

1. Use draw.io to draw ER diagrams of and Data flow diagrams of
- a. Library system
 - b. Banking system
 - c. Online course registration system
 - d. Online food ordering system

Solution:

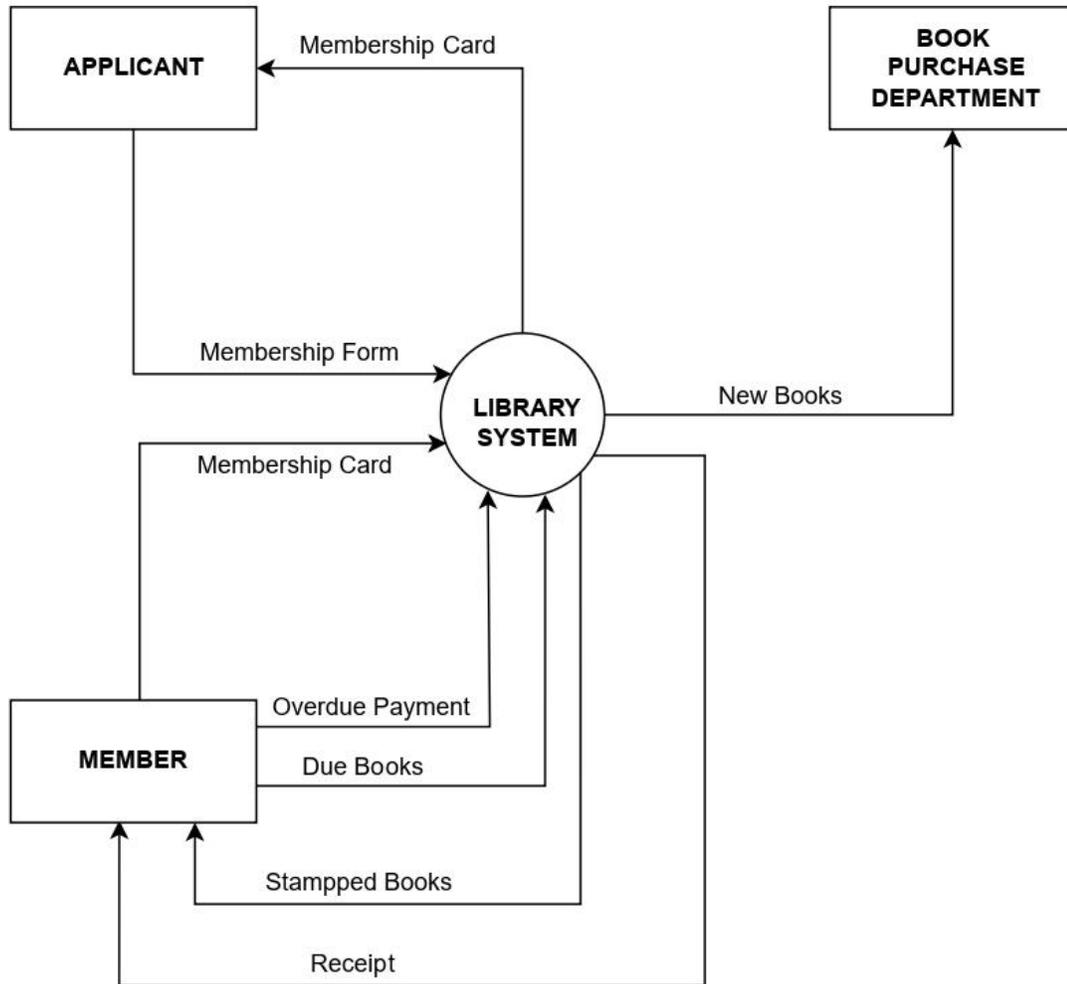


Fig: DFD of Library System

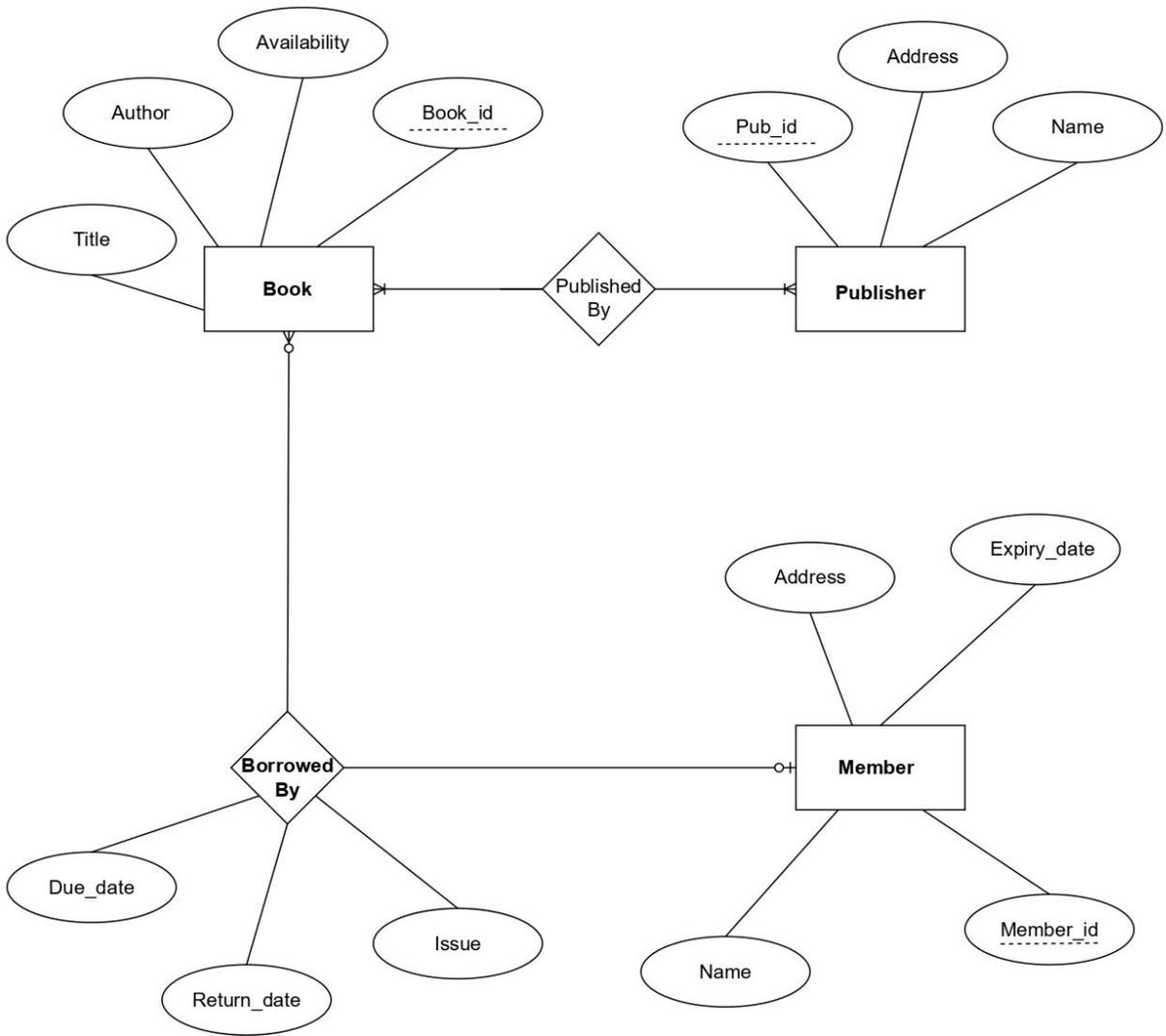


Fig: ER Diagram of Library System

