DATABASE SYSTEM
PRACTICUM REPORT
MODULE 2
DATA BASE DESIGN

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INFORMATICS STUDY PROGRAM

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1.

❖ Define Entity (Stage 1)

A. Student: store student personal data
B. Lecturer: save the personal data of the lecturer
C. Subject : save course data
D. Classroom : store classroom data

❖ Determine the attributes of each entity according to the needs of the database (Stage 2)

A. Student

- NIM : PK
- Name_Student : Varchar (45)
- Address_Student : Varchar (225)

B. Lecturer

- NIDN : PK
- Name_Lecturer : Varchar (45)
- Address_Lecturer : Varchar (225)

C. Subject

- Code_Subject : PK
- Name_Subject : Varchar (45)
- Semester : Varchar (14)
- SKS : Varchar (149)

D. Classroom

- Code_Space : PK
- Capasity : Varchar

❖ Determine the relationship of each entity (Stage 3)

Name	Student	Lecturer	Subject	Classroom
Student	-	1:1	-	-
Lecturer	-	-	1:1	-
Subject	n:1	-	-	-
Classroom	-	-	1:1	-

Releationship :

A. Student Have Lecturer :

- Main Table : Student
- Second Table : Lecturer
- Realationship : *One-to-One (1:1)*
- Connecting attribute : Id_Lecturer (FK Id_Lecturer in Lecturer)

B. Student Take Subject

- Main Table : Student
- Second Table : Subject
- Relationship : *One-to-Many (1:n)*
- Connecting attribute : Code_Subject (FK Code_Subject in Subject)

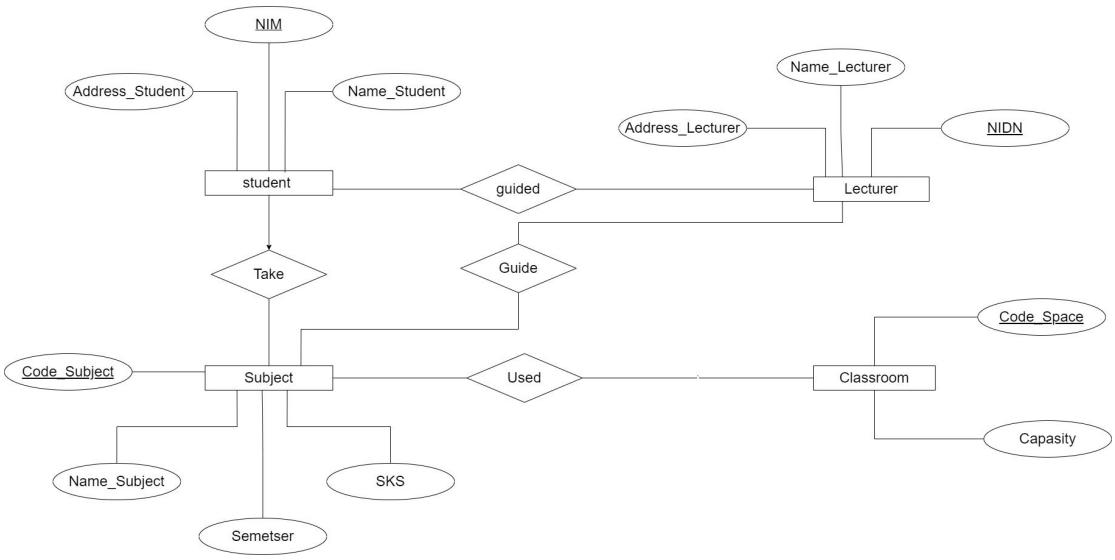
C. Classroom Used Subject :

- Main Table : Subejct
- Second Table : Classroom
- Realationship : *One-to-One (1:1)*
- Connecting attribute : Code_Space (FK Code_Space in Classroom)

D. Lecturer Guide Subject :

- Main Table : Subject
- Second Table : Lecturer
- Relationship : *One-to-One (1:1)*
- Connecting attribute : Code_Subject (FK Code_Subject in Subject)

❖ Draw ERD Diagrams



2.

