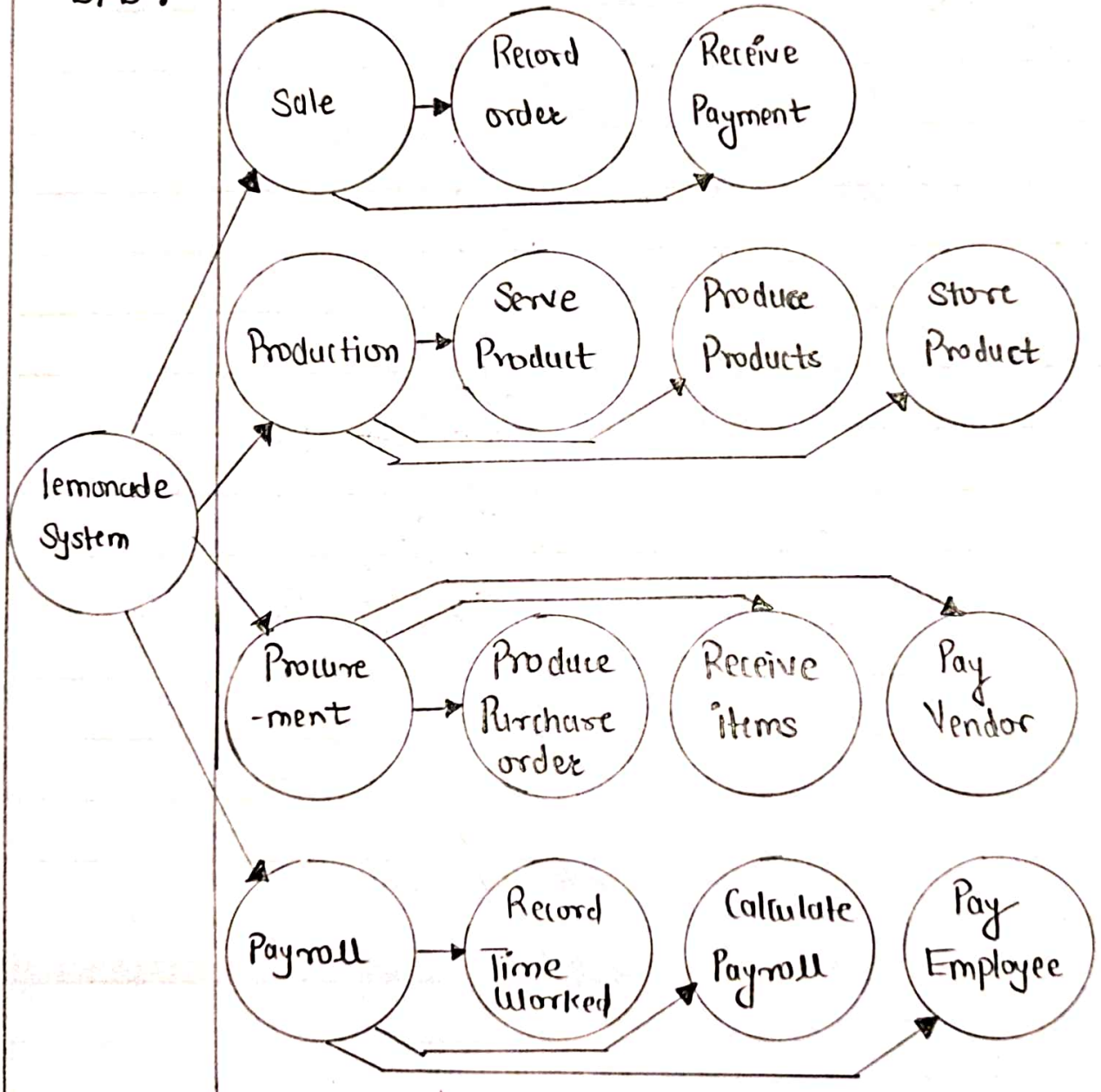
Experiment No. 3 Date:

Aim :- Create entity Relationship Diagram & Data flow Diagram.

