图书管理系统设计报告

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1 实验目的

设计并实现一个精简的图书管理系统，要求具有图书入库、查询、借书、还书、借书证管理等功能。通过该图书馆系统的设计与实现，提高学生的系统编程能力，加深对数据库系统原理及应用的理解。

2 总体设计

1 数据库结构设计

a) 数据对象

对象名称	包含属性
书	书号，类别，书名，出版社，年份，作者，价格，总藏书量，库存
借书证	卡号，姓名，单位，类别（教师 学生等）
管理员	管理员 ID，密码， 姓名， 联系方式
借书记录	卡号，借书证号 ,借期，还期， 经手人（管理员 ID）

Table1：lib_book(主键为 **bno**)

bno	Category	Title	Press	Year	Author	Price	Total	Stock
Char	varchar	Varchar	Varchar	Int	Varchar	Decimal	Int	int
书号	类别	书名	出版社	年份	作者	价格	总量	库存

Table2：lib_borrow

Cno	Bno	Borrow_date	Return_date	Operator
Char(7)	Char(8)	Date	Date	Int(11)
借书证号	书号	借书时间	还书时间	经手人

Table3：lib_card(主键为 **cno**)

Cno	Name	Department	Type
Char(7)	Varchar(20)	Varchar(20)	Char(1)
借书证号	姓名	单位	类别

Table4：lib_user（主键为 **uid**）

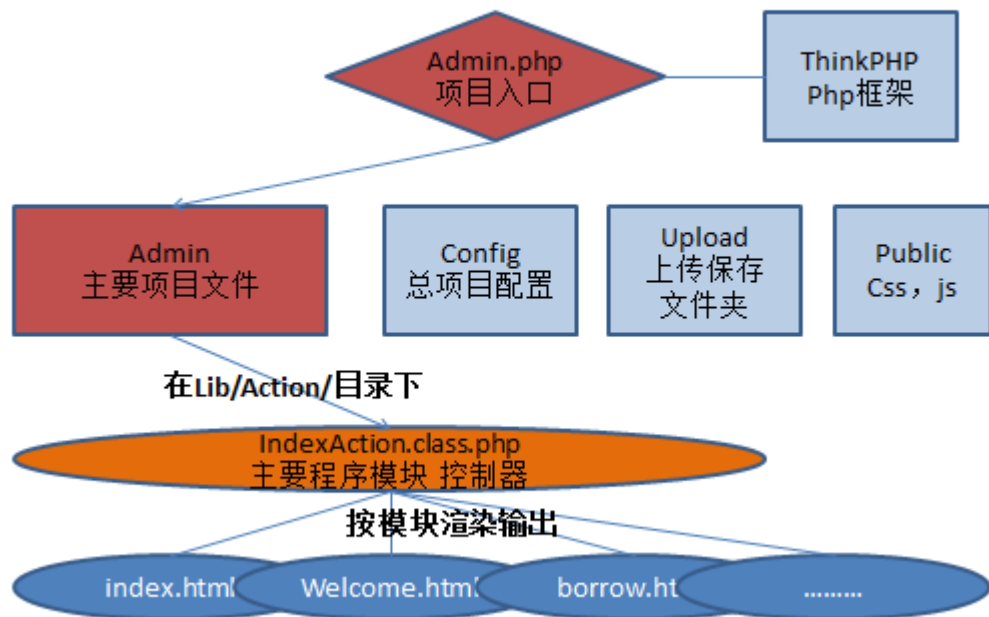| Uid	Username	Password	Tel
Int(11) auto	Varchar(20)	Varchar(20)	Varchar(20)
管理员号	管理员名称	密码	电话

