**分工：恽昕宇55% 姜上云美45%**

**基于Android的书单推荐分享系统**

系统设计报告

**软件设计说明书**

# 1引言

## 1.1编写目的

经过面向对象分析阶段，得到了系统的类图，细化的属性表和操作表，及三层精化类图；设计阶段的任务是给出各个类每层分解的实现方案，即界面显示方式、事务处理逻辑、数据库设计，不同任务的程序员可据此进行方案的实现。

预期读者为：软件开发的人员，项目评审人员，及软件测试人员。

## 1.2背景

说明：

1. 待开发的软件系统的名称：基于Android的书单推荐分享系统；
2. 本项目的任务提出者：恽昕宇、姜上云美；
3. 本项目的任务开发者：恽昕宇、姜上云美；
4. 用户：希望获取书籍资讯和书籍推荐的个人；
5. 实现该软件的计算中心或计算机网络：南京航空航天大学计算中心；

## 1.3定义

用户输入：用户输入的用户名及密码

用户名及口令与用户分类信息：存放在一个数据库表中，用以判断该用户是普通用户还是管理员；

普通用户信息管理：是用户使用该系统的权限的表现，只能处理自己的信息；

管理员用户信息管理：是管理员用户使用取权限的表现，管理员也只维护自己的信息；

普通用户基本信息：存放用户的姓名、年龄、兴趣爱好等各项基本信息，用户可以查询和修改自己的信息；

书籍信息：书籍信息的总库，普通用户只能进行查询、收藏、评论而不能修改，删除，管理员用户有删除违规评论和的权限。

出错显示：当用户名与密码不正确时，系统显示出错，并要求用户重新输入；

显示屏：是用户与计算机系统进行交互的显示渠道。

## 1.4参考资料

|  |  |  |
| --- | --- | --- |
| 编号 | 参考资料 | 作者 |
| 1 | 《软件工程（第三版）》，高等教育出版社，2012 | 齐治昌等 |
| 2 | 《掌握需求过程》，人民邮电出版社，2007 | Suzanne Robertson等 |

