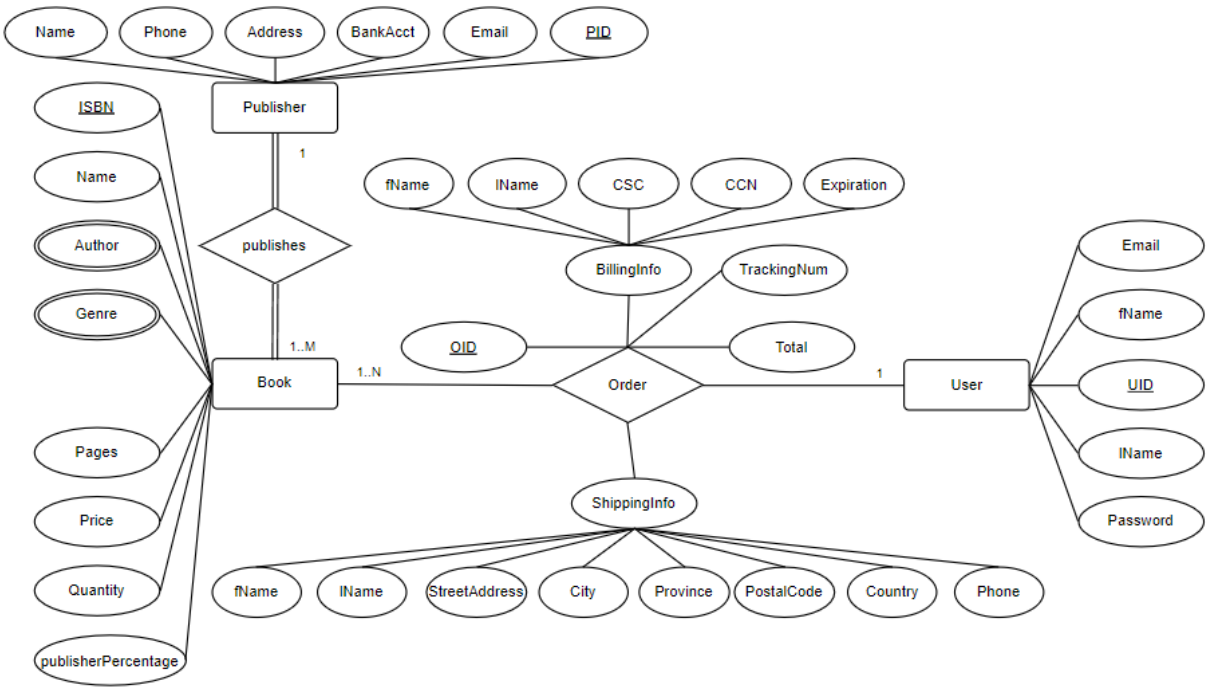
**COMP 3005 Project Report (Fall 2022)**
**Ryan Whyte 101005432**

## 2.1 Conceptual Design




**Assumptions:**

- I assumed that an orders billing info and shipping info can have a different first name and last name and that the first name and last name in either do not need to match that of the users first or last name
- I assumed books would only be shipping within Canada
- I assumed that because each book has a different percentage that is distributed to the publisher that the percentage characteristic would belong to the book for easier traceability/consistency
- I assumed all publishers would be controlled by the bookstore owner; therefore, publishers would not require credentials to access the website (no password attribute, etc.)
- I assumed all contents of an order will be shipped to a single address

**Acronyms used:**

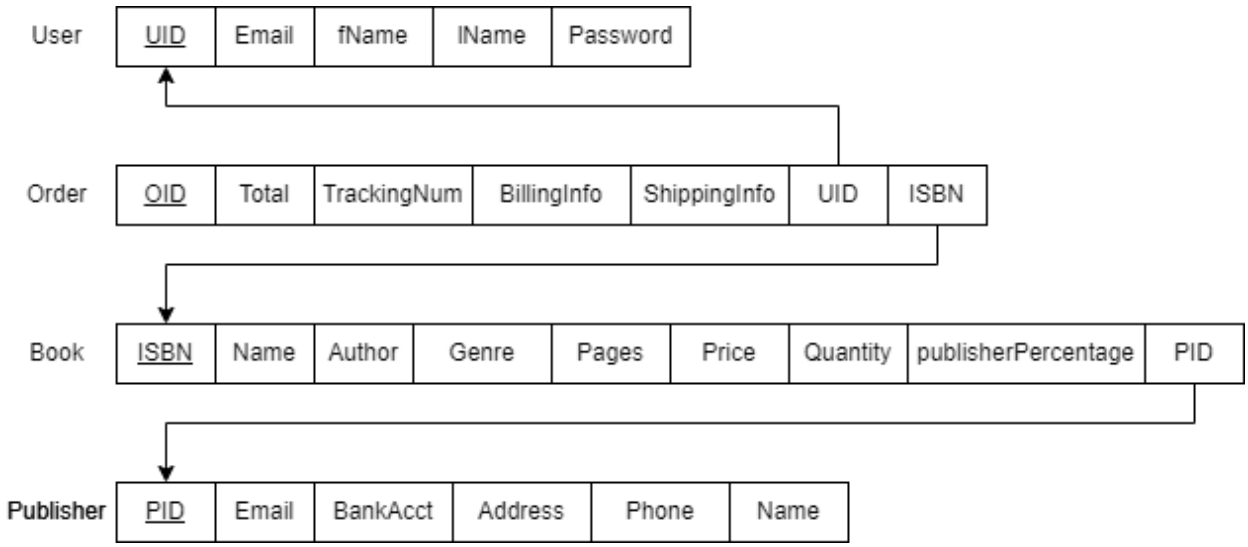
- “CSC” = Card Security Code
- “CCN” = Credit Card Number
- “OID” = Order Identifier
- “PID” = Publisher Identifier