b) 数据库整体构架
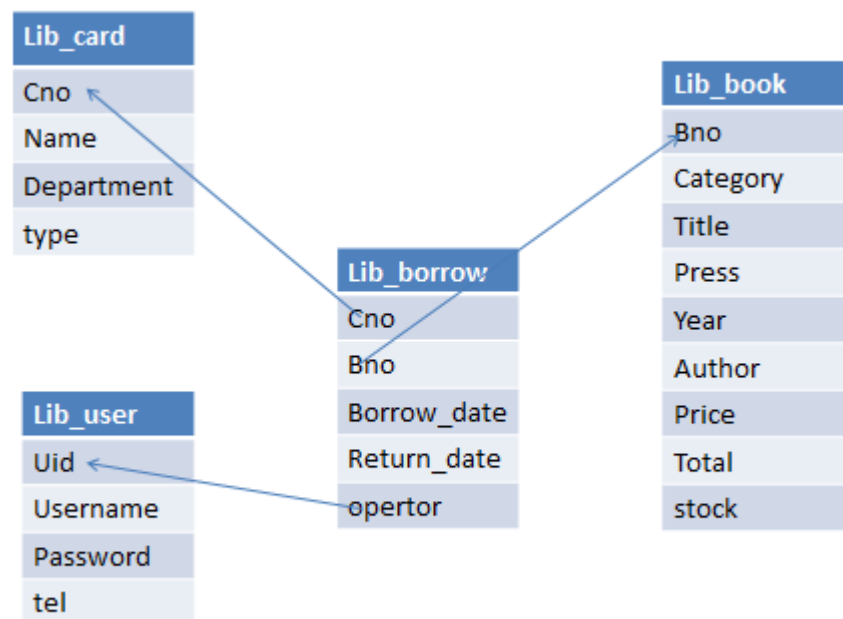
c) ER 模型
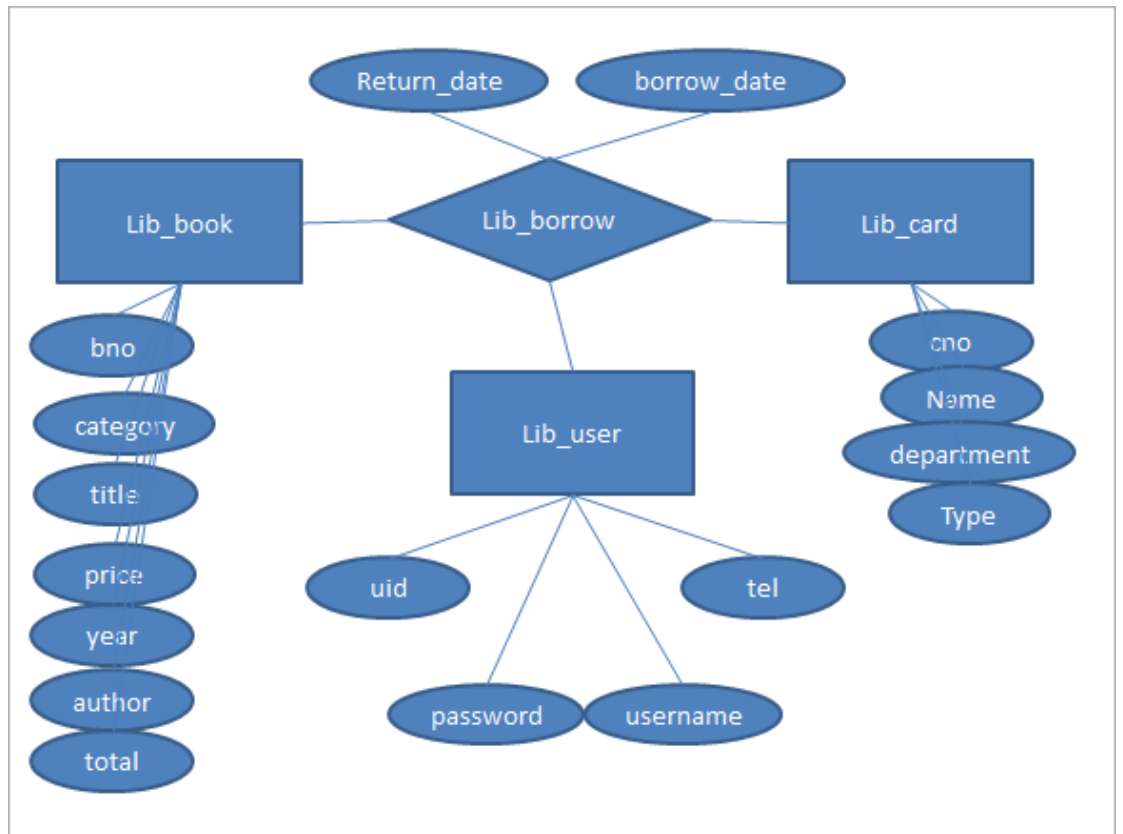
2 系统结构

