

JDBC Exercise

This exercise objective on using JDBC connect database and manipulate data with CRUD.

Table schema

```
CREATE TABLE ttransaction (  
    transid VARCHAR(50) NOT NULL COMMENT 'UUID',  
    userid VARCHAR(50) NOT NULL COMMENT 'tuser.userid',  
    transdate DATE NOT NULL,  
    journalid VARCHAR(50) NOT NULL COMMENT 'tjournal.journalid',  
    transno INT(11) NOT NULL COMMENT 'sequence number',  
    amount DECIMAL(20,4) NOT NULL,  
    remark VARCHAR(200) NULL DEFAULT NULL,  
    transtime DATETIME NULL DEFAULT NULL,  
    editdate DATE NULL DEFAULT NULL,  
    edittime TIME NULL DEFAULT NULL,  
    PRIMARY KEY (transid),  
    UNIQUE INDEX userid_trxdate_journalid (userid, transdate, journalid)  
);
```

Specification

1. Material class TTransaction.java
2. CRUD
 - a. Method create using PreparedStatement insert data into table ttransaction with the following
 - i. transid = UUID if not specified
 - ii. transdate = current date if not specified
 - iii. userid = must specified
 - iv. journalid = must specified
 - v. transno = must specified
 - vi. amount = must specified
 - vii. remark = optional
 - viii. transtime = current timestamp

- ix. editdate = current date
 - x. edittime = current time
- b. Method retrieve using PreparedStatement to execute query and fetch data from ResultSet into attributes of class TTransaction with key column transid specified by parameter passing
 - i. transid = must specified
- c. Method update using PreparedStatement to update column journalid, amount, remark, editdate, edittime with key column transid specified by parameter passing
 - i. transid = must specified
 - ii. journalid = must specified
 - iii. amount = must specified
 - iv. remark = optional
 - v. editdate = current date
 - vi. edittime = current time
- d. Method delete using PreparedStatement to delete data from table ttransaction with key column transid specified by parameter passing
 - i. transid = must specified