The query requirement in our evaluation

1. Background

In a learning system, retrieve the data on classes, and the corresponding data on students and course schedules.

2. Data Dictionary

The data dictionary contains the tables and their columns involved in this query requirement.

3. Logic for retrieving data

The columns of this table report are divided into 3 parts: First part (13 columns, class information), Second part (7 columns, student information), Third part (9 columns, schedule information).

For First part, first retrieve class_id, class_desc, dmn_id, qual_id, start_dte, end_dte, max_size from pa_class, and then retrieve dmn_desc from pa_domain according to dmn_id, qual_title from pa_qual according to qual_id, col_num and user_value from pa_class_user according to class_id, then retrieve label from pa_usrcl_class according to col_num, and user_desc from pa_usrre_class according to pa_usrcl_class.col_num = pa_usrre_class.col_num and pa_usrcl_class.user_value = pa_usrre_class.user_id.

For Second part, first construct a temporary table used to store student information: retrieve class_id, stud_id, class_stat_id, comments from pa_class_student, and then retrieve lname, fname, mi from pa_student according to stud_id and class_stat_desc from pa_class_stat according to class_stat_id.

For Third part, first construct a temporary table used to store schedule information: retrieve class_id, schd_id from pa_class_sched, and then retrieve cpnt_typ_id, act_cpnt_id, rev_dte, timezone_id, display_in_schd_tz from pa_sched according to schd_id, and then retrieve rev_num from pv_course according to cpnt_typ_id, act_cpnt_id, rev_dte. Meanwhile, retrieve start_dte, end_dte from ps_schd_resources according to schd_id.

Finally, for rows in First part, retrieve the corresponding Second part according to class_id, the responding Third part according to class_id.