**服务端设计文档**

# 项目名称：微爱情侣点滴

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| --- | --- | --- | --- |
| **版本** | **创建作者** | **修改作者** | **内容** |
| V1.0 | 陈文鸿  2014-08-17 |  | 项目背景介绍、功能 |
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## 一、系统分析

## 二、数据库设计

## 1、表的创建

1.用户表user

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Uid** | **User\_password** | **User\_name** | **User\_sex** | **User\_role** | **extColumn1** | **extColumn2** | **extColumn3** |
| Int(4) primary key auto\_increment | Varchar(20) not null | Varchar(20) default ‘’ not null | Varchar(10) default ‘’ not null | Varchar(20) default ‘’ not null | Varchar(200) | Varchar(200) | Varchar(200) |
| 用户id，从10000开始自增 |  | 用户名，不为空 | 性别 | 角色，不为空 |  |  |  |

Sql:

create table user(uid int(4) primary key auto\_increment, user\_password varchar(20) not null,user\_name varchar(20) default '' not null, user\_sex varchar(10) default ‘’ not null, user\_role varchar(20) default '' not null, extColumn1 varchar(200), extColumn2 varchar(200), extColumn3 varchar(200))auto\_increment = 10000;

2.当前用户行为表user\_state，创建索引sid\_index

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **sid** | **Uid** | **User\_state** | **Create\_date** | **Read\_date** | **Has\_read** | **extColumn1** | **extColumn2** | **extColumn3** |
| Int(8) primary key auto\_increment | Int(4) | Varchar(200) not null | Varchar(20) default ‘’ not null | Varchar(20) default ‘’ not null | Bit default 0 not null | Varchar(200) | Varchar(200) | Varchar(200) |
| id，从0开始自增 | 用户id | 当前状态，不为空 | 创建时间  2014-07-21 10：00：00 | 读取时间2014-07-21 10：00：03 | 是否已读，0未读 |  |  |  |

Sql:

create table user\_state(sid int(8) primary key auto\_increment, uid int(4) not null, user\_state varchar(200) default '' not null, create\_date varchar(20) default '' not null, read\_date varchar(20) default '' not null, has\_read bit default 0 not null, extColumn1 varchar(200), extColumn2 varchar(200), extColumn3 varchar(200));

3.问答表user\_qa

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **qid** | **Uid** | **Question** | **Create\_date** | **Read\_date** | **Has\_read** | **Answer\_A** | **Answer\_B** | **Answer\_C** | **Answer** |
| Int(8) primary key auto\_increment | Int(4) | Varchar(200) default ‘’ not null | Varchar(20) default ‘’ not null | Varchar(20) | Bit default 0 not null | Varchar(200) default ‘’ not null | Varchar(200) default ‘’ not null | Varchar(200) default ‘’ not null | Int(4) default -1 not null |
| id，从0开始自增 | 用户id | 问题，不为空 | 创建时间  2014-07-21 10：00：00 | 读取时间2014-07-21 10：00：03 | 是否已读，0未读 | 备选答案0 | 备选答案1 | 备选答案2 | 答案{-1，0，1，2} |

|  |  |  |
| --- | --- | --- |
| **extColumn1** | **extColumn2** | **extColumn3** |
| Varchar(200) | Varchar(200) | Varchar(200) |
|  |  |  |

Sql:

create table user\_qa(qid int(8) primary key auto\_increment, uid int(4) not null, question varchar(200) default '' not null, create\_date varchar(20) default '' not null, read\_date varchar(20) default '' not null, has\_read bit default 0 not null, answer\_a varchar(200) default '' not null, answer\_b varchar(200) default '' not null, answer\_c varchar(200) default '' not null, answer int(4) default -1 not null, extColumn1 varchar(200), extColumn2 varchar(200), extColumn3 varchar(200));

4.聊天消息表user\_msg

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **mid** | **Uid** | **User\_msg** | **Create\_date** | **Read\_date** | **Has\_read** | **extColumn1** | **extColumn2** | **extColumn3** |
| Int(8) primary key auto\_increment | Int(4) not null | Varchar(500) not null | Varchar(20) default ‘’ not null | Varchar(20) default ‘’ not null | Bit default 0 not null | Varchar(200) | Varchar(200) | Varchar(200) |
| id，从0开始自增 | 用户id | 消息，不为空 | 创建时间  2014-07-21 10：00：00 | 读取时间2014-07-21 10：00：03 | 是否已读，0未读 |  |  |  |

Sql:

create table user\_msg(mid int(8) primary key auto\_increment, uid int(4) not null,user\_msg varchar(500) not null, create\_date varchar(20) default '' not null, extColumn1 varchar(200), extColumn2 varchar(200), extColumn3 varchar(200));

5.聊天服务器配置表msg\_server\_config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Server\_name** | **port** | **extColumn1** | **extColumn2** | **extColumn3** |
| Varchar(40) not null | Int(4) | Varchar(200) | Varchar(200) | Varchar(200) |
| 服务器地址 | 端口 |  |  |  |

Sql：

create table msg\_server\_config(server\_name varchar(40) not null, port int(4) not null, extColumn1 varchar(200), extColumn2 varchar(200), extColumn3 varchar(200));

## 三、接口设计：

errorCode:

200：成功

201：成功，但不返回data数据

400：请求参数错误

401：uid不存在

<http://myphp/RemoteDBMngr/Business/Interface/GetUserState>

请求方式：GET

请求参数：uid,isWifi,sid(如果带上去，接口会判断，假如没有新的状态了，它不返回，否则，取最后一条已读消息)

返回：

{"data":

{"sid":"1","uid":"10000","user\_state":"我在写代码！","create\_date":"2014-07-21 22:44:00","read\_date":"2014-07-22 07:02:02","has\_read":"0","extColumn1":null,"extColumn2":null,"extColumn3":null},"errorCode":"200",

"errorMsg":""}

示例：

<http://myphp/RemoteDBMngr/Business/Interface/GetUserState?uid=10000>

## 四、通信协议

消息格式：

发送消息格式{operation:XX, key:value,…}

operation:

op\_login登陆{uid, user\_password}

op\_logout登出{uid}

op\_send\_msg发送消息{to\_uid, msg,msg\_type}

op\_unread\_msg\_count未读消息数{uid}

op\_unread\_msg未读消息{from\_uid, msg, msg\_type}

op\_user\_login\_state用户登陆状态{to\_uid}

接收消息格式{data:{ operation:XX, key:value,…} ,errorCode:xx, errorMsg:xx}

消息类型：

text、image、url