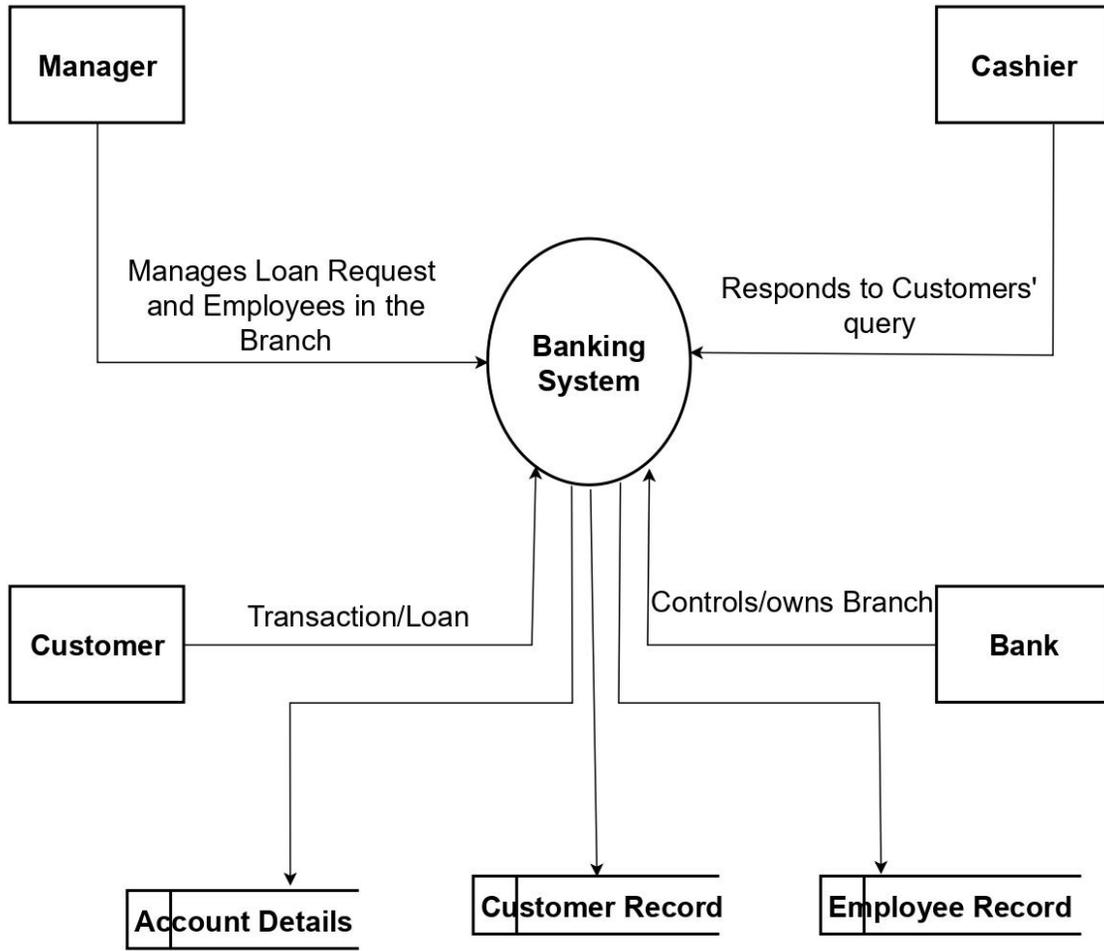


Fig: DFD of Banking System

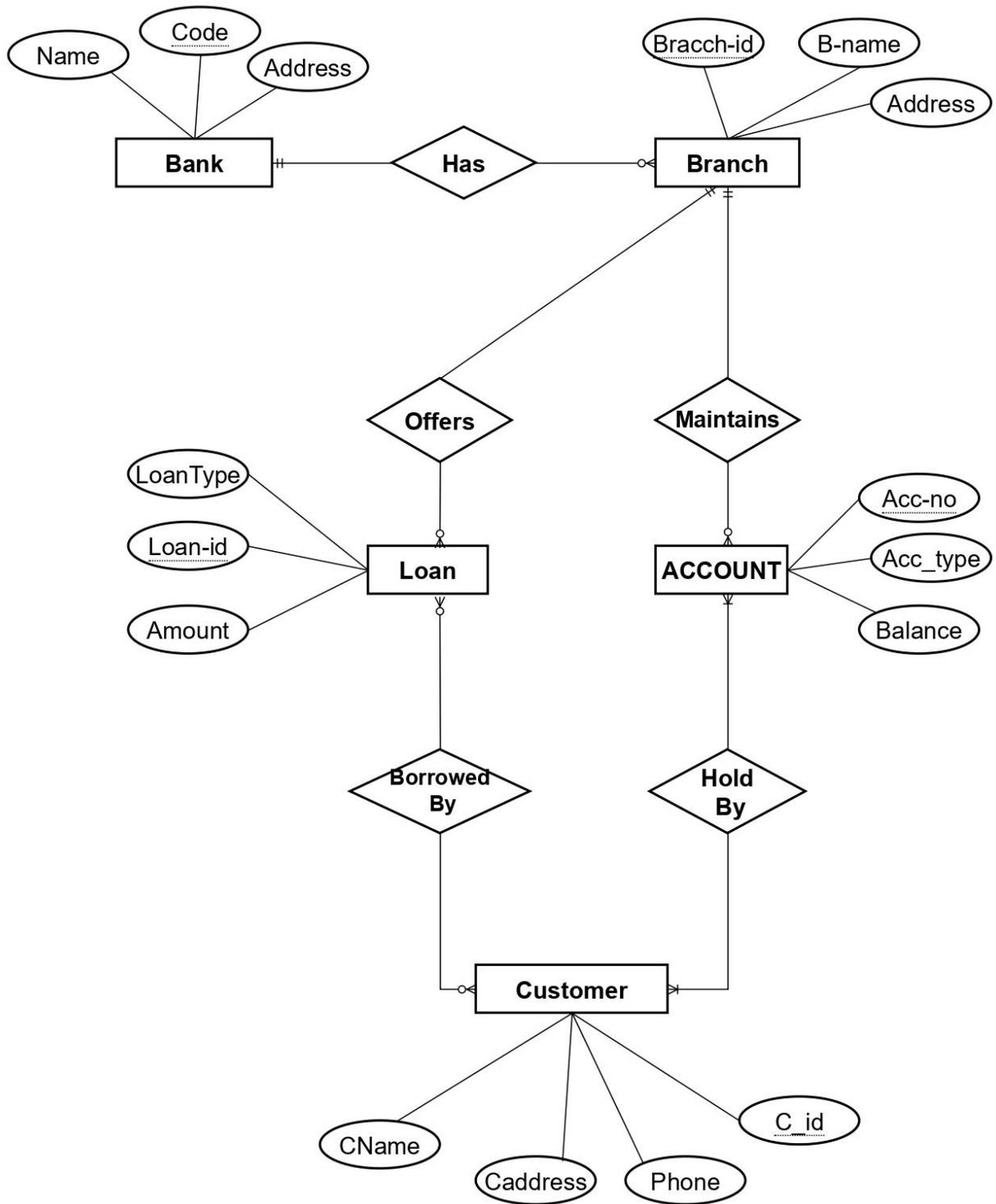


Fig: Banking System ER diagram

