**ASSIGNMENT SUBMITTED TO:**

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**CLASS:**

CLASS: BSCS 8TH SS2

Ontology Requirements Specification Document (ORSD)

# Ontology Name:

Final Year Project Working Ontology (FYPWO)

# 1. Purpose

The purpose of this ontology is to define and organize the key concepts, processes, and relationships involved in the Final Year Project (FYP) workflow of university students. It will help students, supervisors, and administrators to understand and manage the FYP process clearly and systematically.

# 2. Scope

This ontology will cover: proposal submission, topic approval, supervisor assignment, progress reports, mid evaluations, final evaluations, viva presentations, and documentation. It will not cover non-academic activities.

# 3. Implementation Language

* **Primary Language**: OWL (Web Ontology Language)
* **Modeling Tool**: Protégé Ontology Editor
* **Exportable Formats**: OWL/XML, RDF/XML, turtle

# 4. Intended End-Users

* Students
* Supervisors
* Project Committees
* Project Manager
* University Administration

# 5. Intended Uses

* Smart FYP management systems for universities
* Efficient supervisor-student allocation
* Structured reporting for administration
* Easy semantic querying for analysis and reporting
* To evaluate students and their projects.
* To understand and remove any ambiguity in the FYP process

# 6. Requirements

## a) Functional Requirements

## Group of Competency Questions (CQs)

## ****Competency Questions for Students:****

* What is my assigned project title?
* Who is my project supervisor?
* What are the upcoming deadlines for reports and presentations?
* Have I passed my mid-term evaluation?
* What materials have I submitted for my project?

## ****Competency Questions for Supervisors:****

* **Which students am I currently supervising?**
* **What are the titles of the projects assigned to my students?**
* **What feedback have I provided to my students on their progress?**
* **How many students have successfully completed their mid-term evaluations?**

## ****Competency Questions for Evaluation Committee:****

* Which students are scheduled for viva presentations?
* What is the evaluation outcome for each student?
* Which students have successfully defended their projects?

## ****Competency Questions for Project Manager:****

* Which committees have been assigned to upcoming viva sessions?
* Are there any students without an assigned supervisor?
* What percentage of FYP projects have been successfully completed this semester?
* Which students are ready for final evaluation or viva?
* What is the current status of all FYP projects department-wise?
* How many students have submitted final documentation?
* Which students have not yet submitted their project proposals?
* Which supervisors are currently overloaded with too many students?
* Which students have failed or delayed mid-evaluations?
* Which students need urgent intervention for project progress?

## ****Competency Questions for University Administration:****

* How many projects are currently active?
* Which supervisors have the maximum number of supervisees?
* What is the overall project pass/fail rate?
* How many students submitted final reports this semester?

## b) Non-Functional Requirements

* **Scalability to handle projects across multiple departments**
* **Re-usability for various academic disciplines**
* **Conformance to W3C Semantic Web standards**
* **Multilingual support (initially English, later extensible)**
* **Extensibility to include future processes (e.g., industry-linked FYPs).**

# 8. Pre-Glossary of Terms

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| --- | --- |
| **Term** | **Meaning** |
| Student | A final-year student working on a project |
| Supervisor | A teacher assigned to guide the project |
| Committee  Manager | Group evaluating FYP work  Teacher who manages all process of project |
| Proposal | Project idea document |
| Mid Evaluation | Assessment in the middle of project |
| Final Evaluation | Assessment at the end of project |
| Viva | Final oral presentation and defense |
| Documentation | Reports, thesis, and related submissions |