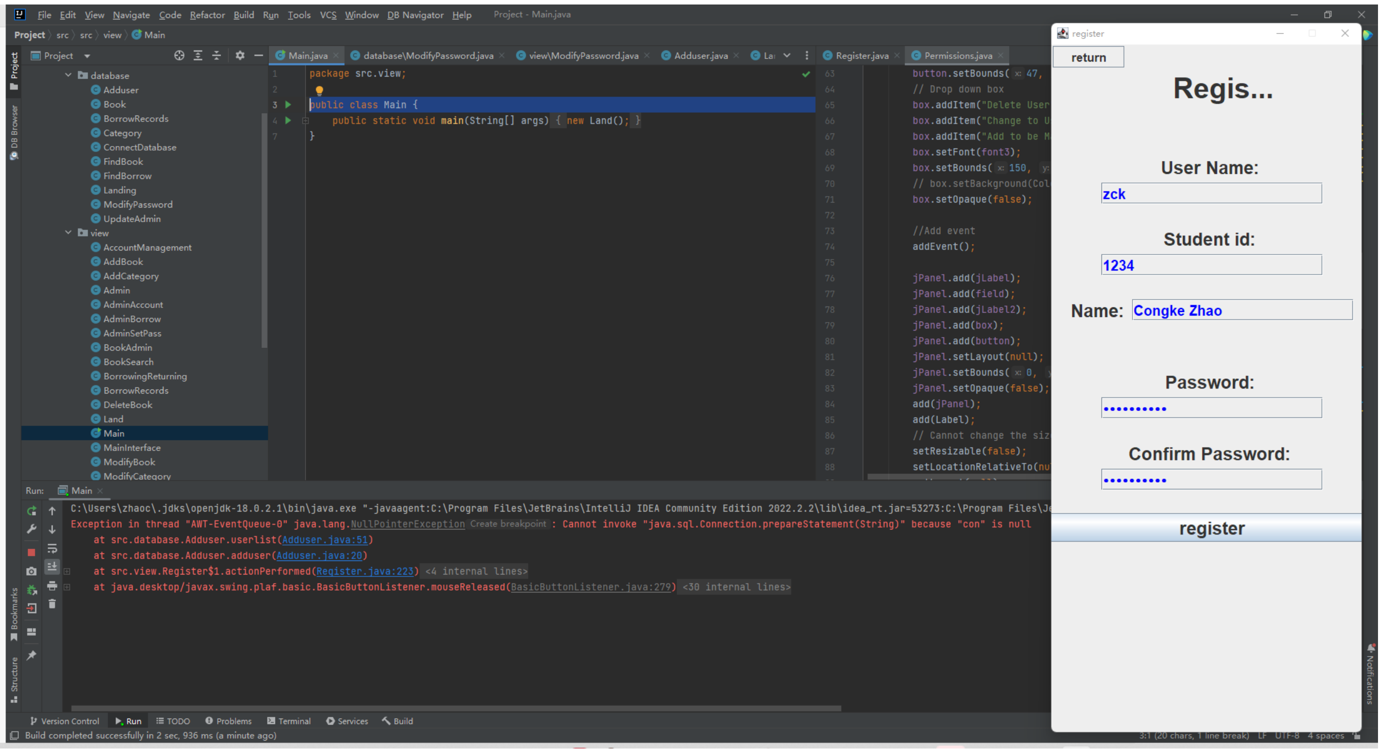
Project 7

Book management system

Congke Zhao & Rui Zhang

Statement: Rui quit in the last part. Because Covid-19 could not continue to make the project, our project was basically completed, but there were always bugs in the running phase. I cannot solve this problem by myself, so we actually do not finish the project. There is a big change between 5 and 6, but there do not have much change between 6 and 7. The big change is the design pattern, because we use java to do the interface directly, we thought this is more convenient. Therefore, we change a lot about the design pattern.



```java
package src.view;

public class Main {
    public static void main(String[] args) { new Land(); }
}
```

```java
        button.setBounds( x: 47,
        // Drop down box
        box.addItem("Delete User
        box.addItem("Change to U
        box.addItem("Add to be M
        box.setFont(font3);
        box.setBounds( x: 150,  y:
        // box.setBackground(Col
        box.setOpaque(false);

        //Add event
        addEvent();

        jPanel.add(jLabel);
        jPanel.add(field);
        jPanel.add(jLabel2);
        jPanel.add(box);
        jPanel.add(button);
        jPanel.setLayout(null);
        jPanel.setBounds( x: 0,
        jPanel.setOpaque(false);
        add(jPanel);
        add(Label);
        // Cannot change the siz
        setResizable(false);
        setLocationRelativeTo(nu
```

```
C:\Users\zhaoc\.jdks\openjdk-18.0.2.1\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.2\lib\idea_rt.jar=53273:C:\Program Files\Je
Exception in thread "AWT-EventQueue-0" java.lang.NullPointerException Create breakpoint : Cannot invoke "java.sql.Connection.prepareStatement(String)" because "con" is null
    at src.database.Adduser.userlist(Adduser.java:51)
    at src.database.Adduser.adduser(Adduser.java:20)
    at src.view.Register$1.actionPerformed(Register.java:223) <4 internal lines>
    at java.desktop/javax.swing.plaf.basic.BasicButtonListener.mouseReleased(BasicButtonListener.java:279) <30 internal lines>
```

