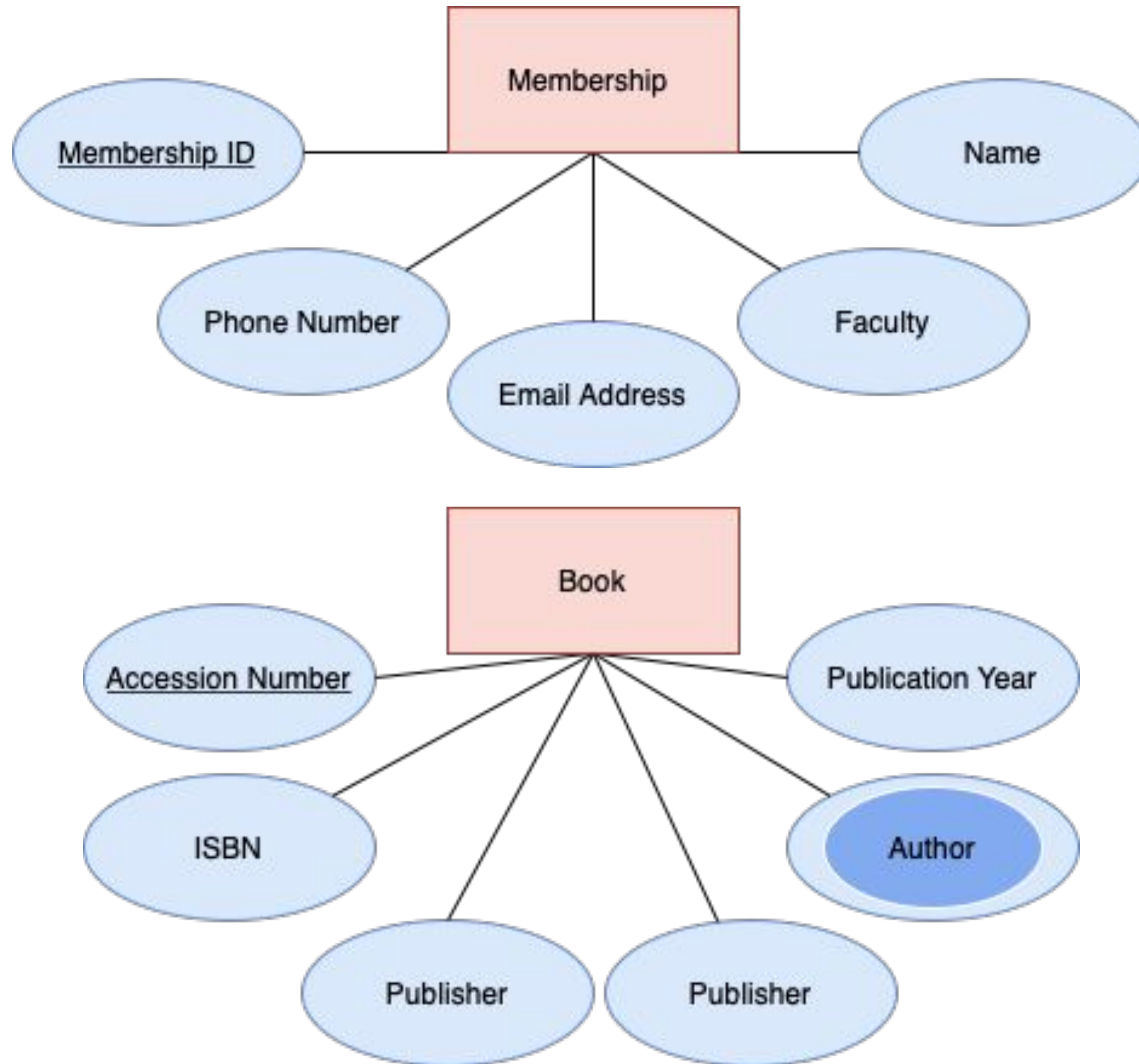


BT2102
Assignment 1

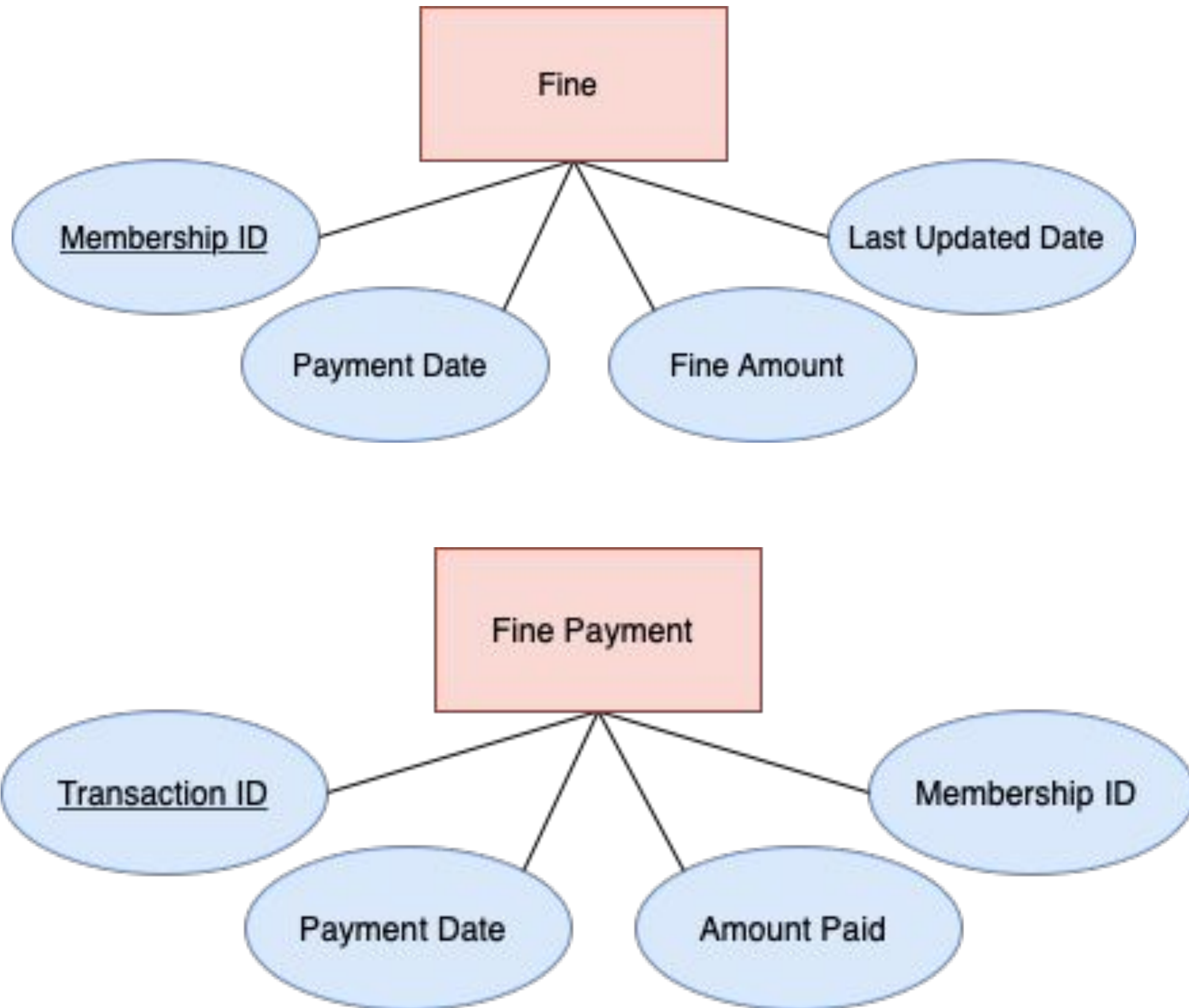
Group 21

Brian Liew
Joel Leng
Seah Ding Xuan
Varsha Ramkumar

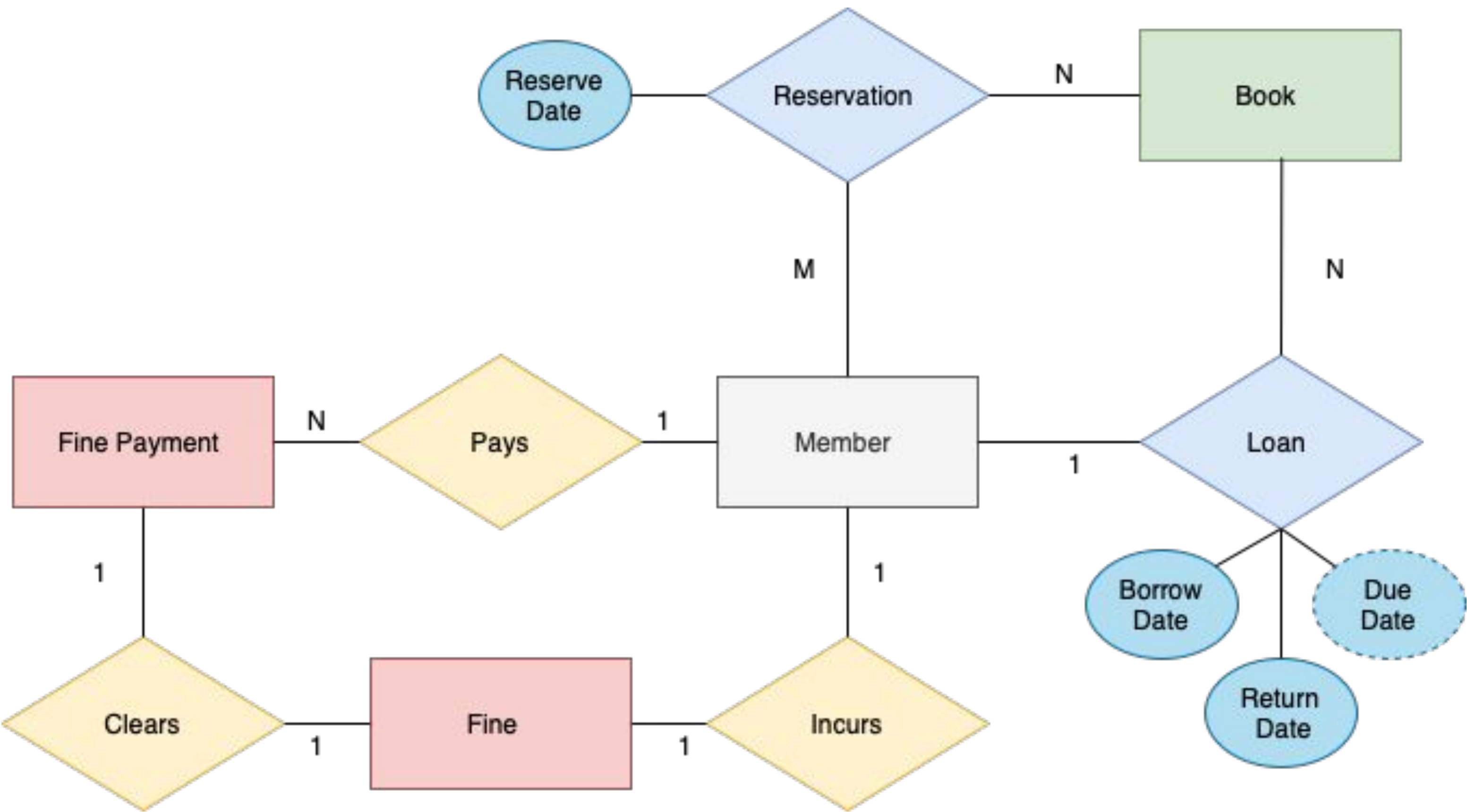
The Final Entities and Attributes: Membership, Book



The Final Entities and Attributes: Fine, Fine Payment



The Final Conceptual Data Model



The Final Logical Schema

membership (membership_id, phone_number, email address, faculty, name)

book (accession_number, title, isbn, publisher, pub_year, borrow_date, due_date, return_date, membership_id borrowed)

fine (membership id fined, last_updated_date, amount_fined, payment_date, transaction_id)

fine payment (transaction_id, amount_paid, pay_date, membership id paying)

reservation (accession_number, membership id, reserved_date)

author (accession_number, author_name)

The Final Logical Data Model

membership (membership_id, phone_number, email address, faculty, name)

Primary Key: membership_id

book (accession_number, title, isbn, publisher, pub_year, borrow_date, due_date, return_date, membership_id_borrowed)

Primary Key: accession_number

Foreign Key: membership_id_borrowed references membership(membership_id)

fine (membership id_fined, last_updated_date, amount_fined, payment_date, transaction_id)

Primary key: membership_id_fined

Foreign Key: membership_id_fined references membership(membership_id)

Foreign key: transaction_id references fine payment(transaction_id)

fine payment (transaction_id, amount_paid, pay_date, membership id_paying)

Primary key: transaction_id

Foreign key: membership_id_paying references membership(membership_id)

reservation (accession_number, membership id, reserved_date)

author (accession_number, author_name)

Primary key: accession_number, author_name

Foreign Key: accession_number references book(accession_number)