PROJECT

Bookstore Database System

Author:

1. Dessy Putri Alvini (1710010180)
2. Julius Danes Nugroho (1710010190)

Faculty   : Muhammad Teguh Brillian, S.Kom

Semester   : 1

Quarter   : 1

Class   : 1NAP2

CONTINUING EDUCATION PROGRAM CENTER

FOR COMPUTING AND INFORMATION

TECHNOLOGY FACULTY OF ENGINEERING

UNIVERSITY OF INDONESIA

2017

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PROJECT ON

Bookstore

Developed by

Group   : 2

Name   :

1. Dessy Putri Alvini (1710010180)
2. Julius Danes Nugroho (1710010190)

NIIT

BOOKSTORE

(Project Title)

Batch Code	: 1NAP2
Start Date	: September 20, 2017 End Date: October 9, 2017
Name of the Coordinator	: Mr. Muhammad Teguh Brillian, S.Kom
Name of Developer	:

1. Dessy Putri Alvini (1710010180)
2. Julius Danes Nugroho (1710010190)

Date of Submission	: September 20, 2017

NIIT

CERTIFICATE

This is to certify that this report titled Bookstore embodies the original work done by Dessy Putri Alvini, and Julius Danes Nugroho in partial fulfillment of their course requirement at NIIT.

Coordinator:

Mr. Muhammad Teguh Brillian, S.Kom

ACKNOWLEDGEMENT

Writer have benefited a lot from the feedback and suggestions given to us by Mr. Muhammad Teguh Brillian, S.Kom and other faculty members. Writer make this project to fulfill our assignment. Writer said Alhamdulillah to Allah S.W.T because of his blessing, writer can complete this project. Writer know this paper is far from perfection. Writer hope if writer friend and writer faculty give any comment and suggestion to make this paper better than before.

Writer also said thankyou to:

1. Our Family who give many support to make this paper completed.
2. Mr. Muhammad Teguh Brillian, S.Kom as the guide's lecturer that give put together with the suggestion, idea, and constructive spirit to make this project better.
3. Our Friends who give many idea, spirit and comment to our project.

If the writer made a mistake in writing the application of this bookstore database. Writer ask forgive to all reader and listener of this paper.

Depok, 20 September 2017

Author

SYSTEM ANALYSIS

System Summary: The book store is a shop that sells books. The book sold is of the donations in the donors by the book donors and fund donors, and then in process through the staff.

ENTITIES

Number of entities: 7

Names of entities:

1. CUSTOMER
2. BOOK
3. STAFF
4. BOOK DONORS
5. FUND DONORS
6. TRANSACTION
7. TRANSACTION DETAIL

TABLE DESIGN

Database Name: Bookstore Database System

BOOK

Field Name	Data Type	Description
Book_Code	Short Text	Code of Book (ISBN)
Book_Type	Short Text	Type of Book
Book_Titile	Short Text	Title of Book
Unit_Price	Number	The Price of The Book per One Unit

CUSTOMER

Field Name	Data Type	Description
Cust_Code	Short Text	Nomor Induk Kependudukan (NIK)
Cust_Name	Short Text	Name of Customer

STAFF

Field Name	Data Type	Description
Staff_ID	Short Text	Nomor Induk Pegawai (NIP)
Staff_Name	Short Text	Name of Staff
Position	Short Text	Position of Staff

BOOK_DONORS

Field Name	Data Type	Description
Book_Donors_ID	Short Text	Number ID of Book Donors
Book_Donors_Name	Short Text	Name of Book Donors
Book_Donors_Type	Short Text	Type of Book
Book_Donors_Quantity	Number	Some of The Books
Staff_ID	Short Text	Nomor Induk Pegawai (NIP)

FUND_DONORS

Field Name	Data Type	Description
Fund_Donors_Id	Short Text	Number ID of Fund Donors
Fund_Donors_Name	Short Text	Name of Fund Donors
Fund_Donors_Money	Currency	Many of The Money
Staff_ID	Short Text	Nomor Induk Pegawai (NIP)

TABLE DESIGN

Database Name: Bookstore Database System

TRANSACTION

Field Name	Data Type	Description
Transaction_ID	Short text	Number ID of Transaction
Cust_Name	Short Text	Name of Customer
Staff_Name	Short Text	Name of Staff
Book_Code	Short Text	Code of Book (ISBN)
Book_Type	Short Text	Type of Book
Book_Titile	Short Text	Title of Book

TRANSACTION DETAIL

Field Name	Data Type	Description
Transaction_ID	Short text	Number ID of Transaction
Book_Code	Short Text	Code of Book (ISBN)
Unit_Price	Number	The Price of One Book
Quantity	Number	Quantity of book
Total_Cost	Calculated	Total of Transaction

