**CS307 Principles of Database Systems**

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| **Project 1 Report** |
| **Database for Shipping Company SUSTC** |

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| **Student Name** | **Student ID** |
| Xuanyu Liu | 12110408 |
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**Semester:** 2022 Autumn

**Lab Session:** Monday 7-8 (Class 2)

**Teacher:** Ran Cheng

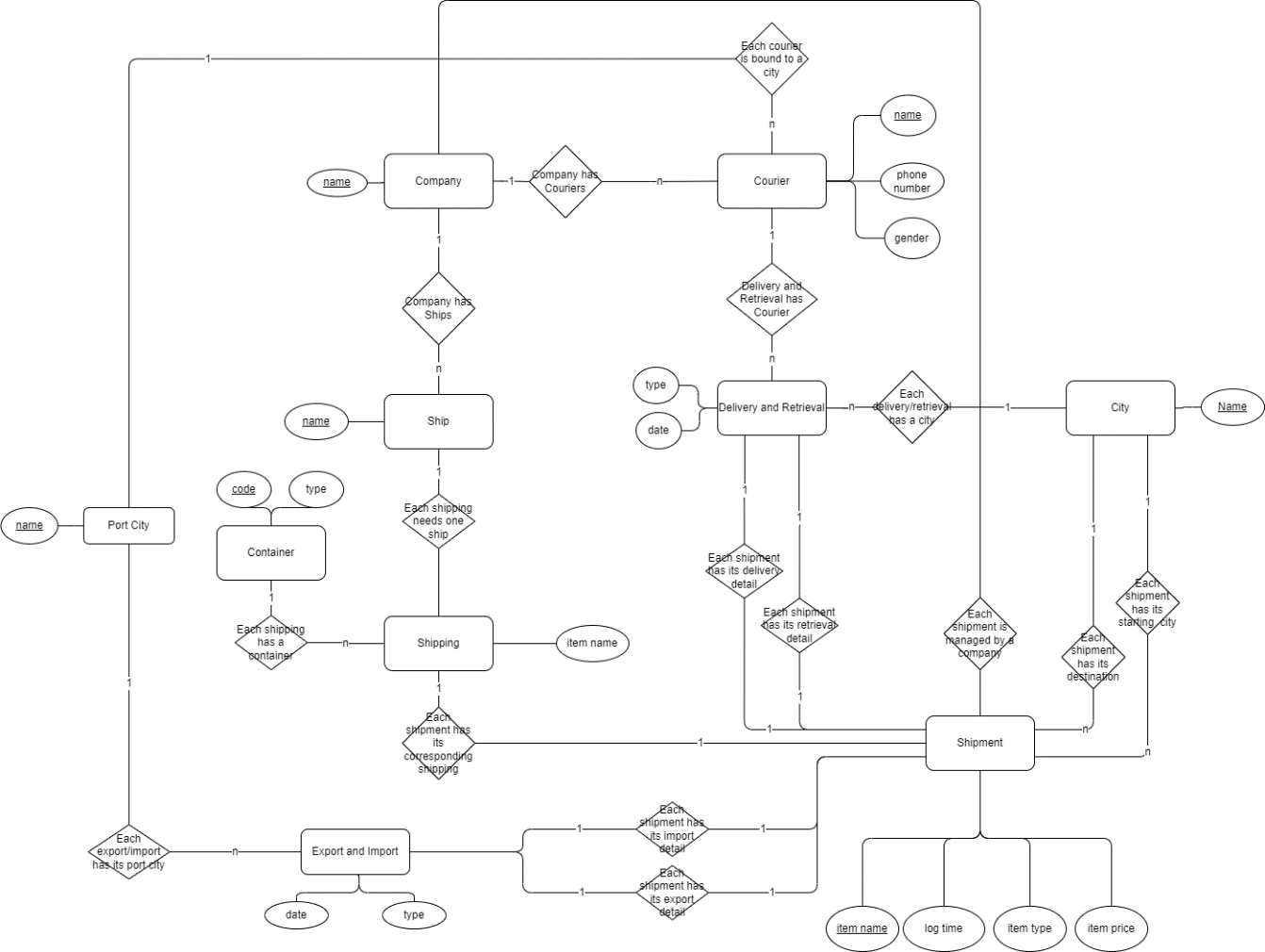
**Student Assistants:**

## Plan and Contributions

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| --- | --- | --- |
| Member | Contribution | Ratio |
| Xuanyu Liu | 1. Design and Draw E-R Diagram 2. Compare DMBS with File I/O | 50% |
| Zexin Feng | 1. Database Design 2. Data Import | 50% |