User Name: zck

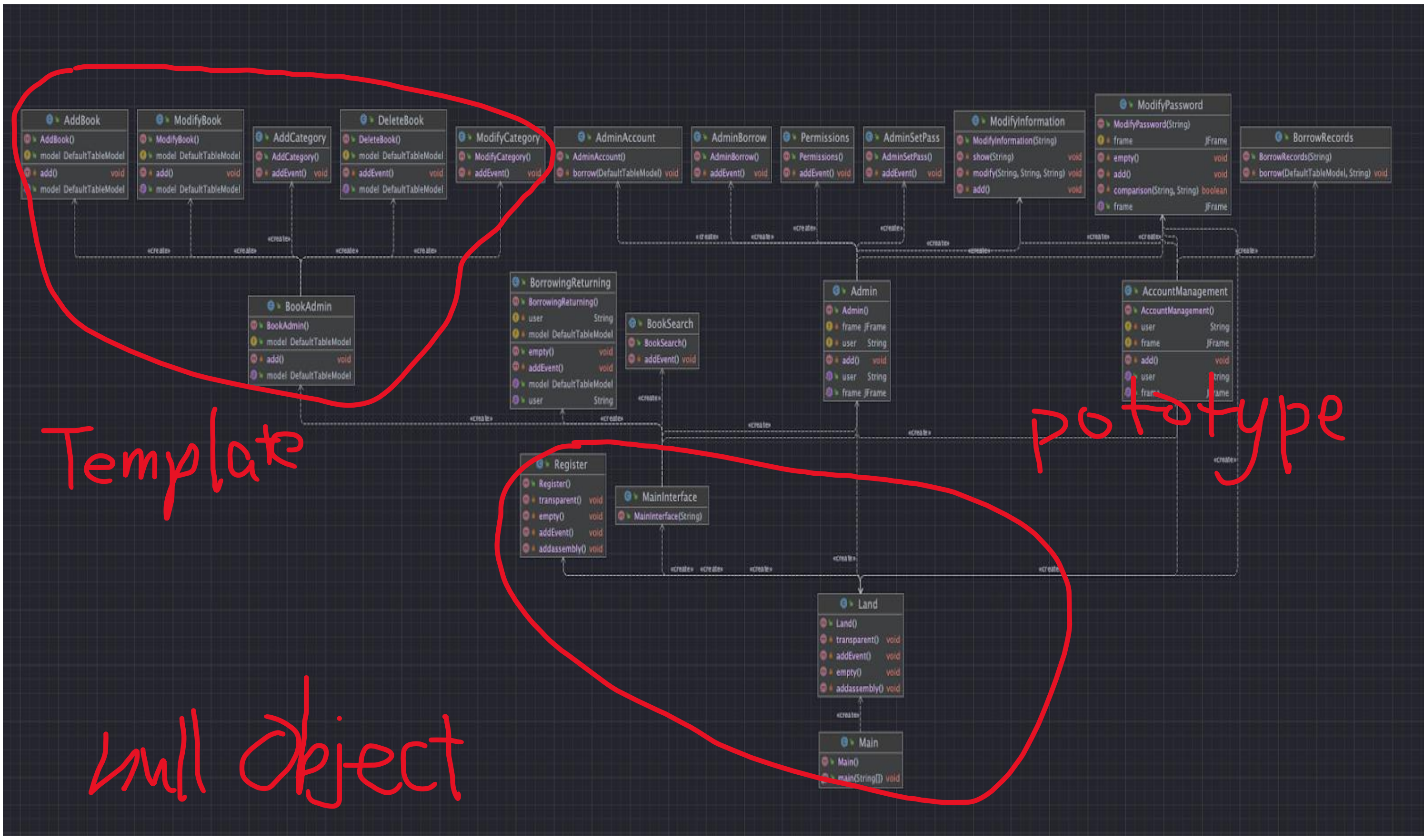
Student id: 1234

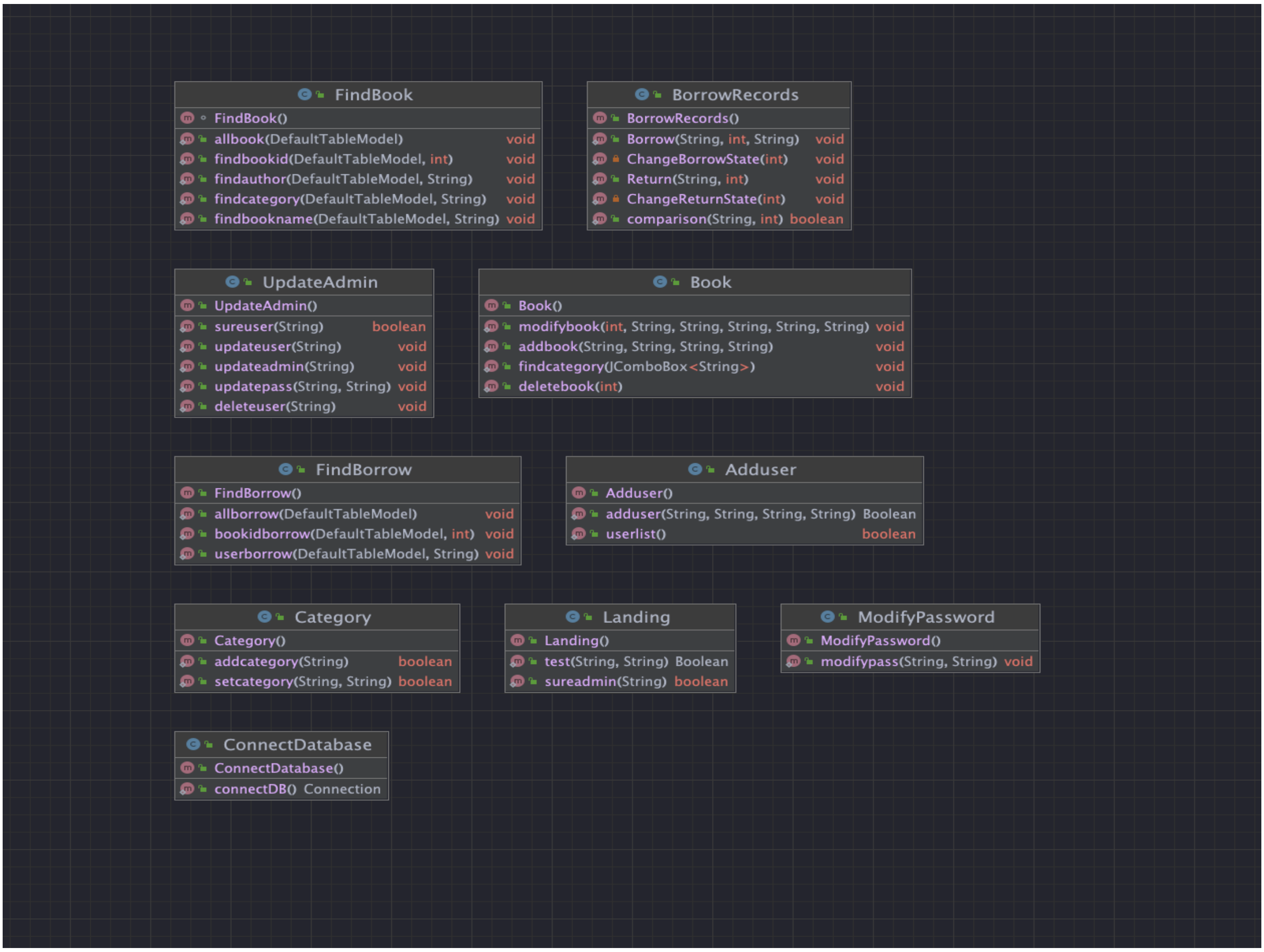
Name: Congke Zhao

Password: ••••••••••

Confirm Password: ••••••••••

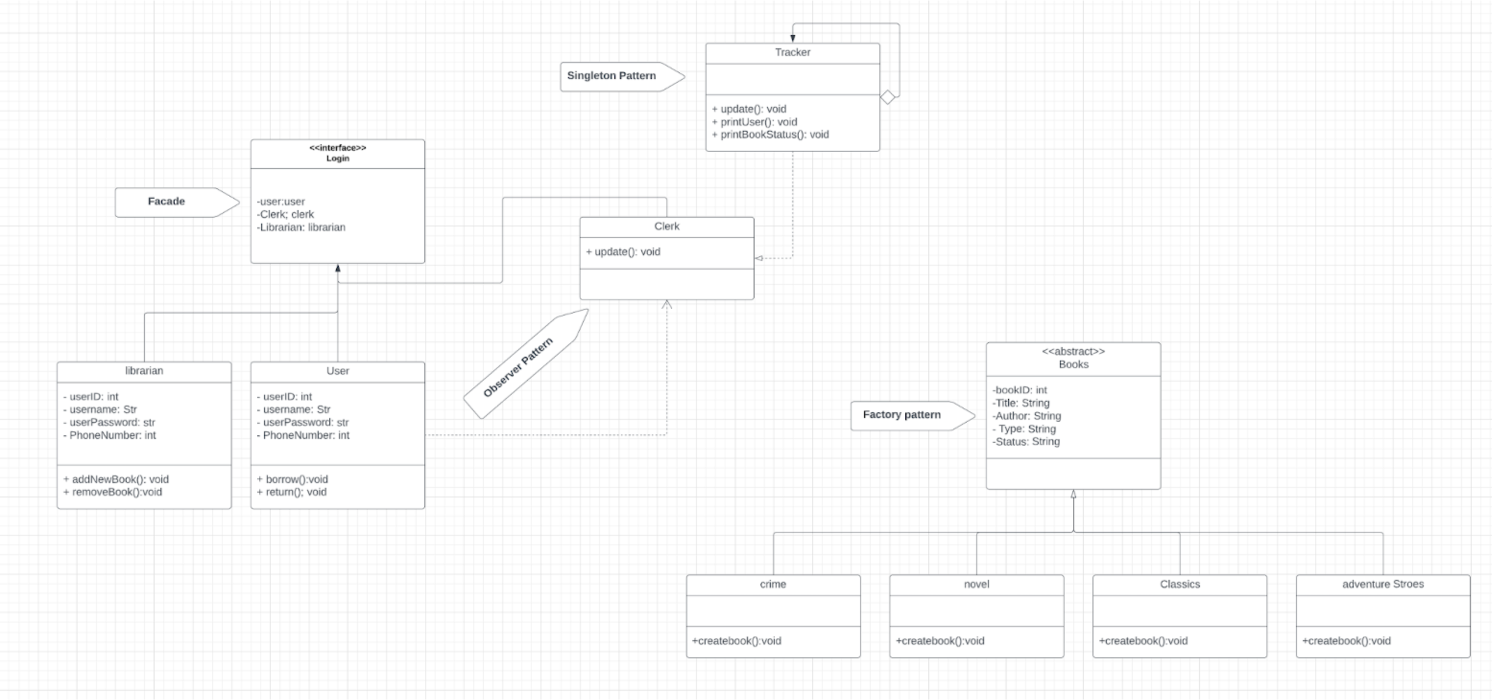
UML:





```
FindBook
FindBook()
allbook(DefaultTableModel)                    void
findbookid(DefaultTableModel, int)            void
findauthor(DefaultTableModel, String)         void
findcategory(DefaultTableModel, String)       void
findbookname(DefaultTableModel, String)       void

BorrowRecords
BorrowRecords()
Borrow(String, int, String)     void
ChangeBorrowState(int)          void
Return(String, int)             void
ChangeReturnState(int)          void
comparison(String, int)      boolean

UpdateAdmin
UpdateAdmin()
sureuser(String)             boolean
updateuser(String)              void
updateadmin(String)             void
updatepass(String, String)      void
deleteuser(String)              void

Book
Book()
modifybook(int, String, String, String, String, String) void
addbook(String, String, String, String)                 void
findcategory(JComboBox<String>)                         void
deletebook(int)                                         void

FindBorrow
FindBorrow()
allborrow(DefaultTableModel)                 void
bookidborrow(DefaultTableModel, int)         void
userborrow(DefaultTableModel, String)        void

Adduser
Adduser()
adduser(String, String, String, String)  Boolean
userlist()                               boolean

Category
Category()
addcategory(String)          boolean
setcategory(String, String)  boolean

Landing
Landing()
test(String, String)  Boolean
sureadmin(String)     boolean

ModifyPassword
ModifyPassword()
modifypass(String, String)  void

ConnectDatabase
ConnectDatabase()
connectDB()  Connection
```

