

Intermediate Education Ontology

Project Code

KSR-348

Project Advisor

Mr. Fahad Maqbool

Domain Advisor

Mr. Abdul Ghafoor

Project Manager

Dr. Muhammad Illyas

Project Team

- Team Leader: Sehrish Noreen – BSEF19M014
- Team Member: Kiran Anwar – BSEF19M018
- Team Member: Rabia Ehsan – BSEF19M013

University:

University of Sargodha, Main Campus

Department:

Computer Sceince and Infirmination Technology

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Summary of Ontology Requirements Specification Document

1. Purpose

The purpose of the Intermediate Education ontology is to provide students with knowledge representation of their inter programs.

2. Scope

Intermediate Education ontology is specific to the Intermediate level (11th and 12th classes). The ontology includes knowledge related to Intermediate courses only. It does not include knowledge about other levels' (Primary, Secondary, A/O Levels, and Higher). It limits to Intermediate Education in the Punjab province of Pakistan (students under BISE-Punjab). Does not include federal boards.

3. Implementation Language

Owl language will be used to implement the ontology.

4. Intended Users:

Sr. No.	User
<u>User 1:</u>	Students
<u>User 2:</u>	Parents
<u>User 3:</u>	Teachers
<u>User 4:</u>	Colleges
<u>User 5:</u>	Punjab Text and Curriculum Board
<u>User 6:</u>	Punjab Higher Education Department
<u>User 7:</u>	Board of Intermediate and Secondary Education

5. Intended Uses:

Sr. No.	Use
<u>Use 1:</u>	To get information about admissions.
<u>Use 2:</u>	To guide children about choices of degrees.
<u>Use 3:</u>	To guide students about board registration.
<u>Use 4:</u>	To guide students in Academics.
<u>Use 5:</u>	To guide students about scholarships.
<u>Use 6:</u>	To guide students about the result announcement.
<u>Use 7:</u>	To guide the students about program selection.

6. Ontology Requirements

6.1 Non-Functional Requirements

- **Performance:** Ontology should meet all the aspects of Intermediate Education (as per the defined scope).
- **Reusability:** Ontology should be flexible enough to be reused.

6.2 Functional Requirements (Competency Question Groups)

G1: Admission and Available Degree Programs

- ☆ G1-A: What are the attributes in the admission form?
- ☆ G1-B: Which institutes offer the intended program?
- ☆ G1-C: What is the duration of Inter program?
- ☆ G1-D: Which/How many programs are available for Inter students?
- ☆ G1-E: Which degree is prerequisite for intermediate?
- ☆ G1-F: How much marks in previous degree, are necessary to get admission?
- ☆ G1-G: What is admissions' opening date in each college?
- ☆ G1-H: What is admissions' closing date in each college?

G2: Institutions

- ☆ G2-A: Which boards in Punjab are offering the Intermediate Programs?
- ☆ G2-B: Which attributes are there in the board registration form?
- ☆ G2-C: How many students are registered in each board?
- ☆ G2-D: When are Intermediate programs' classes starting?
- ☆ G2-E: When Intermediate programs' classes End?
- ☆ G2-F: What is college class timing?
- ☆ G2-G: How many subjects are taught in a day?
- ☆ G2-H: What is colleges' procedure to prepare the students for board exams?

G3: Non-Academic

- ☆ G3-A: Which facilities are given to students in college?
- ☆ G3-B: Which co-curricular functions take place at colleges?
- ☆ G3-C: What is procedure to migrate from a college to other?
- ☆ G3-D: What is the summer and winter vacations' duration?

G4: Academics

- ☆ G4-A: What are the contents of the Syllabus for 1st and 2nd years?
- ☆ G4-B: Who is responsible for approving the subjects for intermediate?
- ☆ G4-C: Who is responsible for preparing and approving the syllabus for intermediate?
- ☆ G4-D: Which subjects are there in each inter-program?
- ☆ G4-E: Which subjects are elective?
- ☆ G4-F: Which subjects are compulsory?
- ☆ G4-G: What are language choices for students?

G5: Examination

- ☆ G5-A: Who is responsible to conduct the examinations in Punjab?
- ☆ G5-B: Who is responsible for deciding the subjects for intermediate?
- ☆ G5-C: Who issues roll no slip?
- ☆ G5-D: What attributes does roll number slip include?
- ☆ G5-E: Which subjects' practical is taken?
- ☆ G5-F: What is exams starting date?
- ☆ G5-G: What is exams ending date?
- ☆ G5-H: Which subjects' exams are on same date?

G6: Result

- ☆ G6-A: Who/when announces the result?
- ☆ G6-B: What attributes does the result sheet include?
- ☆ G6-C: What are the passing criteria for students of intermediate?
- ☆ G6-D: What are the fail/pass criteria for students of intermediate?

G7: Finance

- ☆ G7-A: What is 2 year fee in college?
- ☆ G7-B: Which college has highest/lowest fee?
- ☆ G7-C: How much marks required to get concession?
- ☆ G7-D: How much concession is given?
- ☆ G7-E: Which scholarships are available?
- ☆ G7-F: Which sources will be used to acquire scholarships?
- ☆ G7-G: On what basis scholarships are awarded to students?

G8: Processes

- ☆ G8-A: What is process to get admission in college?
- ☆ G8-B: What is process to get registered in board?
- ☆ G8-C: What is process to take exams?
- ☆ G8-D: What is process to check the result?

Pre Glossary of Terms

Education, intermediate, program, examination, practical, scholarships, college, admission, vacations, subjects, compulsory, elective, roll number slip, pass, fail, result, board, BISE, PTCB, PEB, syllabus, registration, medium.