- “UID” = User Identifier

**Cardinality and participation notes:**

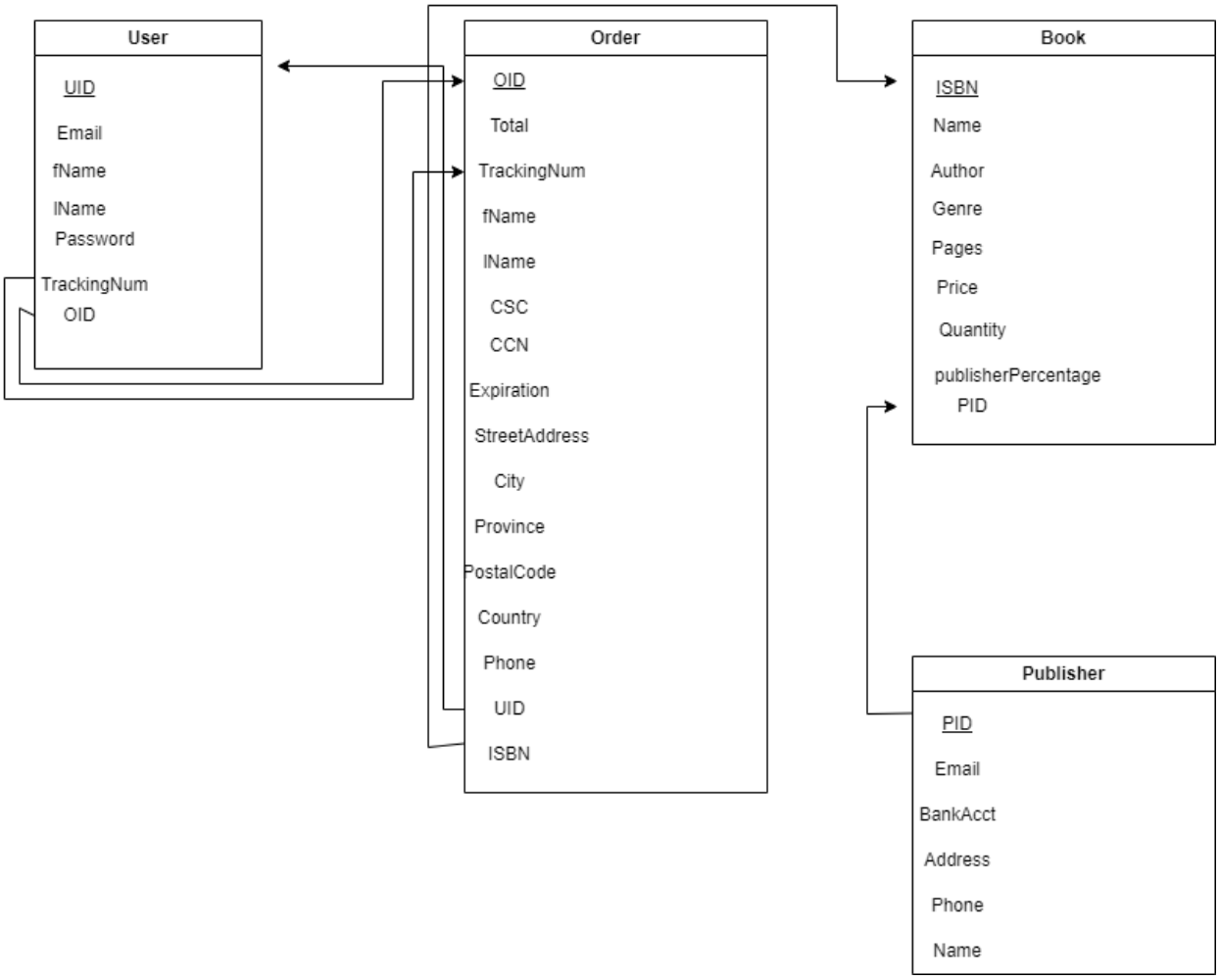
- In my ER-diagram, each order belongs to one user and contains one to many books, with each book having one publisher. While each book only has one publisher, each publisher has one to many books.
- Each book requires one publisher as a percentage of the book’s proceeds are to be distributed to a publisher.
- Partial participation is used for the order relationship as not every user will place an order and not every book will be purchased.
- Mandatory participation is used for the publishes relationship as every book must have a publisher and ever publisher must publish books.

### 2.2 Reduction to Relation Schemas




### 2.3 Normalization of Relation Schemas

### 2.4 Database Schema Design




**2.5 Implementation**

**2.6 Bonus Features**

**2.7 GitHub Repository**

The GitHub repository for this project can be accessed at:
https://github.com/RyanWhyteCA/COMP3005-Project.git

**2.8 Appendix I**

I will be available for a project demonstration at the following times on December 12th, 2022:
12:00pm
12:20pm
12:40pm