Patrick Crowe ITMD-411 Lab04 12/12/20

Admin credentials:

- Username: "Patrick Crowe"

- Password: "pac"

User credentials:

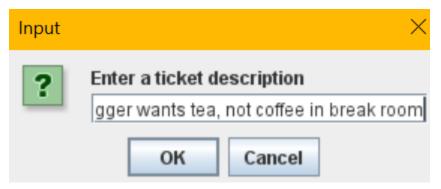
Username: "Joe User"Password: "123"

Description:

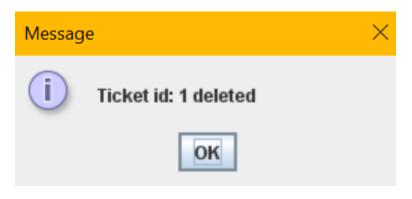
This library of code is a working bulletin board tool. Users can submit tickets that they'd like everyone in the organization to see. Tickets have an ID and a name associated with them so that people know who's requesting the change, and they have a description column that outlines the problem and perhaps a way to fix it. The last two columns of each ticket show what day the ticket was made and, if anyone has gotten around to fixing it, what day the ticket request was fulfilled. The software uses a database, so theoretically many users could access the database at once and see the same tickets, despite being on different machines with different hard drives. Every computer shares this database, so everything is synchronized.

If the user who logs in is an admin, they will have the additional opportunity to update a ticket or completely delete it. When an admin updates a ticket, it uses the admin's name as the ticket_issuer, and the admin can change its description. Deleting a ticket doesn't just list it as closed, instead it gets completely removed from the table view.





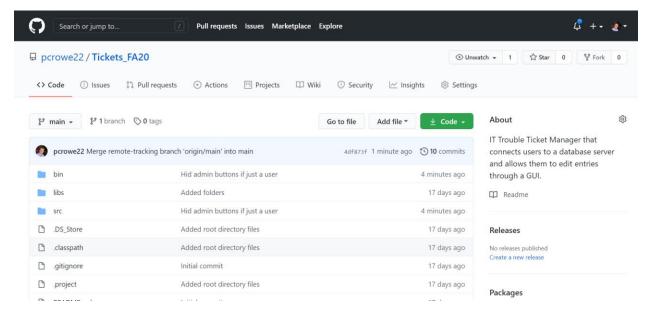








Extra Credit 1 (Git repository):



Extra Credit 2 (SQL Prepared Statements):

```
for (List<String> rowData : array) {
    pst = getConnection().prepareStatement("INSERT INTO pcrow_users(uname,upass,admin) VALUES(?,?,?);");
    pst.setString(1, rowData.get(0));
pst.setString(2, rowData.get(1));
    pst.setString(3, rowData.get(2));
    pst.executeUpdate();
    pst.close();
     //connect.close();
}
System.out.println("Inserts completed in the given database...");
LocalDate local = LocalDate.now();
Date d = Date.from(local.atStartOfDay(ZoneId.systemDefault()).toInstant());
    java.sql.Date sqlDate = new java.sql.Date(d.getTime());
    pst.setDate(3, sqlDate);
    pst.executeUpdate();
    // retrieve ticket id number newly auto generated upon record insertion
    ResultSet resultSet = null;
    resultSet = pst.getGeneratedKeys();
    if (resultSet.next()) {
    // retrieve first field in table
       id = resultSet.getInt(1);
    resultSet.close();
    pst.close();
//connect.close();
```

```
public boolean updateRecords(int ticketID, String ticketName, String ticketDesc) {
    boolean valid = true;
    PreparedStatement pst = getConnection().prepareStatement("UPDATE pcrow_tickets SET ticket_issuer = ?, ticket_description = ? where ticket_id = ?;");
        pst.setString(1, ticketName);
pst.setString(2, ticketDesc);
pst.setInt(3, ticketID);
   pst.setInt(3, ticketID);
pst.executeUpdate();
pst.close();
//connect.close();
} catch (SQLException e2) {
  valid = false;
  e2.printStackTrace();
}
    return valid;
}
// continue coding for deleteRecords implementation
public boolean deleteRecords(int ticketID) {
    boolean valid = true;
    PreparedStatement pst = getConnection().prepareStatement("DELETE FROM pcrow_tickets WHERE ticket_id = ?");
pst.setInt(1, ticketID);
pst.executeUpdate();
    pst.executeopdate();
pst.close();
//connect.close();
} catch (SQLException e3) {
  valid = false;
  e3.printStackTrace();
    return valid;
public boolean closeRecords(int ticketID) {
     boolean valid = true;
     try {
           PreparedStatement pst = getConnection().prepareStatement("UPDATE pcrow_tickets SET end_date = ?, "
                      + "ticket_description = CONCAT(ticket_description, ' | CLOSED.') WHERE ticket_id = ?;");
           pst.setInt(2, ticketID);
           LocalDate local = LocalDate.now();
           Date d = Date.from(local.atStartOfDay(ZoneId.systemDefault()).toInstant());
           java.sql.Date sqlDate = new java.sql.Date(d.getTime());
           pst.setDate(1, sqlDate);
           pst.executeUpdate();
           pst.close();
            //connect.close();
     } catch (SQLException e4) {
           valid = false;
           e4.printStackTrace();
     return valid;
```

```
Connecting to a selected database to create Table...
Connected database successfully...
Creating table in given database...
java.sql.SQLSyntaxErrorException: Table 'pcrow_tab' already exists
         at com.mysql.cj.jdbc.exceptions.SQLError.createSQLException(<u>SQLError.java:120</u>) at com.mysql.cj.jdbc.exceptions.SQLError.createSQLException(<u>SQLError.java:97</u>)
         at com.mysql.cj.jdbc.exceptions.SQLExceptionsMapping.translateException(<u>SQLExceptionsMapping.java:122</u>)
         at com.mysql.cj.jdbc.StatementImpl.executeUpdateInternal(StatementImpl.java:1335)
at com.mysql.cj.jdbc.StatementImpl.executeLargeUpdate(StatementImpl.java:2108)
         at com.mysql.cj.jdbc.StatementImpl.executeUpdate(StatementImpl.java:1245)
         at lab04.Dao.createTable(Dao.java:37)
         at lab04.LoanProcessing.main(<u>LoanProcessing.java:17</u>)
Inserting records into the table...
Loan Analysis Report:
ID
                  Income
 id12101
                            22467.0
                                                YES
 id12102
                            32825.0
                                                YES
 id12103
                            16575.4
                                                YES
 id12106
                           37869.6
                                                YES
 id12107
                            8877.07
                                                YES
 id12113
                            15735.8
                                                YES
 id12114
                           55204.7
                                                YES
                           26909.2
 id12119
                                                YES
 id12121
                            57880.7
                                                YES
 id12128
                           20114.0
                                                YES
 id12130
                            24270.1
                                                YES
```

id12133

23443.2

YES