一、表

（一）实体表

1、用户表

| **Column(s) of "user" Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Datatype** | **Null Option** | **Comment** | **Is PK** | **Is FK** | **Name** |
| UserID | int | NOT NULL |  | Yes | No | 用户ID |
| UserName | Varchar(50) | NOT NULL |  | No | No | 用户昵称 |
| Passwd | Varchar(50) | NOT NULL |  | No | No | 密码 |
| Status | int(1) | NOT NULL | 1在线，0离线 | No | No | 用户状态 |

2、消息表

| **Column(s) of "info" Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Datatype** | **Null Option** | **Comment** | **Is PK** | **Is FK** | **Name** |
| InfoID | int | NOT NULL |  | Yes | No | 消息ID |
| Type | int(1) | NOT NULL | 1消息，0文件 | No | No | 消息类型 |
| Content | text | NOT NULL |  | No | No | 消息内容 |

Content

如果是Type为0，则直接保存消息的内容；否则，保存文件的链接。

（二）关系表

1、用户发送消息

| **Column(s) of " User\_info " Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Datatype** | **Null Option** | **Comment** | **Is PK** | **Is FK** | **Name** |
| ID | int | NOT NULL |  | Yes | Yes | 表ID |
| Sender | int | NOT NULL |  | No | Yes | 发送方ID |
| Receiver | int | NOT NULL |  | No | Yes | 接收方ID |
| Time | datetime | NOT NULL |  | No | No | 消息发送时间 |
| Status | int(1) | NOT NULL | 1接收0未接收 | No | No | 是否接收消息 |

2、用户与用户表

| **Column(s) of " User\_User" Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Datatype** | **Null Option** | **Comment** | **Is PK** | **Is FK** | **Name** |
| ID | int | NOT NULL |  | Yes | No | 表ID |
| UserID | int | NOT NULL |  | No | Yes | 用户ID |
| FriendID | int | NOT NULL |  | No | Yes | 好友ID |
| FriendName | Varchar(50) | NOT NULL |  | No | No | 好友名 |

1、用户注册

2、用户登录

3、更改密码

4、用户下线

5、添加好友

6、查看好友

7、发送消息（文件）

8、消息接收后，消息状态的改变

9、AS获取用户密码

10、查看聊天记录

publicKey:

65537&12212690687876111778631914058053907976672300451113723158078853698843000468416739308414181522225554504542219939793375968679427188159730219293000830899772769066746380191645968656774232302544015186785263475832891868277798832771100729783896725712096811259212894243591440731016513297774084827386817208464370668118510828455653669260208409066084619658228019359651857026389909006539430417151844000764455572849945097089283151421428135744852391646439525779749842257922838275014988726831619189559790172218242953019246646473673072924757195240042233223846998606331043164626716215112204416985916658702487045605969466575568761671927  
  
  
privateKey:

8557101429532493902296069297432525966839984080979327210872956678683348055444964967001529143851526051674302144365958534595103475598437701907847447318576766643956753870338631318477695764725592831182069652413848583110556211008269306066443957530852580573158003931606862663354720091456520366718077516710925142743668247386421510669808588015590335943907223630577185479712024698807041111648656999415659482009438403276728722609217371949987026479788277879123846309104089082329707504277965397334028538418284539552314085362446506371015899741229715542022265559066873543511768304091636770969870525365939612341502515608477750495233&12212690687876111778631914058053907976672300451113723158078853698843000468416739308414181522225554504542219939793375968679427188159730219293000830899772769066746380191645968656774232302544015186785263475832891868277798832771100729783896725712096811259212894243591440731016513297774084827386817208464370668118510828455653669260208409066084619658228019359651857026389909006539430417151844000764455572849945097089283151421428135744852391646439525779749842257922838275014988726831619189559790172218242953019246646473673072924757195240042233223846998606331043164626716215112204416985916658702487045605969466575568761671927

publicKey2:

65537&24939412851792017341433983041853385544439316891084434582068824517997516912997756104244445946338318587035793654527250842689287586037725783325035506738918998572208619541146401910294900050070690254366506474231994935174581127480000859539890011078293388464297959682561142964607014423152587470955973889962228142082872111530342973041750666450651149645148894221551259287587540100801244160277084159093706446139061973799178505817972182958748332709022690079998427857362092625678433711746599108438156823702493991805026529354100045300968836980819234474531351499937273165363552991339465793345974870738216141754799426493447310154867  
  
  
privateKey2:

5845466237642510007808831858429739770635402089872102775762686931366401533493424043171016893994276695842910513560173645338513307126134942973524427712842130965221120966348015315684879681235574911841004408970164551310202491710336042287444504023279441234723605881926571510434233311778795125522296030085444657072037876828095896875467120182754989476950013608584079641540513587983878540270574952327491418527131111798104032001240504300223235642033561539910070046161568342861629117181045184342680877050318976969776808989138329833216817509802229071155802310865517184007959224928306420456801302809757007048251121114433360787473&24939412851792017341433983041853385544439316891084434582068824517997516912997756104244445946338318587035793654527250842689287586037725783325035506738918998572208619541146401910294900050070690254366506474231994935174581127480000859539890011078293388464297959682561142964607014423152587470955973889962228142082872111530342973041750666450651149645148894221551259287587540100801244160277084159093706446139061973799178505817972182958748332709022690079998427857362092625678433711746599108438156823702493991805026529354100045300968836980819234474531351499937273165363552991339465793345974870738216141754799426493447310154867