristics: Domains**: Contains a checked checkbox for **Functional**.
- Description: Domains**: Contains fields for 'Equivalent To', 'SubProperty Of', and 'Domains (intersection)'. The 'Domains (intersection)' field lists **Networking**, **Software_Engineering**, **Data_Science**, **Project_Management**, **Marketing**, and **IT_Support**. The 'Ranges' field is set to **string**.

ONTOGRAPH:

