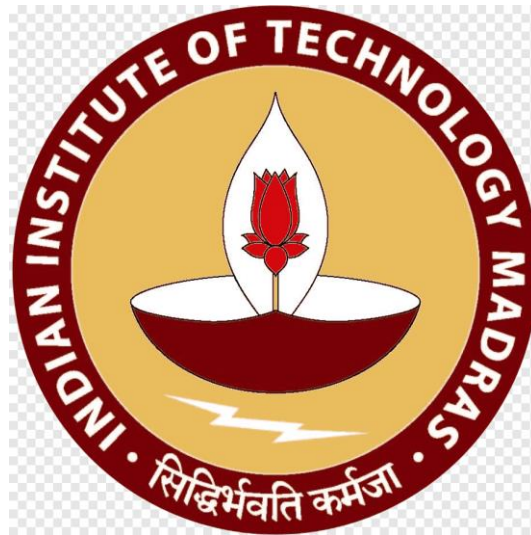


**Indian Institute of Technology, Madras
Chennai**



CS6852: Assignment 3 - Ontology Development

Group-3

Domain: -Inter IIT Basketball Tournament

Submitted By: -

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Assignment Overview

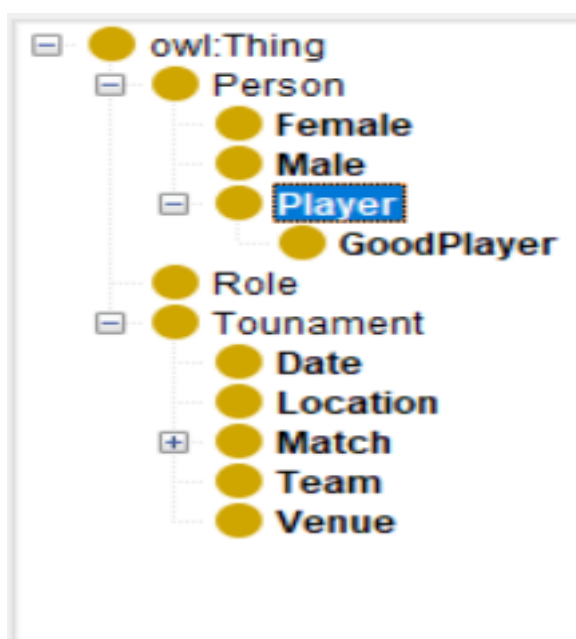
A **Inter IIT Basketball Tournament** domain **OWL** ontology was created, which consisted of multiple distinct classes and object properties. Additionally, individuals were included in the ontology and correctly mapped to their corresponding class types and object properties. The ontology was then evaluated for consistency using Protege software's built-in reasoner. After this evaluation, two different tools were used to visualize the ontology.

Tool Used

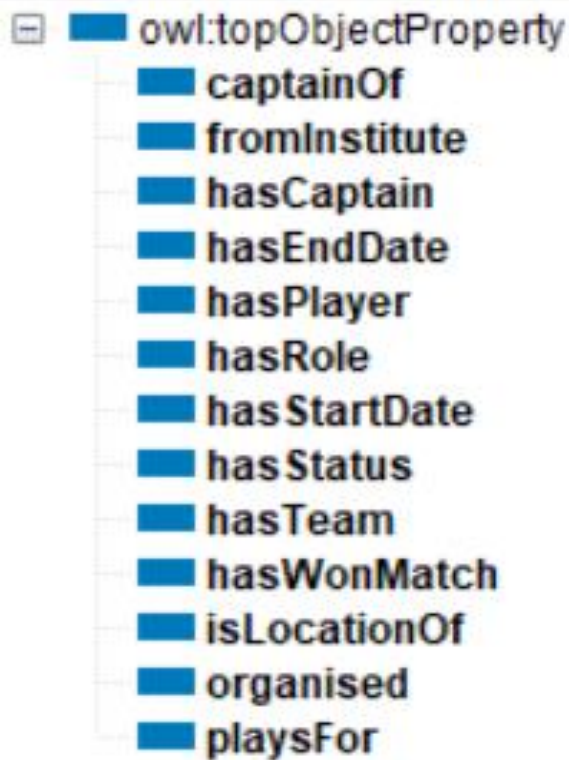
The following tools were utilized for the project:

- **Protege (version 5.6.1)**: This software was used for ontology development and management.
- **GraphViz**: This tool was used for the visualization of the ontologies and graphs.
- **Webvowl (<https://service.tib.eu/webvowl/>)**: This web-based tool was utilized for the analysis and visualization of the ontology. It provides various features such as interactive visualizations, the ability to export the ontology in different formats, and the ability to analyze the ontology's quality.