使用 thinkphp 框架：项目文件名为 lib

Lib/Admin.php 为入口文件。

Lib/Admin 为项目

结构图：

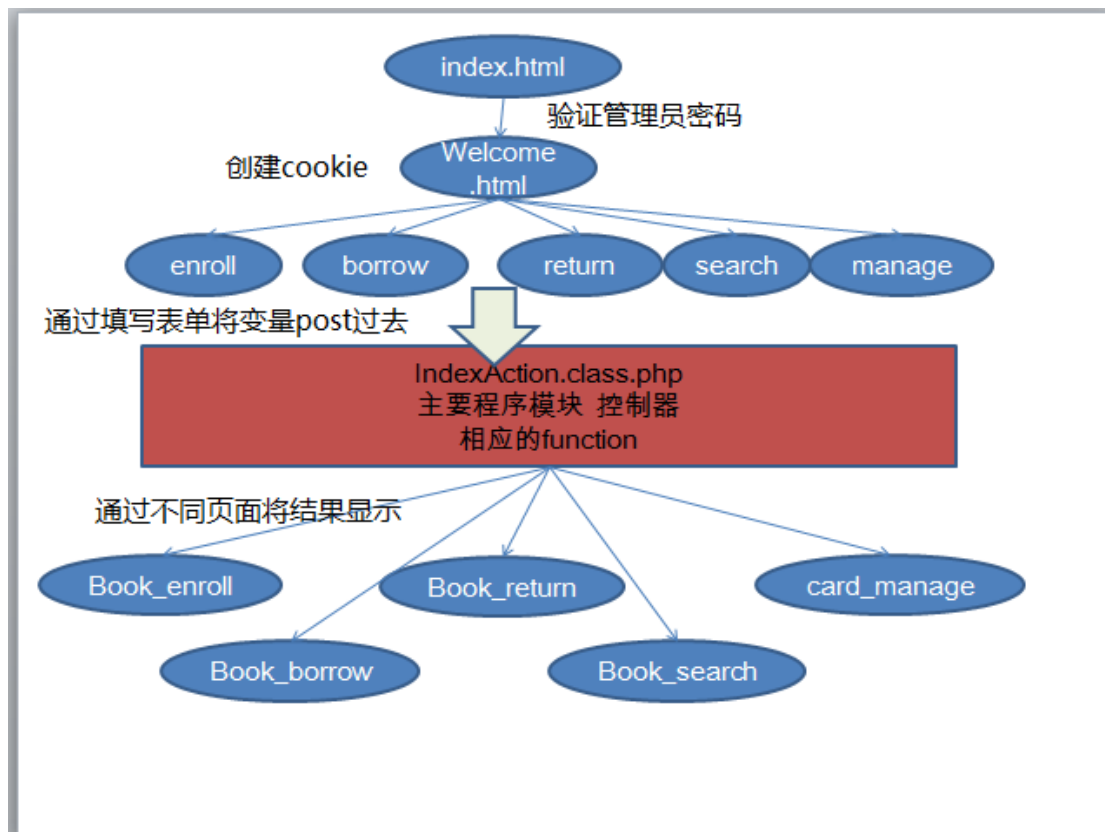## 3 技术简介

ThinkPHP 是一个开源的 PHP 框架，是为了简化企业级应用开发和敏捷 Web 应用开发而诞生

的。在项目根目录下包含 thinkPHP 框架文件，访问入口配置文件即可创建主要项目文件.

同时也支持 php 语句.