SPECIAL FIELD PROPERTIES

Database Name: Bookstore Database System

VALIDATION RULE

Entities	Field Name	Value
BOOK	Book_Code	Like "BOOK[0-9][0-9][0-9]"
CUSTOMER	Cust_Code	Like "CUST[0-9][0-9][0-9]"
STAFF	Staff_ID	Like "STA[0-9][0-9][0-9]"
TRANSACTION	Transaction_ID	Like "TRA[0-9][0-9][0-9]"
TRANSACTION DETAIL	Transaction_ID	Like "TRA[0-9][0-9][0-9]"

VALIDATION TEXT

Entities	Field Name	Value
BOOK	Book_Code	Sampel Input "BOOK010" !
CUSTOMER	Cust_Code	Sampel Input "CUST010" !
STAFF	Staff_ID	Sampel Input "STA010" !
TRANSACTION	Transaction_ID	Sampel Input "TRA010" !
TRANSACTION DETAIL	Transaction_ID	Sampel Input "TRA010" !

INPUT MASK

Entities	Field Name	Value
BOOK DONORS	Book_Donors_ID	"BKDNRS"000;;_
FUND DONORS	Fund_Donors_ID	"FNDDNRS"000;;_

CALCULATED

Entities	Field Name	Value
TRANSACTION DETAIL	Total_Cost	=[quantity]*[unit_price]

QUERY USED

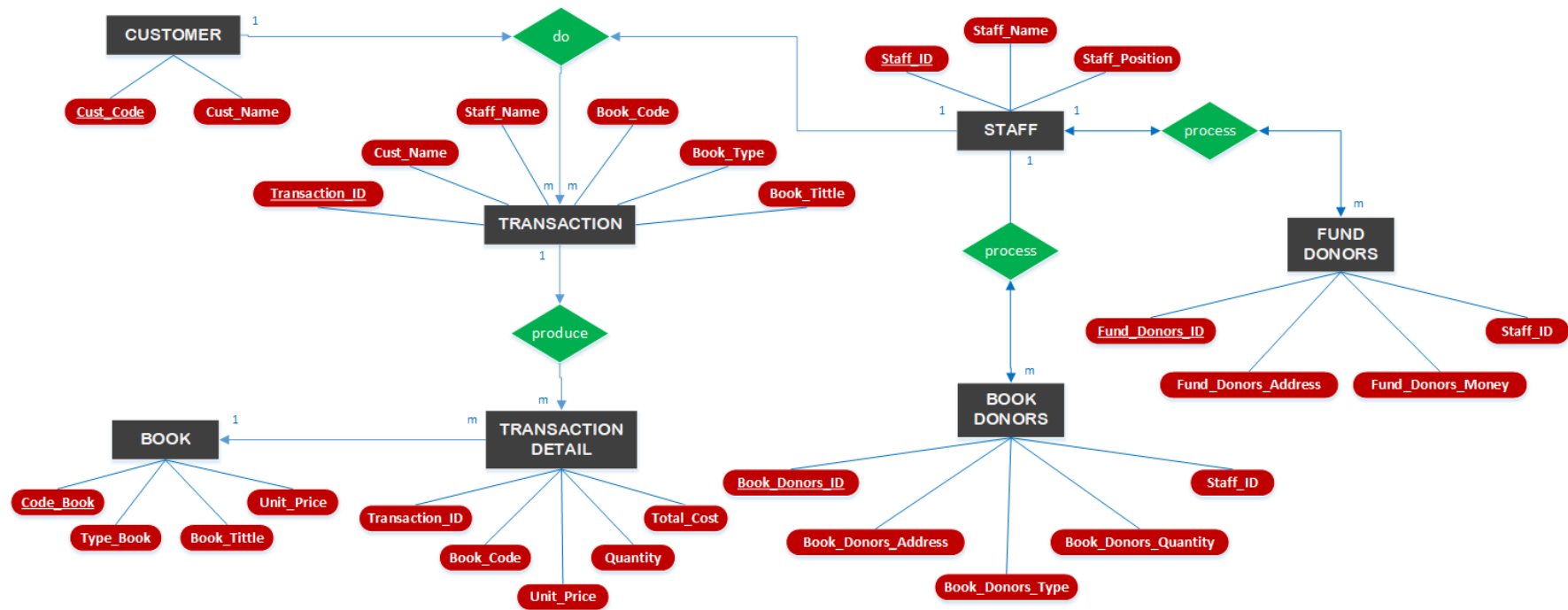| Query Name	Query Type	Description	Tables/Queries Used
Query Book	Simple Query	This query describe about Book	Book Code, Book Type, Book Tittle, Unit Price
Query Customer	Simple Query	This query describe about Customer	Cust Code, Cust Name
Query Staff	Simple Query	This query describe about Staff	Staff ID, Staff Name, Staff Position
Query Transaction	Simple Query	This query describe about Transaction	Transaction ID, Cust Name, Staff Name, Book Code, Book Type, Book Tittle
Query Transaction Detail	Simple Query	This query describe about Transaction Detail	Transaction ID, Book Code, Book Type, Book Tittle, Unit Price, Quantity, Total Cost