# 2界面设计

（根据精化类图逐个给出每个类相关界面的设计结果）

## 2.1 OrdinaryUser类

|  |  |
| --- | --- |
| signup.xml | 注册页面 |

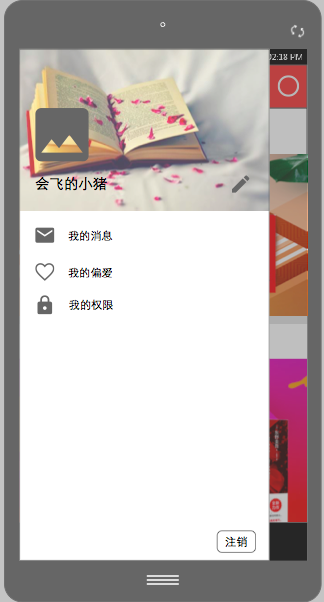


先进入登录／注册界面，再选择分开进入注册或登录

|  |  |
| --- | --- |
| login.xml | 登录页面 |



|  |  |
| --- | --- |
| userinfo.xml | 个人信息页面 |



|  |  |
| --- | --- |
| resetuserinfo.xml | 修改用户信息页面 |

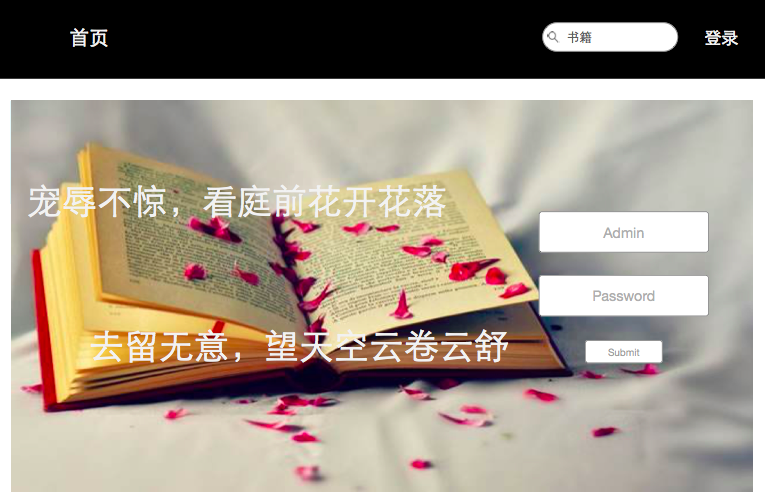


|  |  |
| --- | --- |
| changepassword.xml | 修改登录密码页面 |



## 2.2 Administrator类

|  |  |
| --- | --- |
| login.html | 登录页面 |



|  |  |
| --- | --- |
| index.html | 管理员主页 |

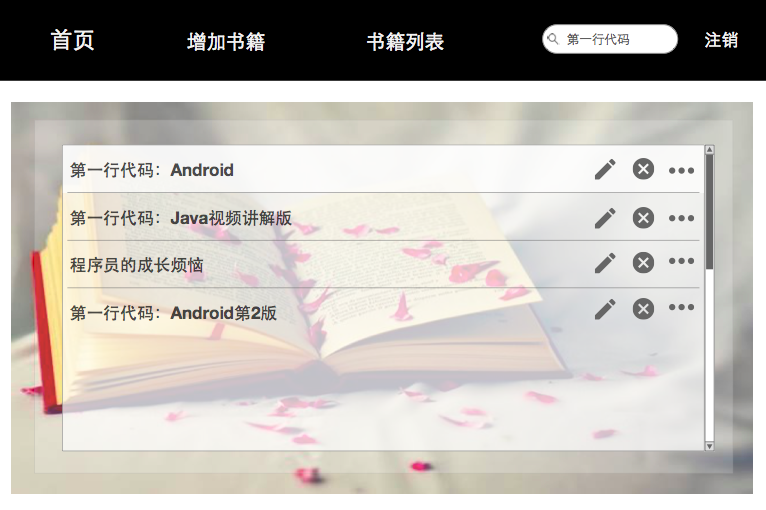


## Book类

|  |  |
| --- | --- |
| addbook.html | 添加书籍页面 |



|  |  |
| --- | --- |
| searchbook.html | 查询书籍页面 |



|  |  |
| --- | --- |
| editbook.html | 编辑书籍页面 |



|  |  |
| --- | --- |
| displaybook.html | 书籍详情页面 |

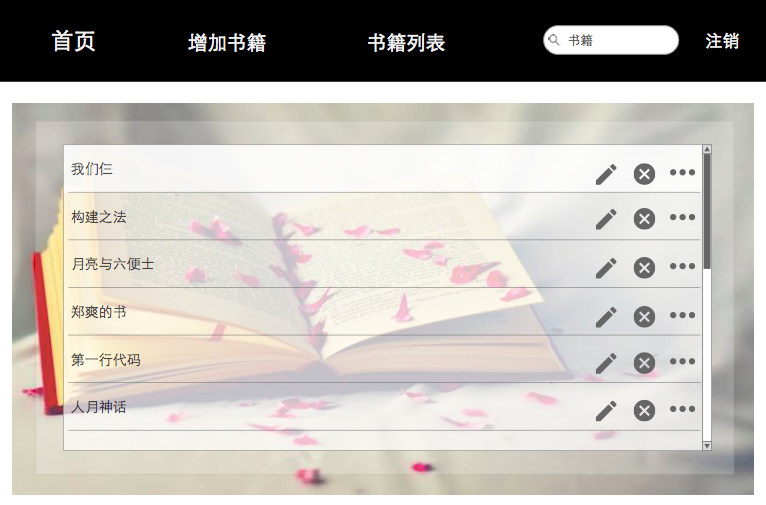


管理员显示书籍界面



普通用户显示书籍界面

|  |  |
| --- | --- |
| managebook.html | 管理书籍页面 |



## Booklist类

|  |  |
| --- | --- |
| createbooklist.xml | 创建书单页面 |



|  |  |
| --- | --- |
| managebooklist.xml | 管理书单页面 |



|  |  |
| --- | --- |
| editbooklist.xml | 编辑书单页面 |



|  |  |
| --- | --- |
| querybooklist.xml | 查询书单页面 |



|  |  |
| --- | --- |
| displaybooklist.xml | 书单详情页面 |



## 2.5 BkInBl类

|  |  |
| --- | --- |
| addbkinbl.xml | 向书单增加书籍页面 |



|  |  |
| --- | --- |
| deletebkinbl.xml | 从书单删除书籍页面 |



## Collection类

|  |  |
| --- | --- |
| collectornot.xml | 添加（或取消）收藏书单页面 |



|  |  |
| --- | --- |
| displaymanagecollection.xml | 收藏展示与管理页面 |



## Comment类

|  |  |
| --- | --- |
| createcomment.xml | 新增评论页面 |



|  |  |
| --- | --- |
| displaycomment.xml | 评论展示页面 |



## Tag类

|  |  |
| --- | --- |
| edittag.xml | 编辑标签页面 |



管理员对书籍增加标签



用户对书单增加标签

|  |  |
| --- | --- |
| displaytag.xml | 标签展示页面 |



用户角度书单显示标签



用户角度书籍显示标签



管理员角度书籍显示标签

# 3事务逻辑设计

用详细设计方法之PDL完成，如已完成代码设计也可贴源码

## 3.1 Administrator类

**登录处理：**

Procedure login

Begin

get the userID and userPassword from login.html

Find the userID and userPassword in the database

If (userID not found )or (userID exist but inputPassWord != Password indatabase )then

display error hint

Else

Change userState;

goto homepage.html

End if

End login

**修改个人信息处理**

Procedure resetuserinfo

begin

get the userinfo from resetuserinfo.html

input new userinfo;

find user in database;

change userinfo;

goto userinfo.html

