DBMS - CS310 - CLASS HACKTHON

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20bcs096

① **Conceptual Schema:**

Student — Student ID, firstName, MiddleInitial, lastName, DOB, Phone, local Address, State, Postal Code, Street

Staff — StaffID, firstName, MiddleInitial, lastName, Suffix, Salary, Pay Amount

Participate (Student — Staff)

makes (Student — Enrollment)

Enrollment — Date Enrolled, Amount Paid, phrase, status, Student ID, lesson Index

Pool — Pool Name, PoolID

Teach (Pool — Staff)

need (Enrollment — Classes)

Classes — classname, Instructor, lesson Index, SectionID, Semester, Days, Time, Limit, enrolled

Levels — classname, level Index

has (Levels — Classes)

enrolls / Instructor (Classes — Instructor)

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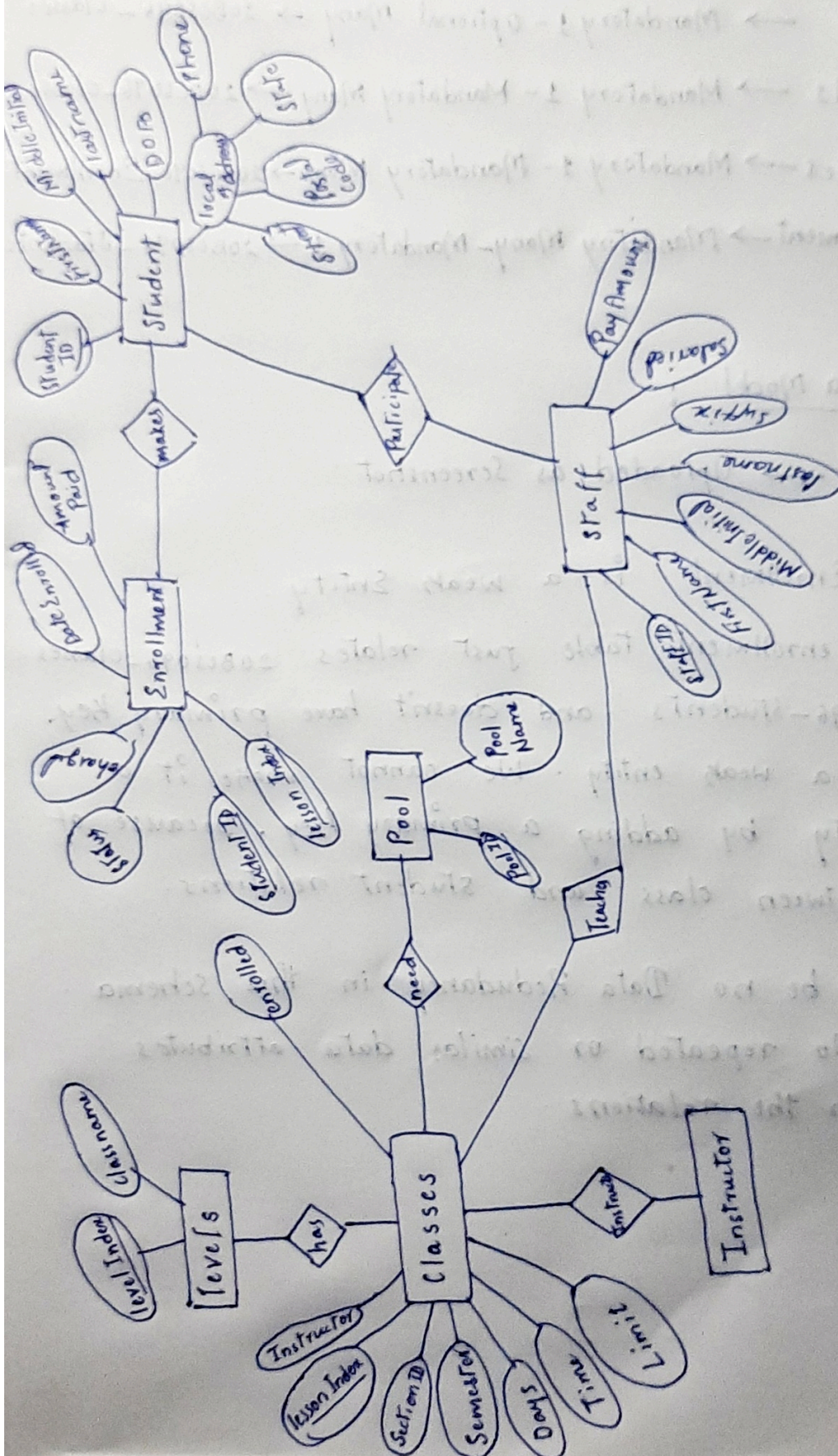20bcs096

② <u>Degree</u> and <u>Cardinality</u> :-

• 20BCS096-Staff → Optional 1 - Optional Many → 20BCS096-classes

• 20BCS096 - Pool → Mandatory 1 - Optional Many → 20BCS096 - classes

• 20BCS096-Levels → Mandatory 1 - Mandatory Many → 20BCS096-classes

• 20BCS096 - classes → Mandatory 1 - Mandatory Many → 20BCS096_Enrollment

• 20BCS096_Enrollment → Mandatory Many - Mandatory 1 → 20BCS096 - Students

③ Physical Data Model :

* ER - Design → Uploaded as Screenshot.

④ 20BCS096 - Enrollment is a weak Entity.

→ Hue, This enrollment table just relates 20BCS096-classes. and 20BCS096 - Students and doesn't have primary key. So, It is a weak entity. We cannot make it a strong entity by adding a primary key. because of relation between class and student relations.

⑤ There will be no Data Redudancy in this schema. because No repeated or similar data attributes present in the relations.