

**DATABASE SYSTEM
PRACTICUM REPORT
MODULE 3
E-R DIAGRAMS DESIGN WITH DBDESIGNER**

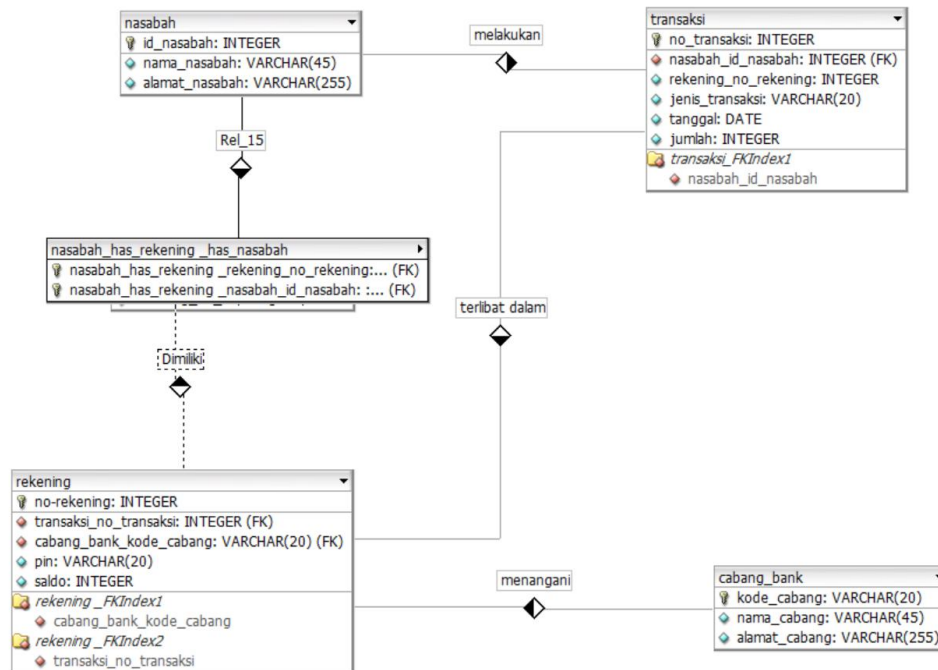


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**INFORMATICS STUDY
PROGRAM**

**FACULTY OF COMMUNICATION AND INFORMATION
SCIENCE MUHAMMADIYAH SURAKARTA UNIVERSITY**

Test.



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
 - Capacity : 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	-

Relationship :

A. Student Have Lecturer :

- Main Table : Student
- Second Table : Lecturer
- Relationship : *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)

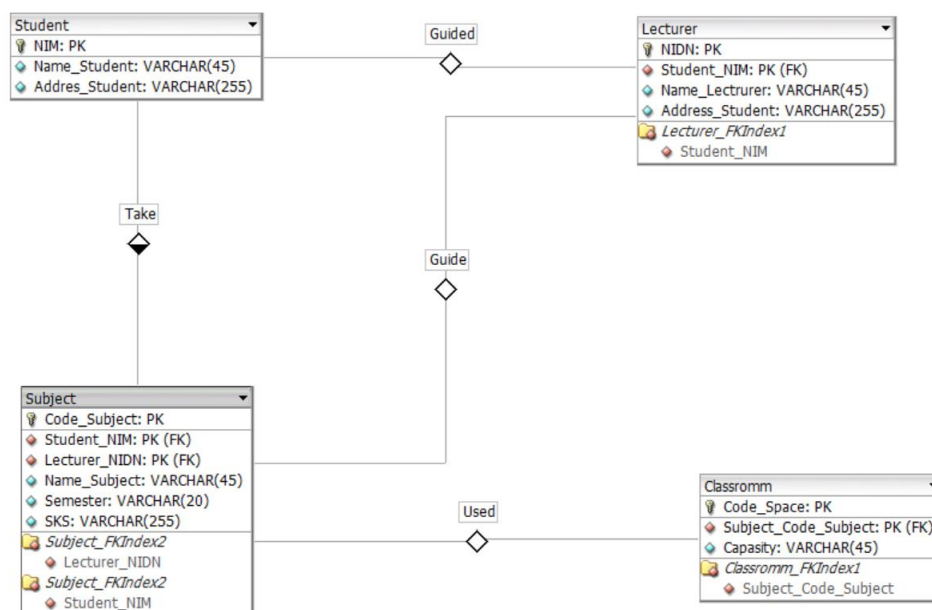
C. Classroom Used Subject :

- Main Table : Subejct
- Second Table : Classroom
- Relationship : *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)