end resetuserinfo

## 3.2 OrdinaryUser类

**登录处理:**

Procedure login

begin

get the userID and userPassword from login.xml

Find the userID and password in the database;

If (userID not found )or (userID exist but inputPassWord != Password indatabase )then

display error hint

Else

Change userState;

goto homepage.xml

End login

**注册处理**

Procedure signup

begin

get the userinfo from signup.xml

Find the userID in the database;

If userID not found then

add user to database

Goto login.html

Else

Show hint

End if

End signup

**修改个人信息处理**

Procedure resetuserinfo

begin

get the userinfo from resetuserinfo.html

input new userinfo;

find user in database;

change userinfo;

goto userinfo.xml

end resetuserinfo

**修改登录密码处理**

Procedure changepassword

Begin

get the originalpassword from changepassword.xml

if the (inputpassword ==correct password in database) then

begin

user input the newpassword twice in the blank

if the twice input was same then

changepassword in database

goto userinfo.xml

else

show error hint

end if

else

show error hint

end if

end changepassword

**注销处理**

Procedure logout

Begin

get submit from Userinfo.xml

find the UserID in database

change userState;

goto login.xml

End logout

## 3.3Book类

**添加书籍处理**

Procedure addBook

begin

get the book info from addbook.html

insert book to database

goto dispalybook.html

end addBook

**删除书籍处理**

Procedure deleteBook

Begin

get delete submit from managebook.html

If (confirm\_delete == true) then

Delete book from the database;

Show hint

goto magagebook.html

Else

goto magagebook.html

End if

End deleteBook

**编辑书籍处理**

Procedure editBook

Begin

get new bookinfo from editbook.html

search bookID in database

if found book

reset bookinfo;

goto displaybook.html;

else

show error hint

end if

end editBook

**查询书籍处理**

Procedure searchBook

begin

get the keyword from searchbook.html

find keyword in database

If found then

display results in searchbook.html

Else

show hint: find nothing.

End if

End searchBook

## 3.4Booklist类

**添加书单处理**

Procedure createBooklist

begin

get the info from createbooklist.xml;

insert booklist to database;

goto dispalybooklist.xml;

end createBooklist

**删除书单处理**

Procedure deleteBooklist

Begin

get delete submit from managebooklist.xml

Delete booklist from the database;

