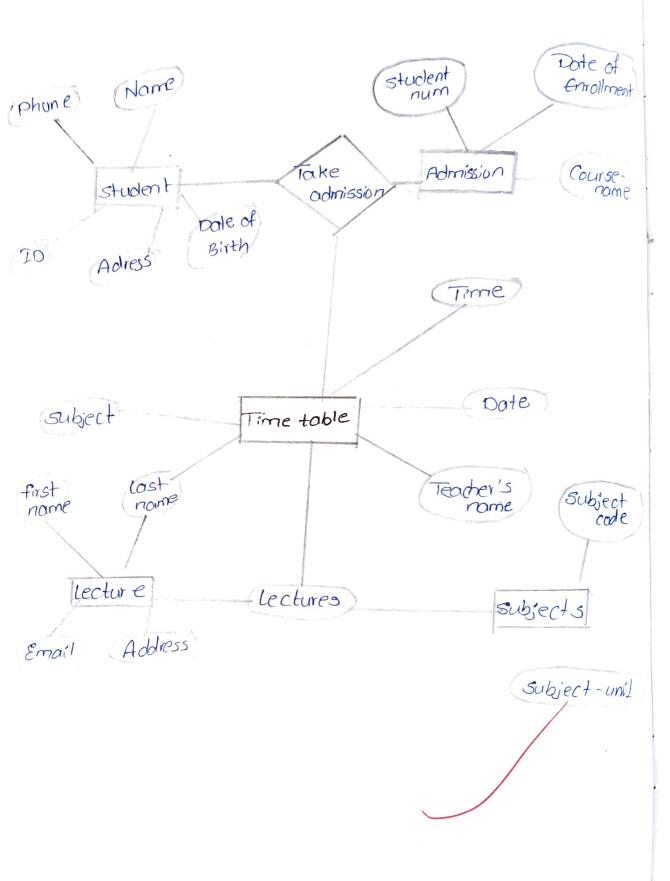
Task (1) Conceptual Design using ER Model Aimi Conceptual Design using ER Model for collège managment system using dnawio Tools Required: steps involved in (reating ER Diagram Step: 2 problem Understanding & Requirement · Analyize the real-word Application; college Analysis. monagment system. · Understand the domain: Student, Admission, Timetoble, Lecturer, Subjects step-2 Entites Vore more Conaponents representing objects or Concept in the System. student Admission Timetable *lecture* subject step-3 Identity Attributes for Each Entity Enample attributes: Entity / Attributes student: student ID, Nome, Adress for Each entity . Admission: student number, Date of Enrollment, Course name. Time touble : Time, Date, teacher's name, Subject Lecture: name, Email, adress Subject: Subject code, Subject unit.



Step. 4 Define Relationships between Entites · A student Enrollment one or more subjects · A Course is tought by one or mare professes · A professor belongs to one Department. · A Course has many Assignments. · A Department offers many Courses. step-s " nother as : Instructions: * Open https://draw.10 R chouse Blant Diagram the following * from left panel, drag the following * Use rectangles for Entites (student, Admission, timetable, lecture) * Use Ellipses for ottributes (Name, Bodde, Etc.) * Use diamonds the Relationships (taskeodmissions, * Comment using lines * Use Labels Such as (i:N), (M:N), Etc, to show Cardinaties Input for the ER Design Real-time college managment System. User requirements: (college managment, lecture, timetable, student records) Database Design Rules (Entity Attribute -Relationship identification

Output:

Entity Relationship Diogram (ERN) that clearly show:

All identified Entites with a Hirlandes.

All relationships with appropriate Gandiaties foreign keys and keys marked appropriently

Relational model

in trabit

Time to the control of the control o

NOME VARCHAR
STUDENT ID(PT) INT
DEPOSITIONAL TO ME
DEPOSITIONAL TO VARCHAR
ANCES VARCHAR
ANCES VARCHAR

Admission in (DE) IN a course nome value value in an and a course nome value in and a course nome value in and a course nome and a course nome and a course nome and a course nome of Emcollamen

Lectury

Name + VARCHAR

Crender VARCHAR

Cectode = 10 (DK) INT

Ph I com VARCHAR

DESCONT - 1 VARCHAR

8V/

Result: Conceptual Design using FR model fr college majorgment System using draw: 10 has been implemented successfully and touk is done. Task (1.1) Convert ER Diagram INTO Relational mode 1 Aim: To Convert the ER Diagram into relational model. steps for converting ex diagram to the relational model * Entity type become a table * All single valued attributes become a colum for the table * A key Attribute of the Entity type Represented by primary key. * The multivalued attribute is represented by a separate table. * Compasite attribute represent by Companers * Derived attributes are not Considered in the table. Using these rules you Can-Convert the fx diagram & column and assign the Mapping between the table. VELTECH EX No. PERFORMANCE (5) GESULT AND ANALYSIS (5) VIVANDEE (S) RECORD (5) TOTAL (20) SIGN WITH DATE Result The relational model for the given ER

Diagram was Sucessfully Convated

Relational model:

Adverse varchar

STUDENT-ID(PK) SIVT

DEPORTMENT-ID INI

DEPORTMENT VARCHAR

DUB DATF

Advess VARCHAR

Time table

Time Time

Oate Date

Classes varing

TT-10(pt) INT

Lectury
Name VARCHAR
Gerda VARCHAR
Lecture-ID(DK) INT
Ph-num VARCHAR
Department VARCHAR

Admission

student ID (pt) INT

Admission-num INT

Course name VARCHAR

Date of Enrollment Date

Subjects. Student-Hame varcuss subject code (PK) DVI