

STUDENT PERFORMANCE MONITORING SYSTEM

SPMS 4.0

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OBJECTIVE

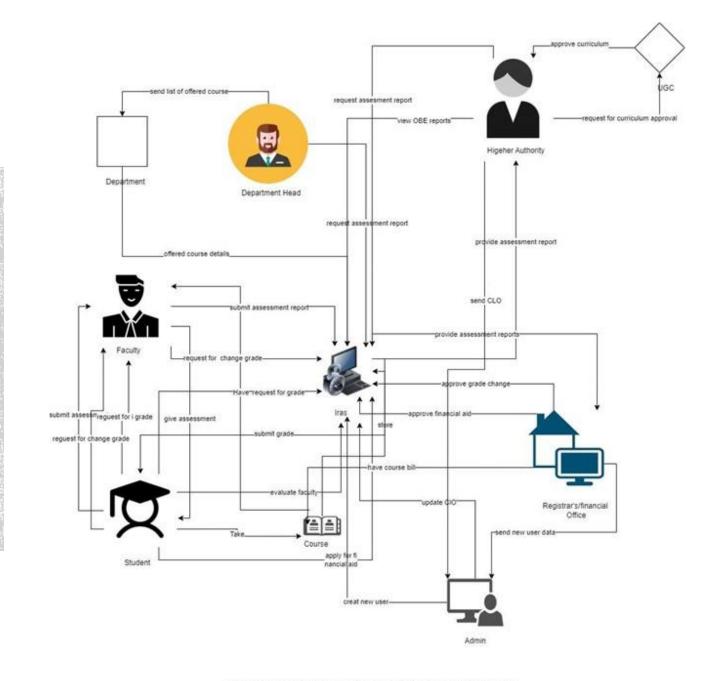
User-friendly monitoring system

Allowing institutional bodies and students to track progress more productively

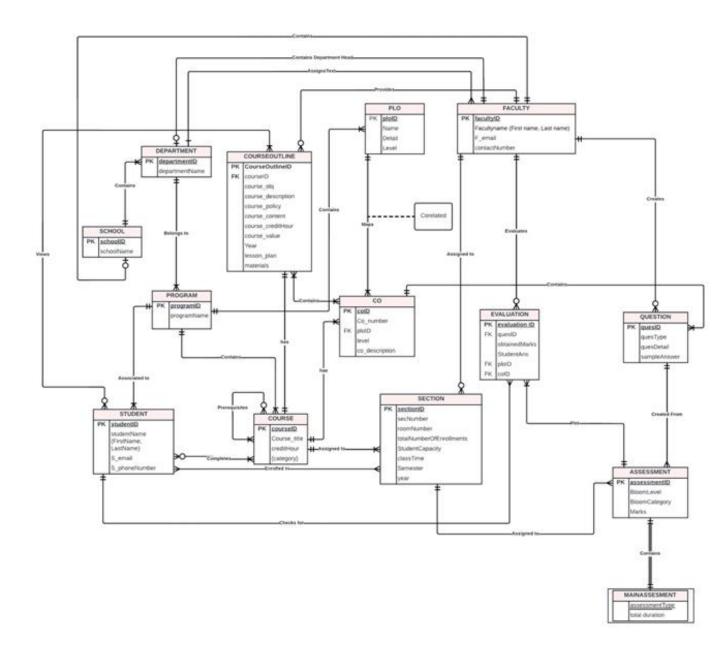
Visualizing progress of courses more effectively



