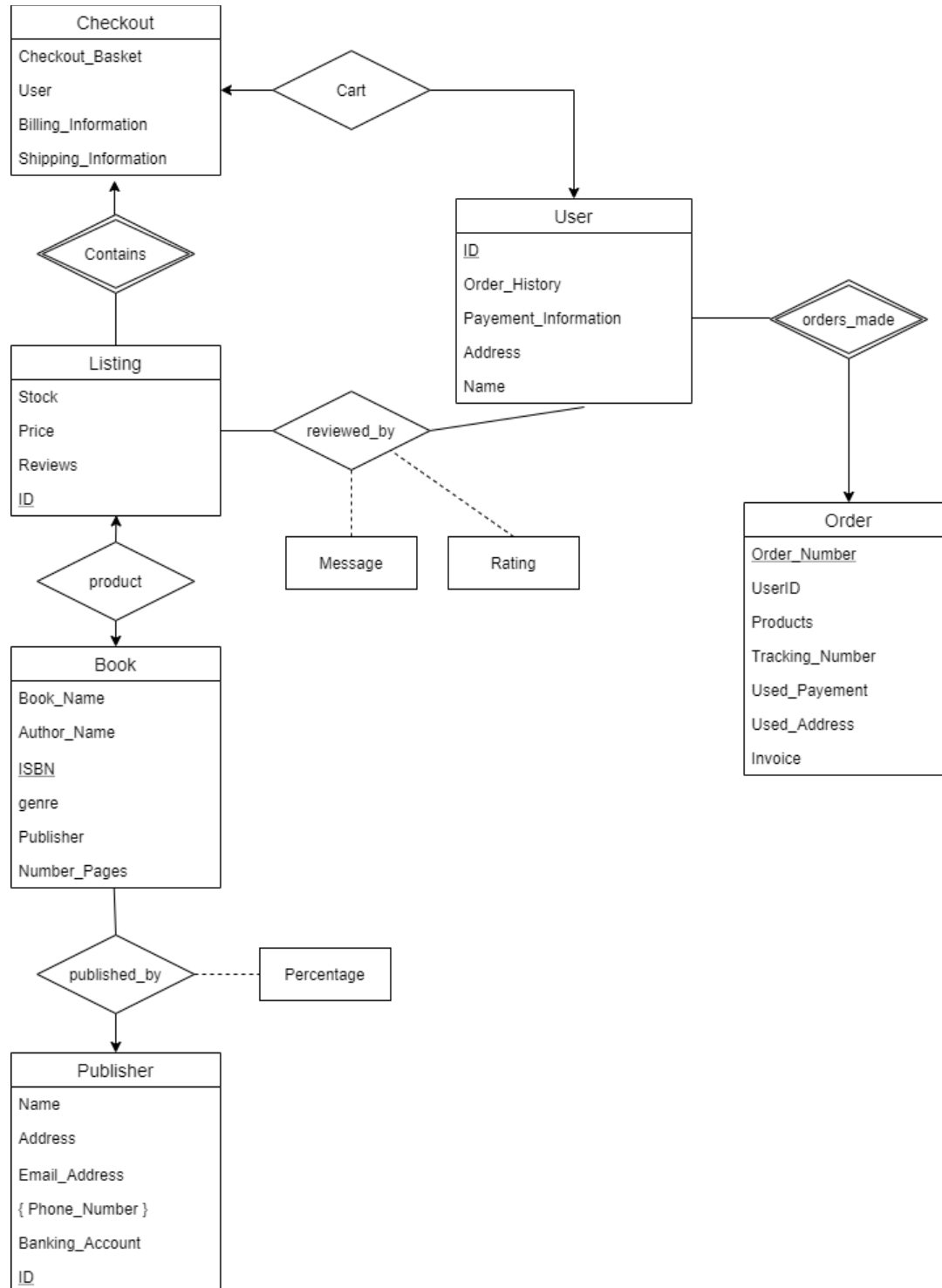


Andy Chia – 101111058

COMP3005 Project

<https://github.com/chia591/COMP3005-Project-OnlineBookstore>

2.1



2.2

Tables:

Checkout(Checkout_Basket, User_ID, Billing_Information, Shipping_Information)

User(ID, Order_History, Payment_Information, Address, Name)

Order(Order number, Products, Tracking_Number, Used_Payment, Used_Address, Invoice)

Listing(ID, Stock, Price, ISBN)

Book(ISBN, Book_Name, Author_Name, genre, Publisher, Number_Pages)

Publisher(ID, Name, Address, Email_Address, Phone_Number, Banking_Account)

