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
   1. Method create using PreparedStatement insert data into table ttransaction with the following
      1. transid = UUID if not specified
      2. transdate = current date if not specified
      3. userid = must specified
      4. journalid = must specified
      5. transno = must specified
      6. amount = must specified
      7. remark = optional
      8. transtime = current timestamp
      9. editdate = current date
      10. edittime = current time
   2. Method retrieve using PrepareStatement to execute query and fetch data from ResultSet into attributes of class TTransaction with key column transid specified by parameter passing
      1. transid = must specified
   3. Method update using PrepareStatement to update column journalid, amount, remark, editdate, edittime with key column transid specified by parameter passing
      1. transid = must specified
      2. journalid = must specified
      3. amount = must specified
      4. remark = optional
      5. editdate = current date
      6. edittime = current time
   4. Method delete using PrepareStatement to delete data from table ttransaction with key column transid specified by parameter passing
      1. transid = must specified