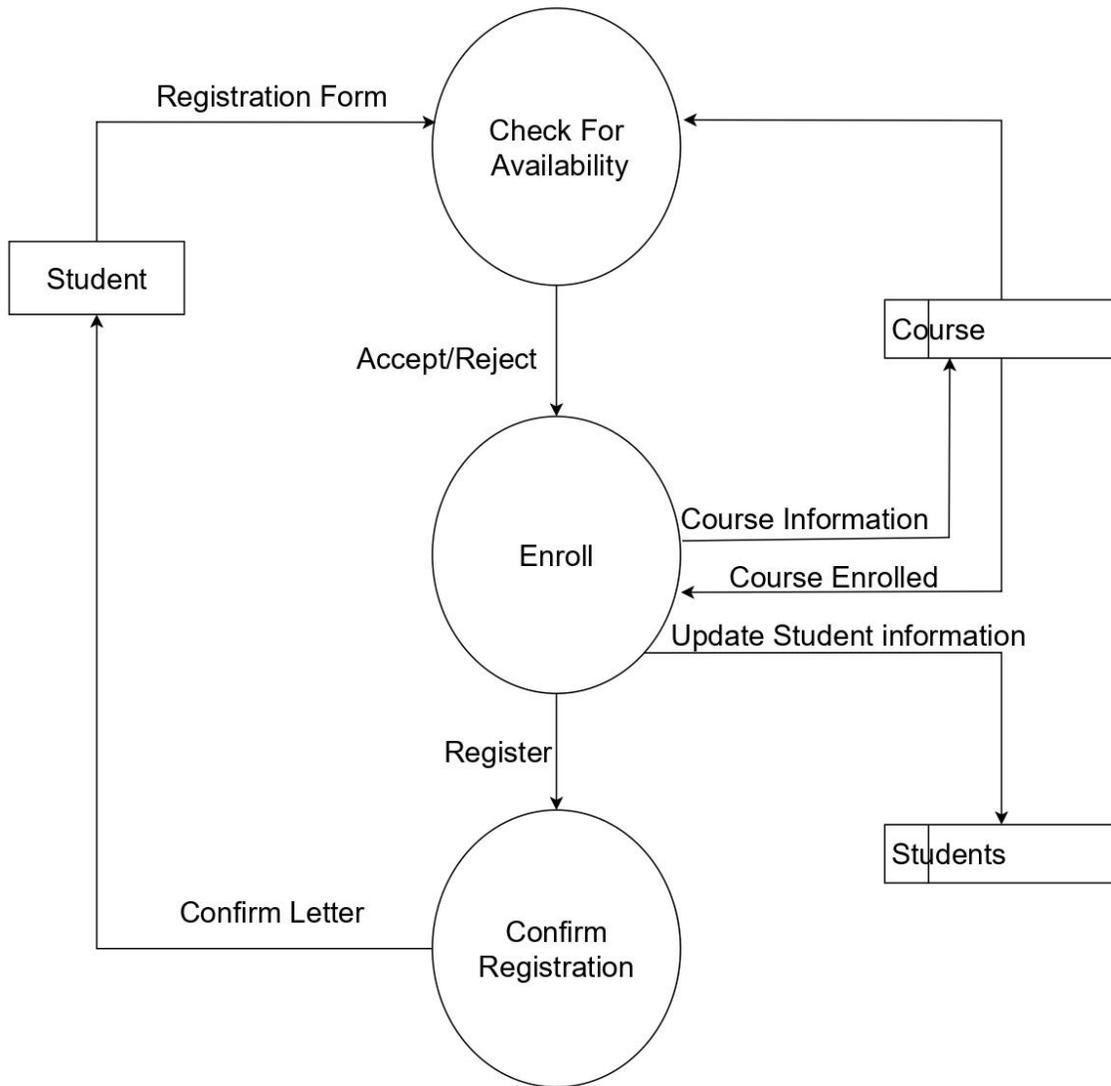


Fig : Student Registration DFD

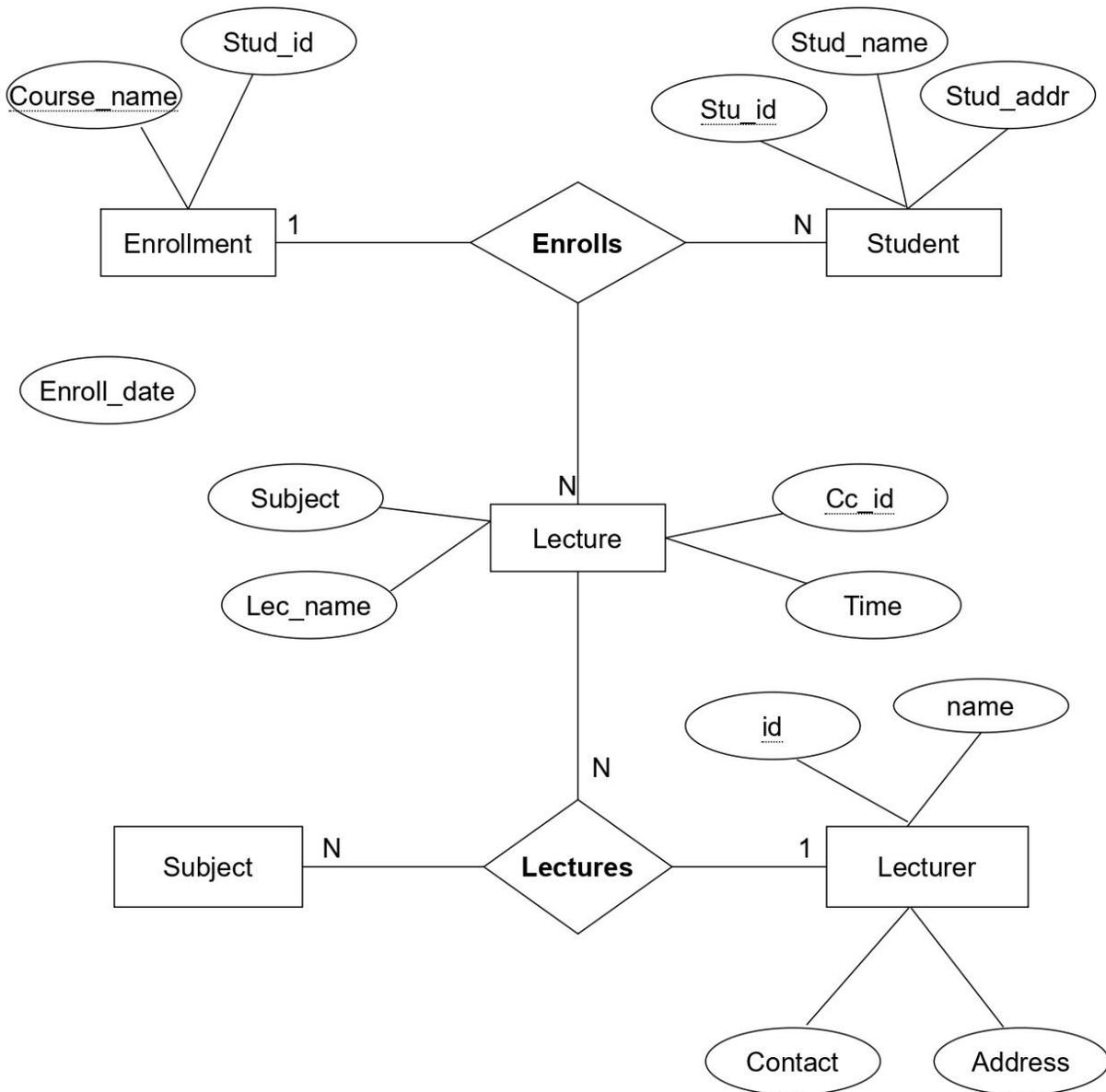


Fig:ER-Online Registration

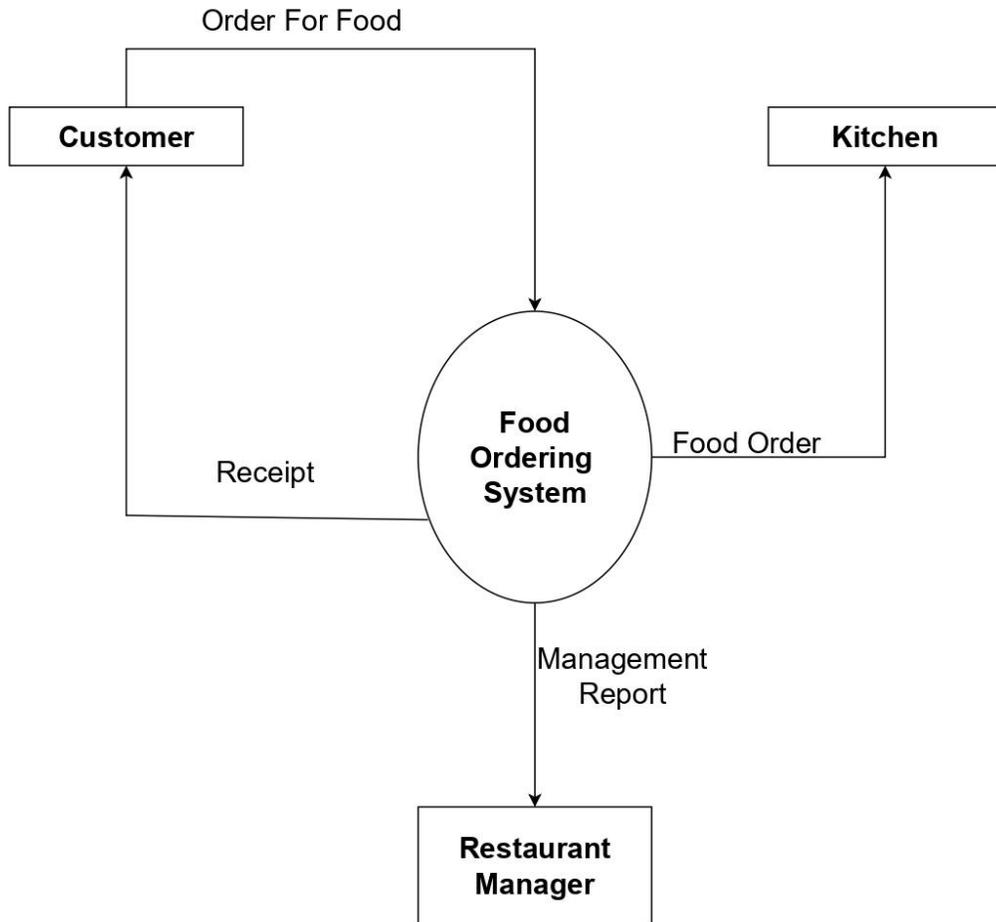


