Lab 6 Load XML Data to Relational Database

- Tasks: importing XML data (books.xml) into a relational database (MySQL database) based on what you have learned so far.

  - JDBC (use the SAT MySQL server: http://csse-mysql.xjtlu.edu.cn)

  - DOM

    - SAX also can be used but DOM is easier for the task.

XML Data

```xml
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
    <price>44.95</price>
    <publish_date>2000-10-01</publish_date>
    <description>An in-depth look at creating applications
    with XML.</description>
  </book>
  <book id="bk102">
    <author>Ralls, Kim</author>
    <title>Midnight Rain</title>
    <genre>Fantasy</genre>
...
```

Create MySQL Table

- You can copy, paste and run the following SQL.

```
CREATE TABLE books(
        id integer primary key auto_increment,
        book_id varchar(25) not null unique,
        author varchar(50) not null,
        title varchar(250) not null,
        genre varchar(25) not null,
        price float not null,
        publish_date date not null,
        description text not null
        )
```

Task 1: Code Writing

- Write a Java program to
  - Extract (book_id, author, title, genre, price, publish_date, description) from the XML file
  - Use JDBC to store the data into MySQL database
- Copy source code to a WORD document.

Task 2: Check Results

- Execute your code.
- Take screenshot of all imported data from either:
    - MySQL server Web interface (if you are using the university MySQL).
    - Your own MySQL database.
- Attach a screenshot of the imported data to the WORD report.
- Submit on LM Core via the submission link.
    - Deadline: 18:35, 10 Dec 2024 (FIRM)
    - Extra 5 minutes given for submission