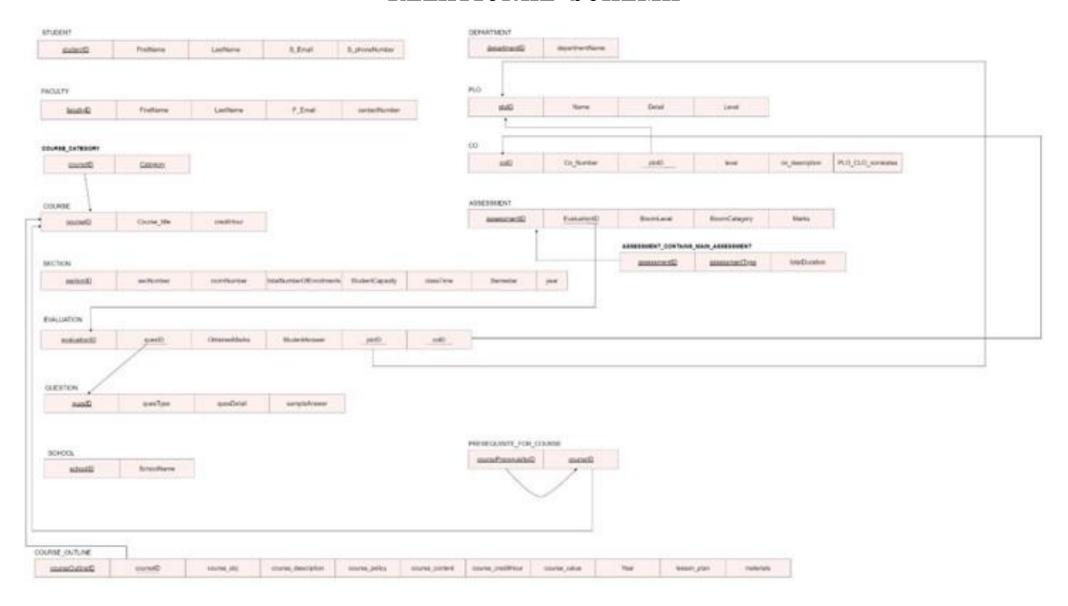








RELATIONAL SCHEMA





NORMALIZATION INDEXING

| t1→ | t2, t3, t4, t5 | | | | | | | | | |
|-----|-------------------------------------|--|--|--|--|--|--|--|--|--|
| d1→ | d2 | | | | | | | | | |
| fl→ | f2, f3, f4, f5 | | | | | | | | | |
| pl→ | p2, p3, p4 | | | | | | | | | |
| c1→ | c2, p1, c3, c4, c5 | | | | | | | | | |
| o1→ | o2, o3, v1, u1, w1 | | | | | | | | | |
| a1→ | e1, a2, a3, a4, r1, r2 | | | | | | | | | |
| bl→ | b2, b3, b4, b5, b6, b7, b8 | | | | | | | | | |
| el→ | q1, e2, e3, p1, c1 | | | | | | | | | |
| q1→ | q2, q3, q4 | | | | | | | | | |
| s1→ | s2 | | | | | | | | | |
| w1→ | w2, w3, w4, w5, w6, w7, w8, w9, w10 | | | | | | | | | |

| studentID→ | FirstName, LastName, S_email, S_phoneNumber | | | | | | | | | |
|------------------|--|--|--|--|--|--|--|--|--|--|
| departmentID→ | departmentName | | | | | | | | | |
| facultyID→ | FirstName, LastName, F_email ,contactNumber | | | | | | | | | |
| coID→ | Co_Number, ploID, level, co_description, PLO_CLO correlates | | | | | | | | | |
| courseID→ | Course_Title, creditHour, Category, coursePrerequisiteID, courseOutlineID | | | | | | | | | |
| assesmentID→ | evaluationID, BloomLevel, BloomCategory, Marks, assesmentType, totalDuration | | | | | | | | | |
| sectionID→ | secNumber, roomNumber, totalNumberofEnrollments, StudentCapacity, classTime, Semester, year | | | | | | | | | |
| evaluationID→ | quesID, ObtainedMarks, StudentAnswers, ploID, coID | | | | | | | | | |
| quesID→ | quesType, quesDetail, sampleAnswer | | | | | | | | | |
| schoolID→ | SchoolName | | | | | | | | | |
| courseOutlineID→ | course_obj, course_description, course_policy, course_content, course_creditHour, course_value, Year, lesson_plan, materials | | | | | | | | | |

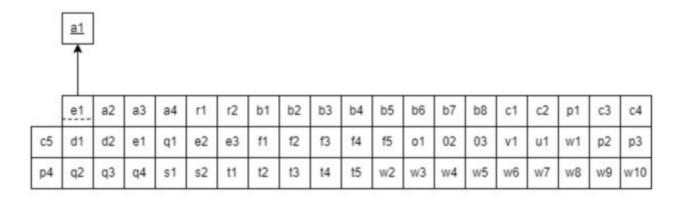


NORMALIZATION

1nF

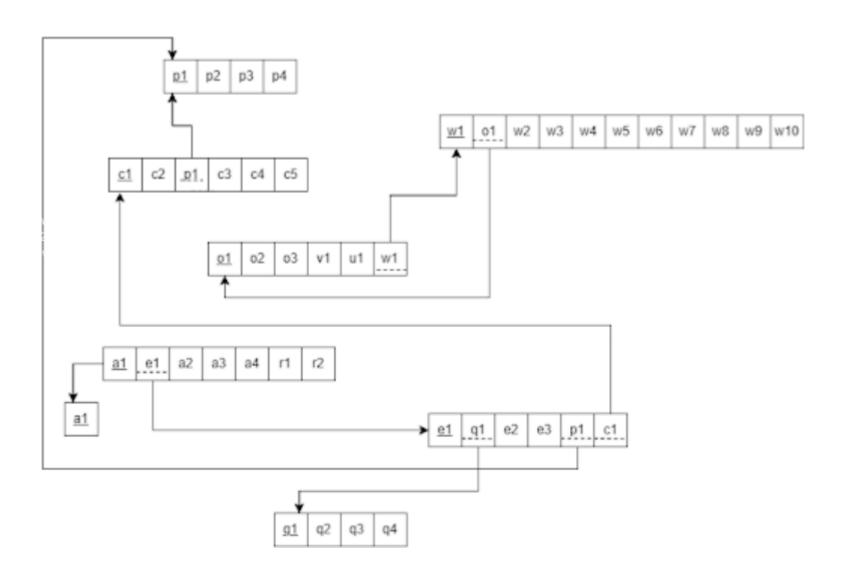
| <u>a1</u> | e1 | a2 | а3 | a4 | r1 | r2 | b1 | b2 | b3 | b4 | b5 | b6 | b7 | b8 | c1 | c2 | p1 | с3 | c4 |
|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| c5 | d1 | d2 | e1 | q1 | e2 | е3 | f1 | f2 | f3 | f4 | f5 | 01 | 02 | 03 | v1 | u1 | w1 | p2 | р3 |
| p4 | q2 | q3 | q4 | s1 | s2 | t1 | t2 | t3 | t4 | t5 | w2 | w3 | w4 | w5 | w6 | w7 | w8 | w9 | w10 |

2nF





NORMALIZATION 3NF





BCNF

• In this stage of our normalization, no non-key attribute can identify any primary key or part of the primary key. So, we can say that all relations are already in BCNF.



THANK YOU