FORM USED

Form Name	Form Type	Description	Tables/Reports Used
Main Menu	Columnar	This form describe about Main Menu	Book, Customer, Book Donors, Fund Donors, Staff, Transaction, Report Book, Report Customer, Report Book Donors, Report Fund Donors, Report Staff, Report Transaction, Report Transaction Detail
BOOK	Columnar	This form describe about Books	Book
CUSTOMER	Columnar	This form describe about Customer	Customer
BOOK DONORS	Columnar	This form describe about Book Donors	Book Donors
FUND DONORS	Columnar	This form describe about Fund Donors	Fund Donors
STAFF	Columnar	This form describe about Staff	Staff
TRANSACTION	Columnar	This form describe about Transaction	Transaction
TRANSACTION DETAIL Subform	Columnar	This subform describe about Detail Transaction	Transaction Detail

REPORTS OUTLINE

Reports Name	Layout	Reports Type	Tables/Queries Used
Report BOOK	Columnar	Table	Book Code, Book Type, Book Tittle, Unit Price
Report CUSTOMER	Columnar	Table	Cust Code, Cust Name
Report BOOK DONORS	Columnar	Table	Book Donors ID, Book Donors Name, Book Donors Type, Book Donors Quantity, Staff ID
Report FUND DONORS	Columnar	Table	Fund Donors ID, Fund Donors Name, Staff ID
Report STAFF	Columnar	Table	Staff ID, Staff Name, Staff Position
Report TRANSACTION	Columnar	Form	Transaction ID, Cust Code, Cust Name, Staff Name, Staff ID, Staff Position
Report TRANSACTION DETAIL	Columnar	Query	Transaction ID, Book Code, Book Type, Book Tittle, Unit Price, Quantity, Total Cost

E/R DIAGRAM

BOOKSTORE DATABASE

CUSTOMER
- Cust_Code
- Cust_Name

do

TRANSACTION
- Transaction_ID
- Cust_Name
- Staff_Name
- Book_Code
- Book_Type
- Book_Tittle

produce

BOOK
- Code_Book
- Type_Book
- Book_Tittle
- Unit_Price

TRANSACTION DETAIL
- Transaction_ID
- Book_Code
- Unit_Price
- Quantity
- Total_Cost

STAFF
- Staff_ID
- Staff_Name
- Staff_Position

process

FUND DONORS
- Fund_Donors_ID
- Fund_Donors_Address
- Fund_Donors_Money
- Staff_ID

BOOK DONORS
- Book_Donors_ID
- Book_Donors_Address
- Book_Donors_Type
- Book_Donors_Quantity
- Staff_ID

TABLES

Number of Tables: 7

Structure of Tables: The table structures are shown here

BOOKSTORE DATABASE

BOOK [ENTITY]

BOOK
Book_Code
Book_Type
Unit_Price
Book_Tittle

CUSTOMER [ENTITY]

CUSTOMER
Cust_Code
Cust_Name

STAFF [ENTITY]

STAFF
Staff_ID
Staff_Name
Staff_Position

BOOK DONORS [ENTITY]

BOOK DONORS
Book_Donors_ID
Book_Donors_Name
Book_Donors_Type
Book_Donors_Quantity
Staff_ID

FUND DONORS [ENTITY]

FUND DONORS
Fund_Donors_ID
Fund_Donors_Name
Fund_Donors_Money
Staff_ID

TRANSACTION [ENTITY]

TRANSACTION
Transaction_ID
Cust_Name
Staff_Name
Book_Code
Book_Type
Book_Tittle

TRANSACTION DETAIL [ENTITY]

TRANSACTION DETAIL
Transaction_ID
Book_Code
Unit_Price
Quantity
Total_Cost

PRIMARY AND FOREIGN KEYS

The Primary and Foreign keys (wherever applicable) for each table are listed with their respective table names:

- **BOOK**
  Primary key: Book_Code
  Foreign keys: -

- **CUSTOMER**
  Primary key: Cust_Code
  Foreign keys: -

- **STAFF**
  Primary key: Staff_ID
  Foreign keys: -

- **BOOK DONORS**
  Primary key: Book_Donors_ID
  Foreign keys: Staff_ID

- **FUND DONORS**
  Primary key: Fund_Donors_ID
  Foreign keys: Staff_ID

- **TRANSACTION**
  Primary key: Transaction_ID
  Foreign keys: Book_Code

- **TRANSACTION DETAIL**
  Primary key: -
  Foreign keys: Book_Code
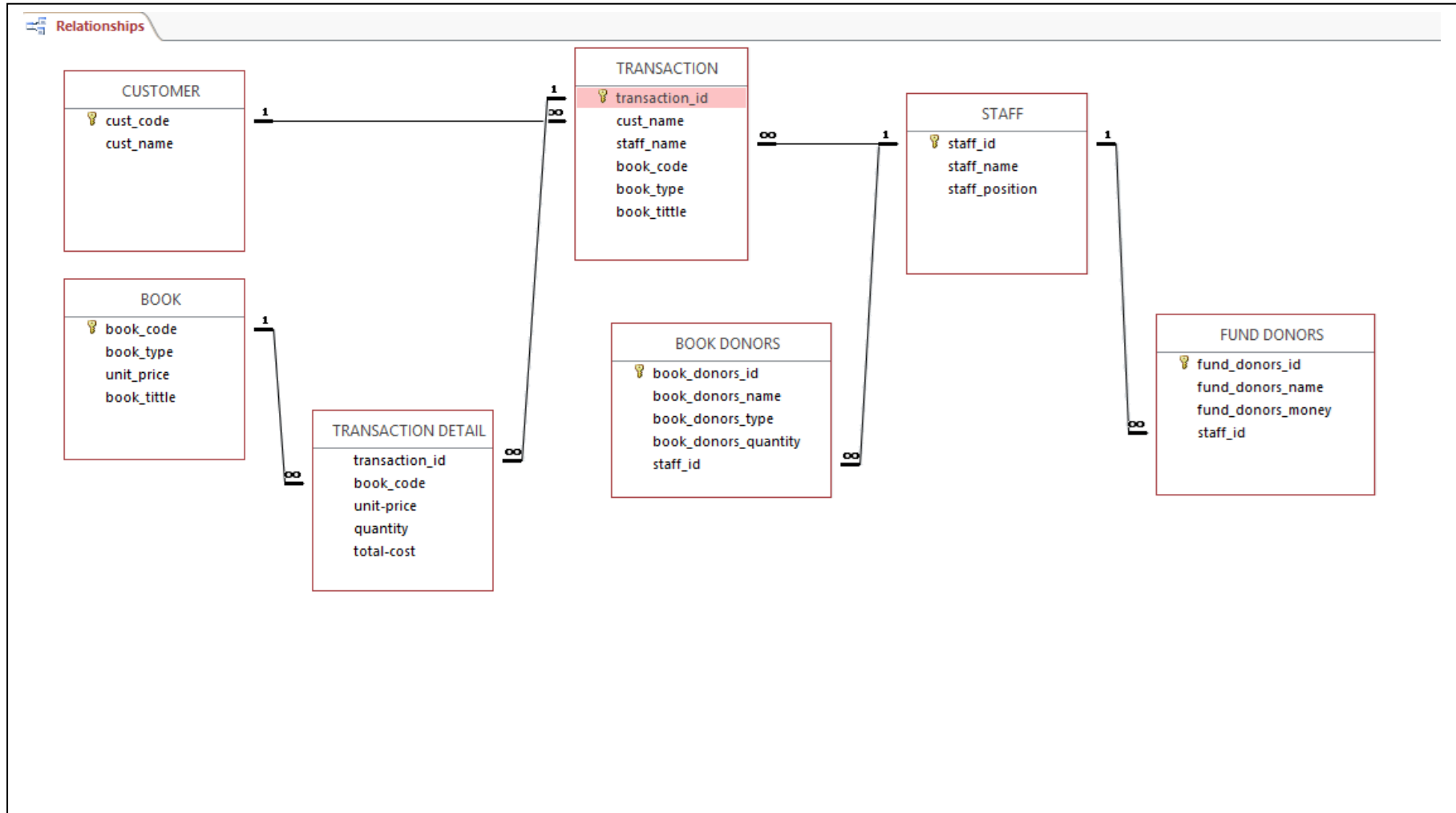
CONFIGURATION

Hardware: Laptop compatible with an Intel Core i3, 4 GB RAM, 64-bit Operating System, x64-based processor, and 500GB of Hard disk space

Operating System: Microsoft Windows 10 Home

Software: Microsoft Access 2016

PROJECT FILE DETAILS

S. No	File Name	Remarks
1	Bookstore System Database.accdb	Microsoft Office Access 2016 database that contains tables, queries, forms and reports