Classes



Objects

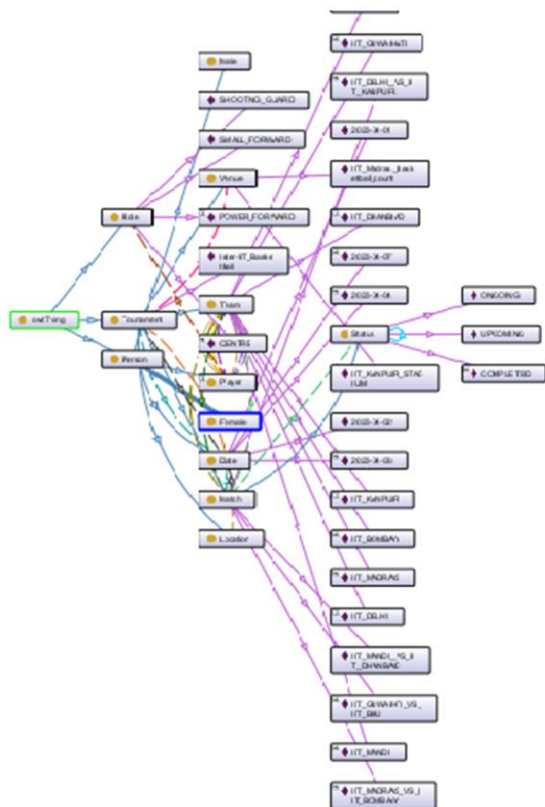


Individuals



- ◆ IIT_MADRAS_VS_IIT_BOMBAY
- ◆ IIT_MANDI
- ◆ IIT_MANDI_VS_IIT_DHANBAD
- ◆ Inter-IIT_Basketball
- ◆ jaydeep_Varun
- ◆ Nandan_Bhowmik
- ◆ ONGOING
- ◆ Pankaj_Singh
- ◆ POINT_GUARD
- ◆ POWER_FORWARD
- ◆ Prakesh_Singh
- ◆ Prem_Jeet_Singh
- ◆ Rahul_Das
- ◆ Rahul_Kurmi
- ◆ Rajesh_Patel
- ◆ Ram_Prasad_Kumar
- ◆ Raunak_Singh
- ◆ Ravi_Kumar
- ◆ Rohit_Gupta
- ◆ Rupak_Gupta
- ◆ Sandeep_Lala
- ◆ Sandip_Singh
- ◆ Sawan_Anand
- ◆ Sekhar_Gupta
- ◆ Shankadeep_Singh
- ◆ Shashank_Rajput
- ◆ SHOOTING_GUARD
- ◆ SMALL_FORWARD
- ◆ Subham_Poddar
- ◆ Sumit_Sharma
- ◆ Sunil_Singha
- ◆ Suraj_Kumar
- ◆ Suraj_Prasad
- ◆ Suraj_Thakur

Class Hierarchy



Consistency

The ontology's consistency was verified by executing the 'HermiT 1.4.3.456' reasoner, which confirmed that the ontology is consistent.

```
INFO 21:22:12 ----- Running Reasoner -----
INFO 21:22:12 Pre-computing inferences:
INFO 21:22:12   - class hierarchy
INFO 21:22:12   - object property hierarchy
INFO 21:22:12   - data property hierarchy
INFO 21:22:12   - class assertions
INFO 21:22:12   - object property assertions
INFO 21:22:12   - same individuals
INFO 21:22:12 Ontologies processed in 164 ms by HermiT
INFO 21:22:12
```