



# DISTRIBUTED AND CLOUD COMPUTING

## REPORT

LAB ASSIGNMENT: 1

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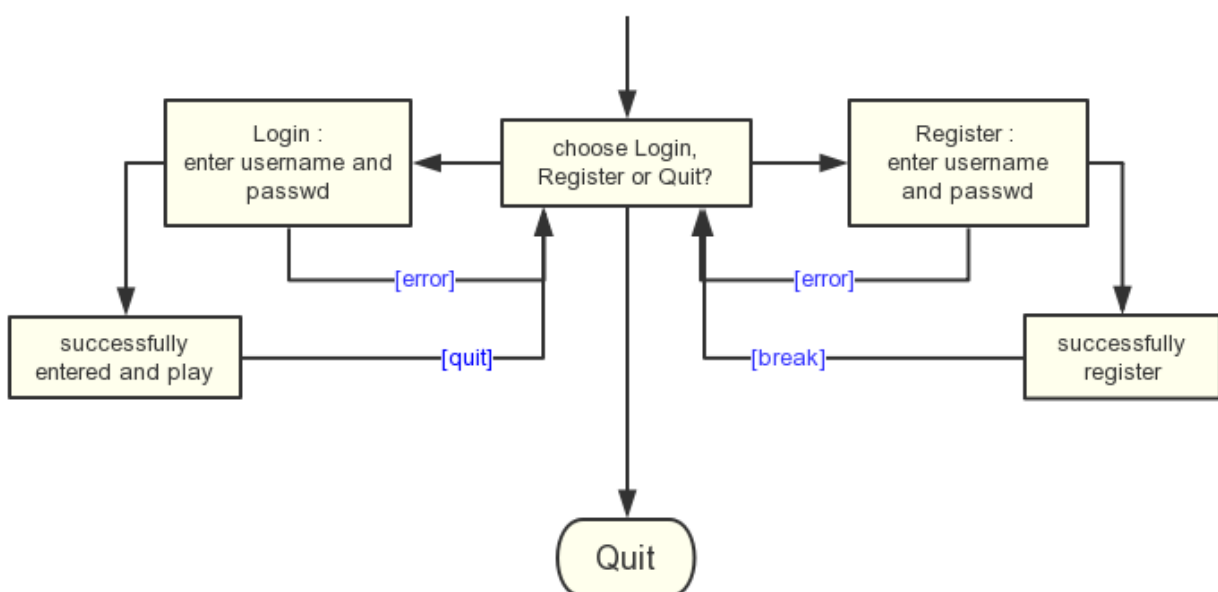
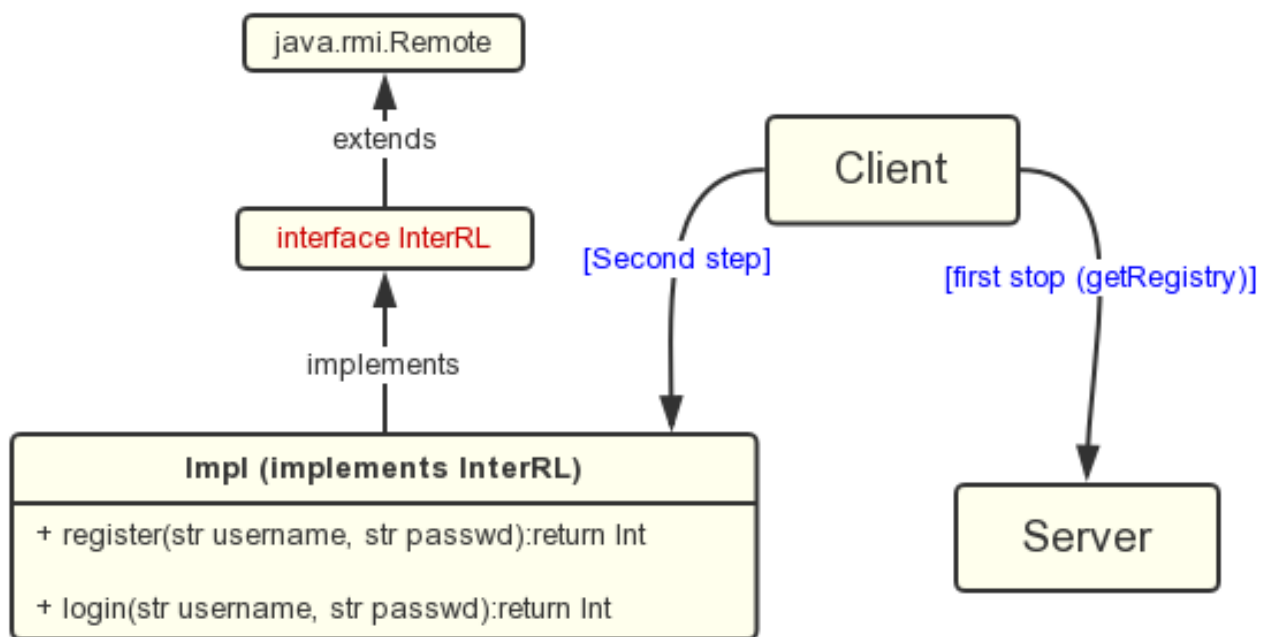
计算机科学与工程系