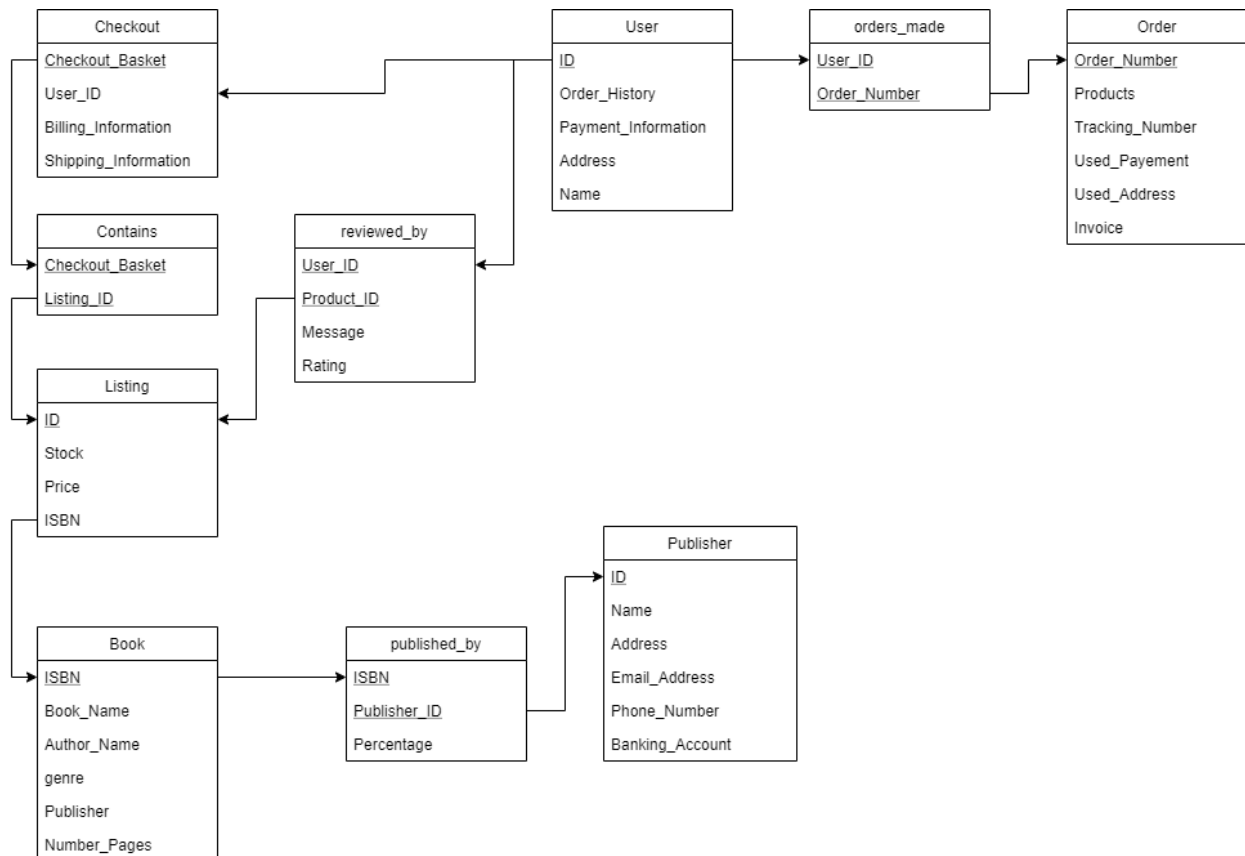
Relation Sets

orders_made(User ID, Order Number)

Contains(Checkout Basket, Listing ID)

reviewed_by(User ID, Product ID, Message, Rating)

published_by(ISBN, Publisher ID, Percentage)



2.3

Functional Dependencies

```
f = {  
  User_ID -> Order_History, Payment_Information, Address, Name (User)  
  Payment_Information -> Address, Name (User)  
  Checkout_Basket -> User_ID (Checkout)  
  Checkout_Basket, User_ID -> Billing_Information, Shipping_Information (Checkout)  
  Order_Number -> Tracking_Number, Products, Invoice, Used_Payment (Order)  
  Tracking_Number -> Used-Address (Order)  
  User_ID -> Product_ID (reviewed_by)  
  User_ID, Product_ID -> Message (reviewed_by)  
  User_ID, Product_ID -> Rating (reviewed_by)  
  ID -> Stock, Price, ISBN (Listing)  
  ISBN -> Author_Name, Publisher (Book)  
  Author_Name -> Book_Name (Book)  
  ISBN, Author_Name, Publisher -> genre, Number_Pages, Book_Name (Book)  
  ISBN, Publisher_ID -> Percentage (published_by)  
  ISBN -> Publisher_ID (published_by)  
  ID -> Name, Address, Email_Address, Phone_Number, Banking Account  
}
```