Fig : Food Ordering System DFD

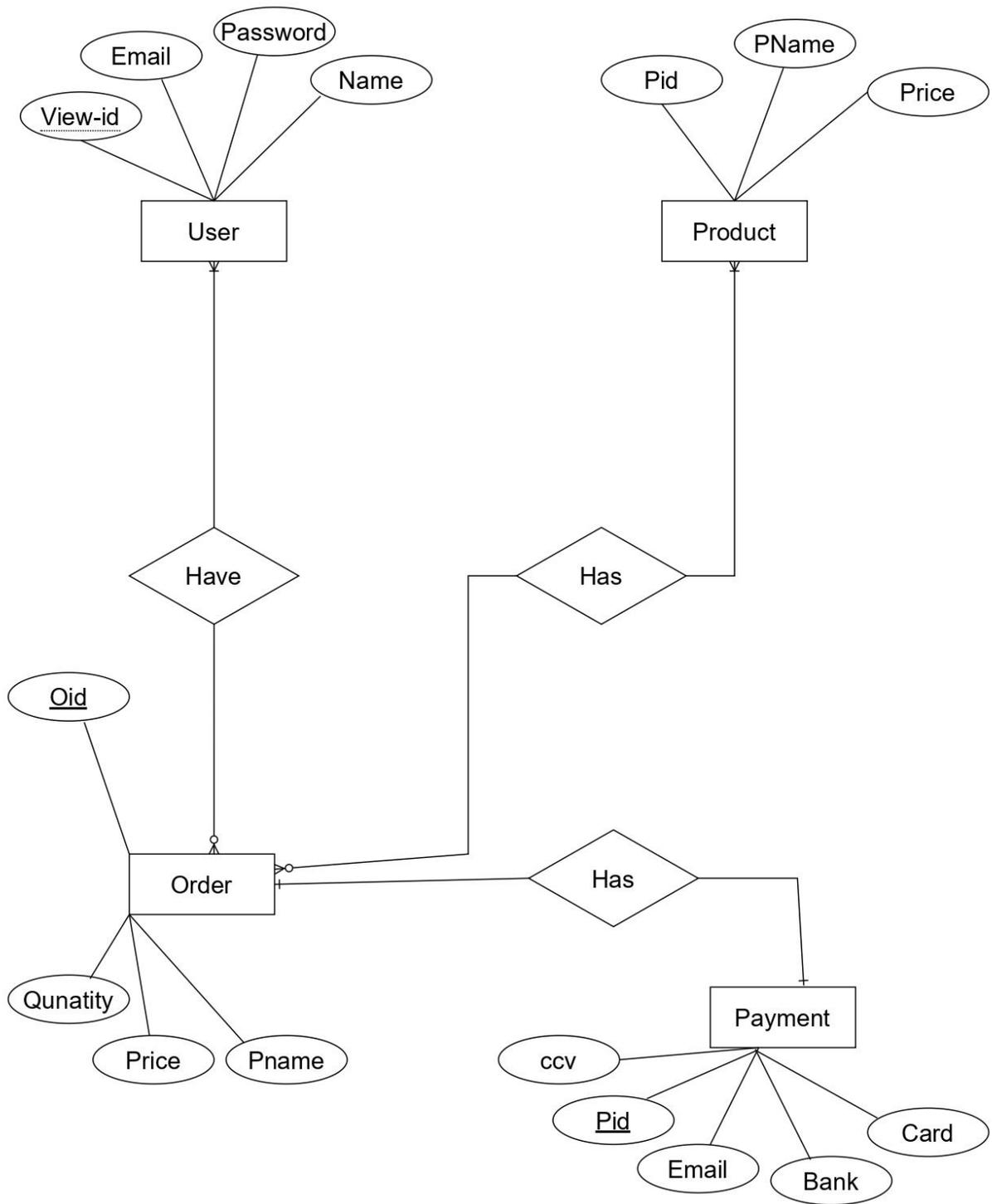
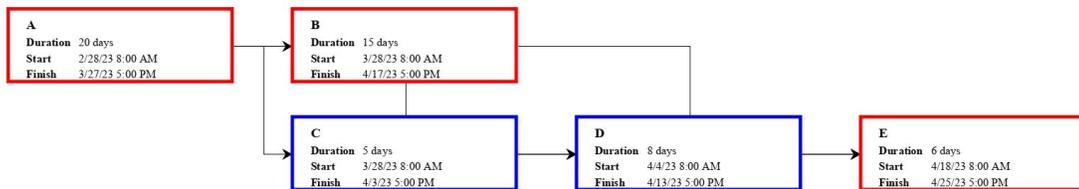


Fig: Online Food Order E-R Diagram

2. Use Project Libra to draw Gantt chart and Network diagram of following tasks and show the critical path. What is the duration of this project?

Activity	Duration (days)	Precedence
A	20	
B	15	A
C	5	A
D	8	A, C
E	6	B, D

Solution:



ID	Name	Duration	Start	Finish	Predecessors	Resource Names
1	A	20 days	2/28/23 8:00 AM	3/27/23 5:00 PM		
2	B	15 days	3/28/23 8:00 AM	4/17/23 5:00 PM	1	
3	C	5 days	3/28/23 8:00 AM	4/3/23 5:00 PM	1	
4	D	8 days	4/4/23 8:00 AM	4/13/23 5:00 PM	1,3	
5	E	6 days	4/18/23 8:00 AM	4/25/23 5:00 PM	2,4	