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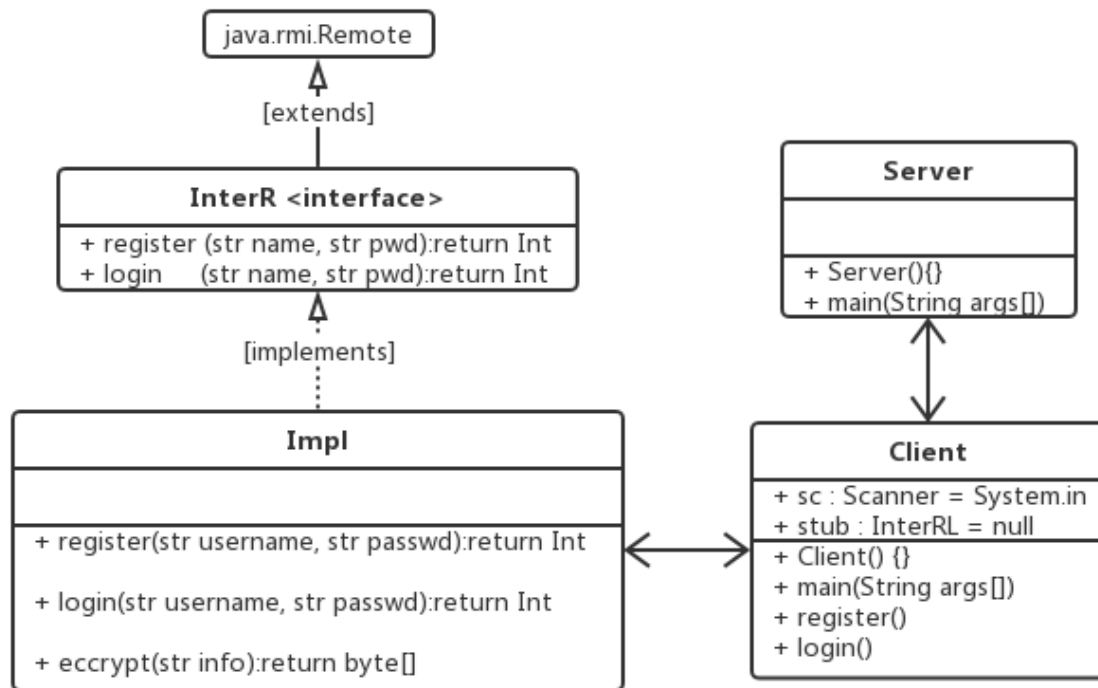
Distributed Systems and Cloud Computing

## DESIGN

Describe the design of your system by providing the following information:



And the class diagram:



The server first starts to set the registry. After the client obtains the information, submit the application and get the corresponding remote method and remote object. Take advantage of remote operations for convenience and efficiency.

## • PROBLEMS

MD5/TCP port/Database :

The passwords saved in the database were encrypted and using MD5 encryption.

There are some problems with the jdbc path of the database and java connection, and I have been prompted to find the class.