Objective :- Create ERD & DFD on Library management System using "Lucid chart tool".

Example of DFD : lemonade Stand :

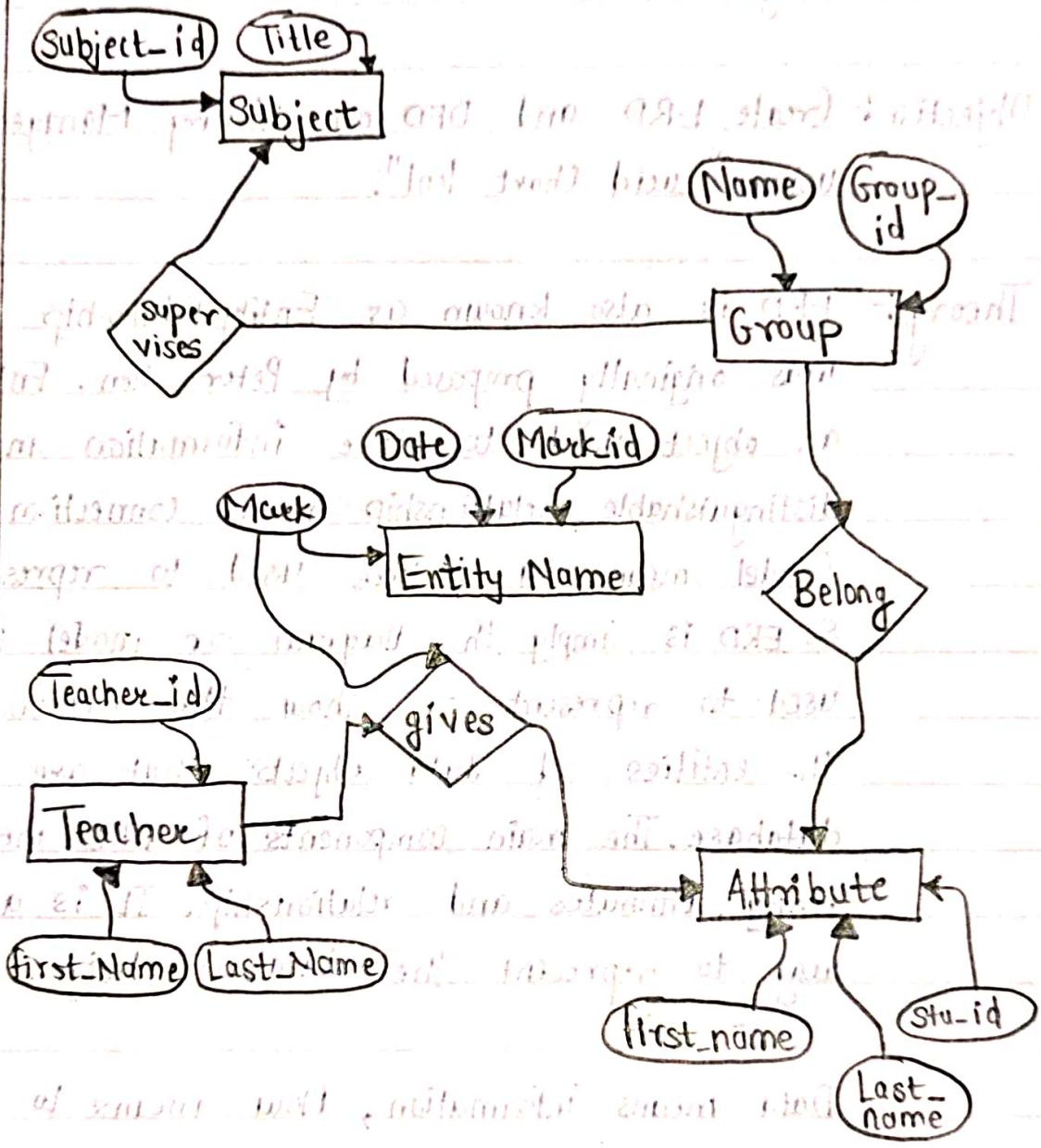


Experiment No. 3 Date:-

Aim :-	Create entity relationship Diagram & Data flow Diagram.
Objective :-	Create ERD and DFD on library Management System using "Lucid Chart tool".
Theory :-	ERD is also known as Entity-Relatiaship Model. ERD was originally proposed by Peter Chen. Entity means an object used to store information and are distinguishable, relationship means connection & diagram /model means a picture used to represent something So ERD is simply the diagram or model that is used to represent or show the relationships btw the entities of data objects that are stored in a database. The main components of ERD model are an entity, attributes and relationship. It is a very easy way to represent the database design.

Data means information, flow means to move & a diagram means a picture to present something. So DFD is simply the graphical representation of the flow of data or information. It is a framework or pattern of data systems. It includes data input, data output and storing data. DFD describes the process of taking the data as input, storing the data & giving the data as output. DFD describes the path of the data