Project 5 UML:



The most important change is the use of patterns. In Project 5, we did not intend to use Java directly as the interface, but in the later production process, we found that Java seems to be able to directly serve as the front-end language, so we changed the pattern idea and made a major change to the UML diagram.

Database connection is learned from:

https://stackoverflow.com/questions/38660104/how-to-connect-intellij-with-local-mysql

https://www.javatpoint.com/example-to-connect-to-the-mysql-database

https://blog.csdn.net/kongsanjin/article/details/96425826

Java swing (interface):

https://www.geeksforgeeks.org/java-swing-jpanel-with-examples/

https://docs.oracle.com/javase/7/docs/api/javax/swing/JFrame.html database:

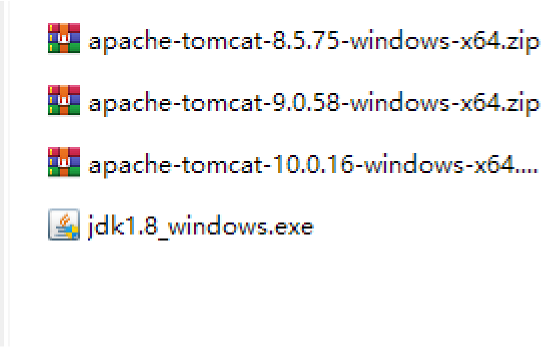
https://www.w3schools.com/MySQL/default.asp

https://www.youtube.com/watch?v=JR1c8p2apJM

In the process of making the project, we give priority to writing code. After completing part of the code, we analyze and reorganize the code framework and redesign it. Obviously, this makes the code more cluttered and increases the workload. And we didn't list the relationship of each class or interface in advance, which made the production process very complicated. Of course, the biggest problem is that they are not proficient in code learning and cannot use code flexibly.

Our code has been completed for a long time. The main problem is the database connection. Although our code is not very different from project6, we mainly complete the database connection problem, although we still haven't solved the problem in the end.

I tried to edit the database with Navicat, and tried various versions of intellij and jdk files. Similarly, I used different versions of MySQL. And tomcat was used as the local server to try to connect to the database, but failed.