同一个类中各以包含多个方法，本实验所有操作都在 index 类中

4 详细设计

1 登陆（index）

后台代码：

```
public function index(){//清除 cookie 并显示

        cookie('name',null);
        cookie('pwd',null);
        cookie('uid',null);
        $this->display();
}
```

前端主要代码：

```
<form action="{:U('welcome')}" method="post">

            <div class="login">图书馆管理员登陆</div>

            <div class="username-text">管理员账号:</div>

            <div class="password-text">密码:</div>

            <div class="username-field">
                <input type="text" name="username" value="xin" />
```

```
                </div>
                <div class="password-field">
                    <input type="password" name="password" value="xin"
/>
                </div>
                <input type="submit" name="submit" value="GO" />
            </form>
```

表单将用户名和密码 post 到 welcome 中。U 为 thinkphp 中生成 url 的方法。

效果：

2 操作单（welcome）

后端代码：

```
public function welcome(){

        if (!IS_POST) _404('页面不存在',U('index'));

    //如果不是通过 post 访问该界面，报错返回

        //取出管理员信息

        $name = I('username');
        $pwd = I('password');
        $con = mysql_connect("localhost","root","");
        if (!$con) {
            die('Could not connect: ' . mysql_error());
        }
        mysql_select_db("lib", $con);
        $sql = "SELECT * FROM lib_user where username ='$name' and
password ='$pwd' ";
        // dump($sql);
        $result = mysql_query($sql);
        $admin = mysql_fetch_array($result);

        //如果信息不存在报告提示他不是管理员或密码错误

        //如果是管理员创建 cookie

        if (!$admin) $this->error('您并不是管理者或密码错误
',U('index'));
        else {
            cookie('name',$name,3600);
```

```
            cookie('pwd',$pwd,3600);
            cookie('uid',$admin['uid'],3600);
        }
        // dump($_COOKIE);
        $this->assign('name',$_COOKIE['name']);
        $this->assign('pwd',$_COOKIE['pwd']);
        $this->display();
    }
```

前端主要代码：

```
<div class="welcome">
    <div class="welcome-user" style="font-size: 25px;">欢迎管理员
{$name}!</div>
    <div class="welcome-text">
                <a                         href="{:U('enroll')}"
style="color:orange;font-size: 20px;">图书入库</a></br></br>
                <a                         href="{:U('search')}"
style="color:orange;font-size: 20px;">图书查询</a></br></br>
                <a                         href="{:U('borrow')}"
style="color:orange;font-size: 20px;">借书</a></br></br>
                <a                     href="{:U('return_book')}"
style="color:orange;font-size: 20px;">还书</a>

               &n
bsp;

               &n
bsp;

               &n
bsp;

               &n
bsp;
                <a                         href="{:U('manage')}"
style="color:orange;font-size: 20px;">图书证管理</a></br></br>
        </div>
```

```
        <div class="home"><a href="index.html">退出</a></div>

    </div>
```

通过 U 方法，创建访问其余方法的链接。

3　添书（enroll）

后端代码：enroll 预处理模块 检查管理员信息

```
public function enroll(){
        // dump($_COOKIE);
        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];
        //dump($admin);

        if (!$admin) $this->error('登陆超时',U('index'));

        else{
            $this->assign('name',$_COOKIE['name']);
            $this->assign('pwd',$_COOKIE['pwd']);
            $this->display();
        }
    }
```