Finally, carefully modify the classpath of the environment variable, solve the problem after restarting



- ## RUNNING RESULT

Environment: Win 7

Java: jdk1.8.0\_121

JDBC: mysql-connector-java-5.1.44-bin.jar

Mysql Server version: 5.7.18-log MySQL Community Server (GPL)

mysql -u root

```
C:\>mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.7.18-log MySQL Community Server (GPL)
```

drop database if exists Cloud\_Computing\_Assignment;

create database Cloud\_Computing\_Assignment;

```
mysql> drop database if exists cloud_computing_assignment;
Query OK, 1 row affected (0.01 sec)

mysql> create database cloud_computing_assignment;
Query OK, 1 row affected (0.02 sec)
```

create table User\_Login(

id int(5) primary key not null auto\_increment,

username varchar(40),

passwd varchar(40)

);

```
mysql> create table User_Login(
  -> id int(5) primary key not null auto_increment,
  -> username varchar(40),
  -> passwd varchar(40)
  -> );
Query OK, 0 rows affected (0.01 sec)
```

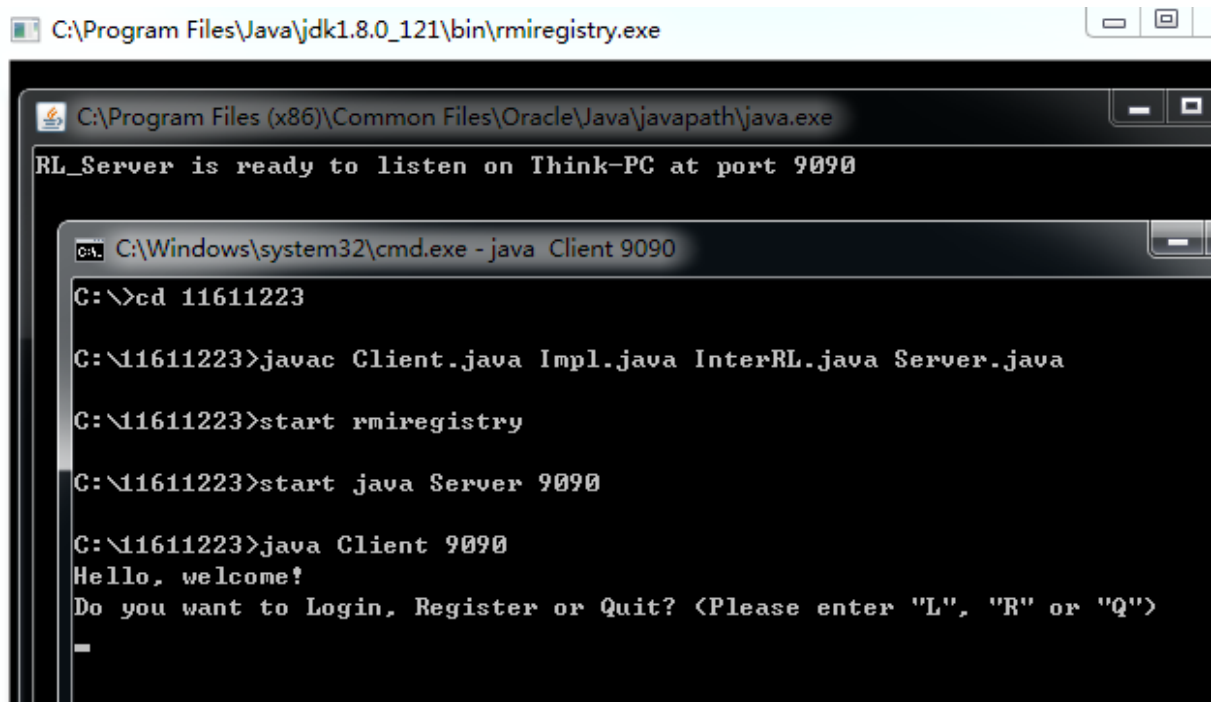
So:

```
mysql> desc User_Login;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(5) | NO   | PRI | NULL    | auto_increment |
| username | varchar(40) | YES | | NULL    | |
| passwd | varchar(40) | YES | | NULL    | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```



Start:

```
cd 11611223
javac -d . Client.java Impl.java InterRL.java Server.java
start rmiregistry
start java Server 9090
java Client 9090
```



Then:



```
C:\11611223>java Client 9090
Hello, welcome!
Do you want to Login, Register or Quit? <Please enter "L", "R" or "Q">
R
Please enter user name
hans
Please enter password
1612
Congratulations.
Do you want to Login, Register or Quit? <Please enter "L", "R" or "Q">
L
Please enter user name
hans
Please enter password
1612
Congratulations, you have successfully entered the system.
Enter repeat mode. <Press "Q" to exit>
what
what
Q
Q
Do you want to Login, Register or Quit? <Please enter "L", "R" or "Q">
Q
bye
```