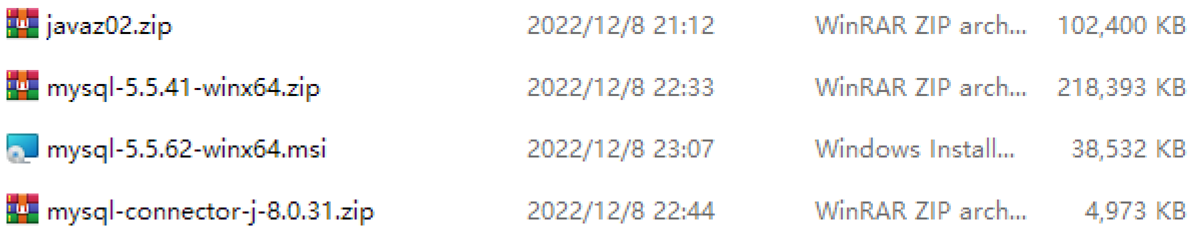


apache-tomcat-8.5.75-windows-x64.zip

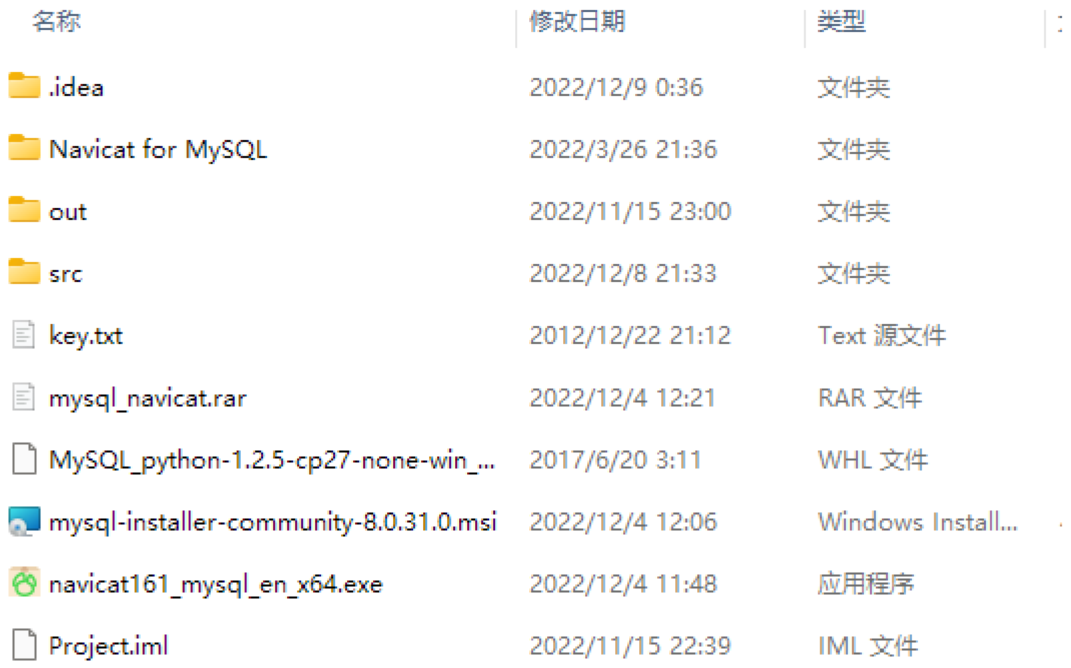
apache-tomcat-9.0.58-windows-x64.zip

apache-tomcat-10.0.16-windows-x64....

jdk1.8_windows.exe



javaz02.zip	2022/12/8 21:12	WinRAR ZIP arch...	102,400 KB
mysql-5.5.41-winx64.zip	2022/12/8 22:33	WinRAR ZIP arch...	218,393 KB
mysql-5.5.62-winx64.msi	2022/12/8 23:07	Windows Install...	38,532 KB
mysql-connector-j-8.0.31.zip	2022/12/8 22:44	WinRAR ZIP arch...	4,973 KB



名称	修改日期	类型
.idea	2022/12/9 0:36	文件夹
Navicat for MySQL	2022/3/26 21:36	文件夹
out	2022/11/15 23:00	文件夹
src	2022/12/8 21:33	文件夹
key.txt	2012/12/22 21:12	Text 源文件
mysql_navicat.rar	2022/12/4 12:21	RAR 文件
MySQL_python-1.2.5-cp27-none-win_...	2017/6/20 3:11	WHL 文件
mysql-installer-community-8.0.31.0.msi	2022/12/4 12:06	Windows Install...
navicat161_mysql_en_x64.exe	2022/12/4 11:48	应用程序
Project.iml	2022/11/15 22:39	IML 文件