❖ Define Entity (Stage 1)

A. User

B. Product

C. Store

D. Order

❖ Determine the attributes of each entity according to the needs of the database (Stage 2)

A. User

- Id_User : Integer
- User_Name : Varchar(45)

B. Product

- Id_Product : Integer
- Product_Name : Varchar(225)
- Product_Price : Integer
- Product_Stock : Integer

C. Store
- Id_Store : Integer
- Store_Name : Varchar(225)

D. Order
- Id_Order : Integer
- Order_Time : Date

❖ Determine the relationship of each entity (Stage 3)

Name	User	Product	Store	Order
User	-	-	-	1:n
Product	-	-	-	n:1
Store	1:1	1:n	-	-
Order	-	-	1:1	-

A. User Orders Order
- Main Table : User
- Second Table : Order
- Relationship : *One to Many (1:n)*
- Connecting attribute : Id_User(FK Id_User in Order)

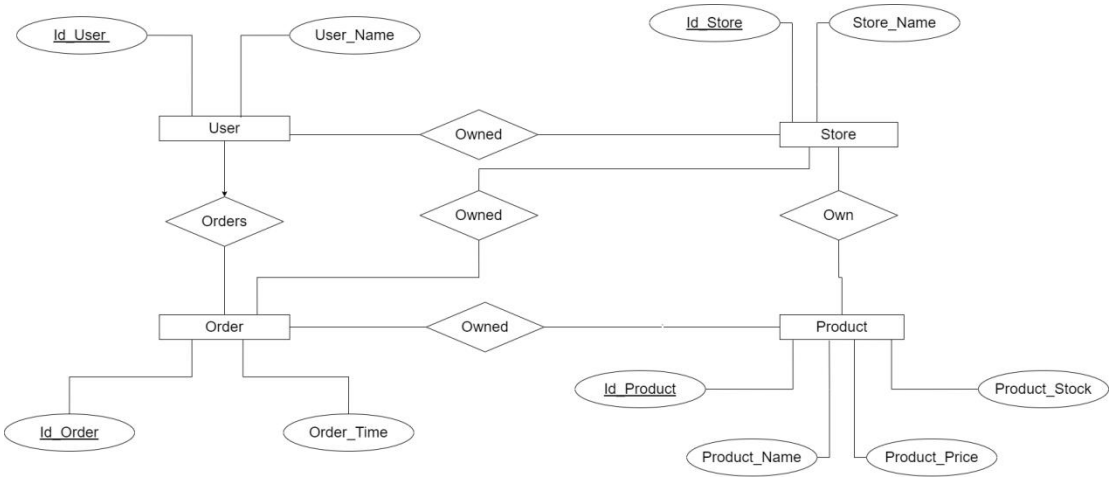
B. Store Have Product
- Main Table : Store
- Second Table : User
- Relationship : *One to one (1:1)*
- Connecting attribute : Id_Store (FK Id_Store in User)

C. Store Own Product
- Main Table : Store
- Second Table : Store_Own_Product
- Relationship : *One to Many (1:n)*
- Connecting attribute : Id_Store (FK Id_Store in Product)

D. Product Owned Order
- Main Table : Product
- Second Table : Product_Owned_Order
- Relationship : *Many to One(1:n)*
- Connecting attribute : Id_Product (FK Id_Product in Order)

E. Order Owned Store
- Main Table : Order
- Second Table : Order_Owned_Store
- Relationship : *One to one (1:1)*
- Connecting attribute : Id_Order (FK Id_Order in Store)

❖ Draw ERD Diagrams (Stage 4)


Id_User
User_Name
Id_Store
Store_Name
User
Owned
Store
Orders
Owned
Own
Order
Owned
Product
Id_Product
Product_Stock
Id_Order
Order_Time
Product_Name
Product_Price