Show hint

goto magagebooklist.xml

End deleteBooklist

**编辑书单处理**

Procedure editBooklist

begin

get the new booklistinfo from editbooklist.html

search booklistID in database

if found

reset booklistinfo;

goto dispalybooklist.xml;

else

show error hint

end if

end editBooklist

**查询书单处理**

Procedure searchBooklist

begin

get the keyword from querybooklist.html

find keyword in database

If found then

Display results in querybooklist.xml

Else

show hint

End if

End searchBooklist

## 3.5BkInBl类

**向书单添加书籍**

Procedure addbkinbl

Begin

displaybook.xml

if select add book to a booklist

begin

get bookid and booklist id

find in database

if found

show hint: the book has already in the booklist

else

add bkinbl to database;

end if

end if

end addbkinbl

**从书单删除书籍**

Procedure deletebkinbl

begin

displaybooklist.xml

if select delete book from the booklist

begin

get bookid and booklist id

find in database

if found

delete the bkinbl from database

else

show error hint;

end if

end

end if

end deletebkinbl

## 3.6Collection类

**添加收藏处理**

Procedure addCollection

Begin

displaybooklist.xml

find collection in database

if not found

add collection to database;

show hint

end if

end addCollection

**取消收藏处理**

Procedure deleteCollection

Begin

displaybooklist.xml

find collection in database

if found

delete collection from database;

show hint

end if

end deleteCollection

## 3.7Comment类

**增加评论处理**

Procedure addComment

begin

get the commentinfo from createcomment.html

Insert comment into the database;

If succeed

Goto displaycomment.xml

Else

Show error hint

End if

End addComment

**删除评论处理**

Procedure deletecomment

Begin

If (delete submit == true) then

Delete comment from the database;

Goto displaycomment.html

Else

Show error hint

End if

End deletecomment

## 3.8 tag类

**编辑书籍标签处理**

Procedure deleteBookTag

Begin

show all tags in edittag.xml

if the book already have some tags

choosed them in edittag.xml

get choosed tags

reset booktag

goto displaybook.html

end if

end deleteBookTag

**删除书单标签处理**

Procedure deleteBooklistTag

Begin

show all tags in edittag.xml

if the booklist already have some tags

choosed them in edittag.xml

get choosed tags

reset booklisttag

goto displaybooklist.xml

end if

end deleteBooklistTag

**添加标签处理：**

Procedure addtag

Begin

Get new tag info from edittag.xml

Find tagContent from database

If the same tagContent has already exist

Show hint

Else

Add new tag to database

End if

End addtag

**删除标签处理：**

Procedure deleteTag

begin

Get delete submit from edittag.xml

Delete tag from database

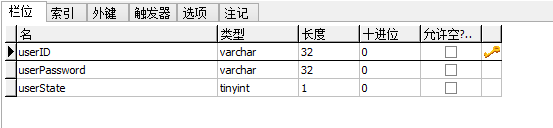
Show hint

end deleteTag

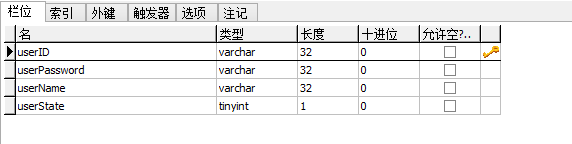
# 4数据库设计

在数据库建立基表后截图。基本上，每个类对应一个数据库的表。

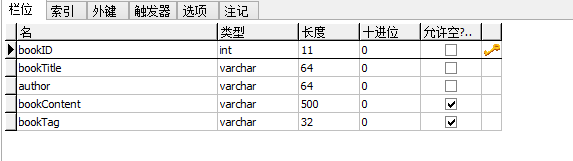
## 4.1 Administrator



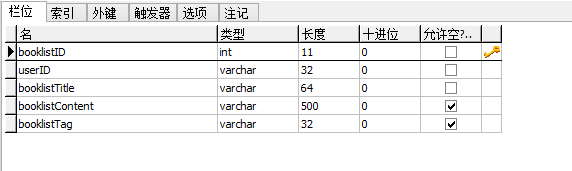
## 4.2 OrdinaryUser



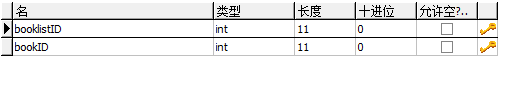
## 4.3Book类



## 4.4Booklist类



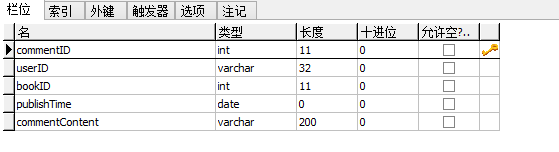
## 4.5BkInBl类



## 4.6Colletion类

GZGH9~`JBWUHJWLXDM671I4

## 4.7Comment类



## 4.8 Tag类