## Task1: E-R Diagram

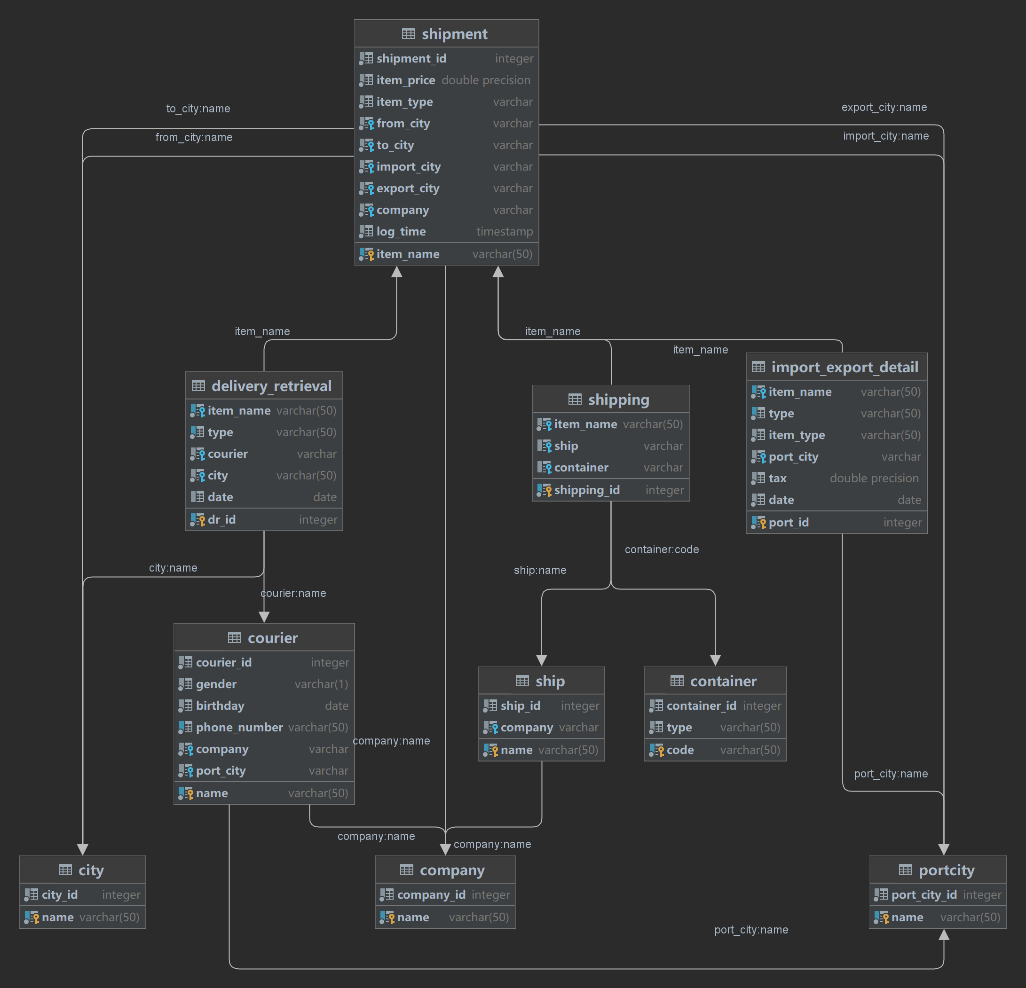
Based on the analysis to the data provided and the description about the data structure in project description, we designed following E-R diagram by using use Freedgo(<https://www.freedgo.com/>). The diagram is compressed forcedly, so it is not clear enough. The original E-R diagram is attached as **ER-Diagram.png**.



## Task2: Database Design

### Database Diagram

Our database diagram exported from DataGrip is as follows:



The full DDL scripts are attached as **createTables.sql**.

### Database