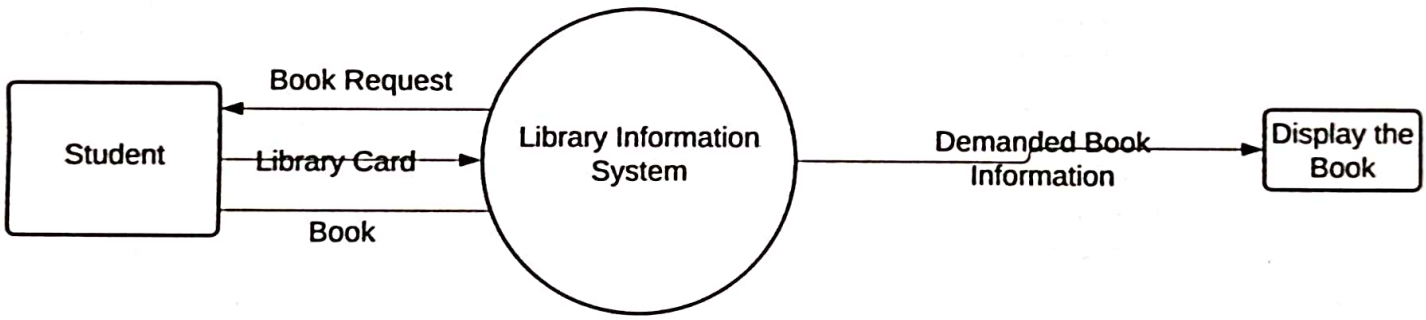
Example of ERD:-

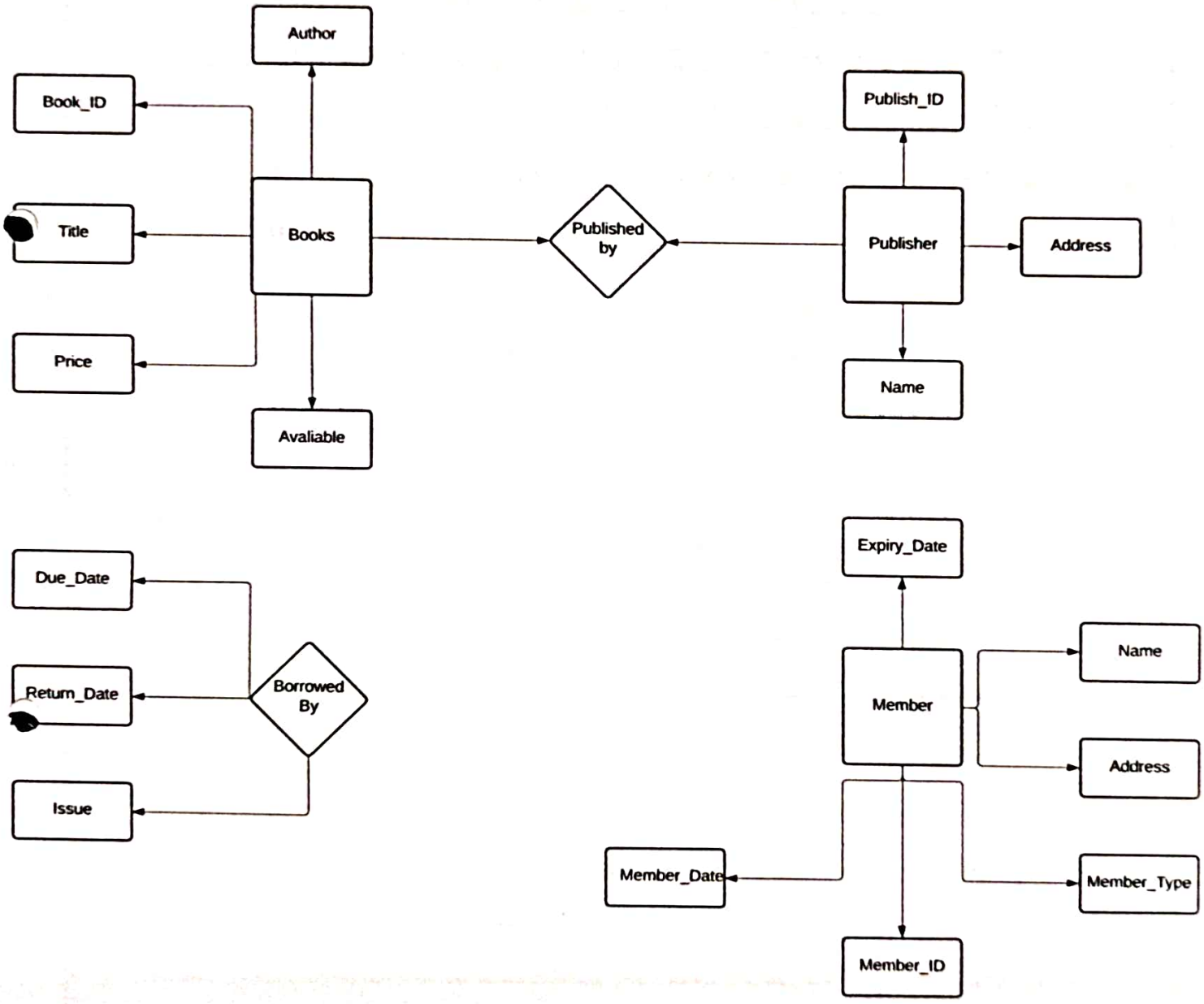


that completes the process. There are mainly 2 types of DFD : ① Data Flow Diagram.
② Logical Data Flow Diagram.

Table of Comparison:-	DFD	ERD
	Stands for Data flow Diagram	Stands for Entity Relationship Diagram or Model.
	Main objective is to represent the processess & data flow between them..	Main objective is to represent that data object or entity & Relationship btw them.
	It explains the flow & process of data input, data output & storing data.	It explains & represent the relationship btw entities stored
	Rule followed by DFD is that atleast one data flow should be there entering into & leaving the process or store.	Rule followed by ERD is that all entities must represent the set of similar things.
	It models the flow of entire data through a System	It model entities like people objects, places and events for which data is stored in a System.

Conclusion: We have successfully executed the experiment by creating a Entity Relationship Diagram (ERD) & a Data flow Diagram (DFD) for a library management system using Lucid tools chart. The ERD effectively illustrates the entities & their relationships, while the DFD mapped out the data flow within the system. This experiment enhanced our understanding of system design & demonstrate the value of using lucid chart for visualizing complex process.


Student
Book Request
Library Card
Book
Library Information System
Demanded Book Information
Display the Book


Author
Book_ID
Publish_ID
Title
Books
Published by
Publisher
Address
Price
Name
Avaliable
Due_Date
Expiry_Date
Name
Return_Date
Borrowed By
Member
Address
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