前端：创建表单，使用户填写信息，并提交到 book_enroll 方法

```
    <!DOCTYPE html>
    <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

    <title>图书馆--图书添加</title>

    <link rel="stylesheet" href="__PUBLIC__/css/form.css" type="text/css"
/>
    <script                                           type="text/javascript"
src="__PUBLIC__/js/jquery-1.2.6.js"></script>
    </head>
    <body>
        <form           action="{:U('book_enroll')}"           method="post"
enctype="multipart/form-data">

        <h1>图书馆--图书添加</h1>

        <div align="center">
        <div class="contentA">
```

```html
        <div class="row">

            <div class="left">图书编号(8)</div>

            <div    class="right"><input    name="bno"    type="text"
class="text" /></div>

            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">书名</div>

            <div    class="right"><input    name="title"    type="text"
class="text" /></div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">类别</div>

            <div   class="right"><select   name="class"   style="width:
195px">

                <option value=></option>

                <option value="科学">科学</option>

                <option value="社会科学">社会</option>

                <option value="教科书">教育</option>

                <option value="当代小说">小说</option>

                <option value="数学">数学</option>

                <option value="美术">美术</option>

                <option value="历史">历史</option>

                <option value="漫画">漫画</option>

                <option value="地理">地理</option>

                <option value="computer">计算机</option>

                </select></div>
            <div class="clear"></div>
        </div>
```

```html
        <div class="row">

            <div class="left">出版商</div>

            <div    class="right"><input    name="press"    type="text"
class="text" /></div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">作者</div>

            <div    class="right"><input    name="author"    type="text"
class="text" /></div>

            <div class="clear"></div>
        </div>
    </div>
        <div class="contentA">
        <div class="row">

            <div class="left">年份</div>

            <div     class="right"><input     name="year"     type="text"
class="text" />
            </div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">价格</div>

            <div    class="right"><input    name="price"    type="text"
class="text" /></div>
            <div class="clear"></div>
        </div>
    </div>
    </div>

    <input name="button" type="submit" value="添加" />

    </div>
    <hr />
        <div class="contentA">
        <div class="row">

            <div class="left">批量添加图书</div>

            <div class="right">
```

```html
                <input type="file" name="file" id="file" />
                <br />


                <!--    <textarea    name="arr"    cols="24"
rows="3"></textarea></div> -->
            <div class="clear"></div>
        </div>
        </div>
    </form>

    <form action="{:U('welcome')}" method="post">
        </br></br><hr>
        <input type="hidden" name="username" value={$name} />
        <input type="hidden" name="password" value={$pwd} />

        <input type="submit" name="submit" value="返回主菜单" />
    </form>
    <div style="text-align:right;clear:both"><br>
    xinhao
    </div>
    </body>
</html>
```

后端 book_enroll 方法：主要处理模块

```php
public function book_enroll(){
        if (!IS_POST) _404('页面不存在',U('index'));


        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];

        if (!$admin) $this->error('登陆超时',U('index'));


        $con = mysql_connect("localhost","root","");
        if (!$con){
```

```php
            die('Could not connect: ' . mysql_error());
        }
        mysql_select_db("lib", $con);
        //dump($_POST);
        //dump($_FILES['file']);


        if ($_POST['button'] == "添加"){

            if      (!$_POST['bno']      ||      !$_POST['title']
||!$_POST['class']||                              !$_POST['press']
||!$_POST['author']|| !$_POST['year']||!$_POST['price']){

                $this->error('请完善图书信息!!! ');

            }
            $bno = $_POST['bno'];
            $title = $_POST['title'];
            $class = $_POST['class'];
            $press = $_POST['press'];
            $author = $_POST['author'];
            $year = $_POST['year'];
            $price = $_POST['price'];
            $sql = "SELECT * from lib_book where bno = '$bno' and title
= '$title' and category = '$class' and press = '$press' and year = $year
and price = $price and author = '$author' ";
            $result = mysql_query($sql);
            $result_row = mysql_fetch_array($result);
            //dump($result_row);
            if ($result_row){
                $sql = "UPDATE lib_book set stock = stock+1,total =
total+1 where bno = '$bno' and title = '$title' and category = '$class' and
press = '$press' and year = $year and price = $price and author = '$author'
";
                $update = mysql_query($sql);

                $this->success("原有图书数量增加 1!");

                echo "<br>";
                echo "<br>";
            }
            else{
                $sql        =        "INSERT       INTO       lib_book
values('$bno','$class','$title','$press',$year,'$author',$price,1,1)";
                //dump($sql);
                $insert = mysql_query($sql);
                //dump($insert);
```

```php
                $this->success("新图书增添成功！");

                echo "<br>";
            }

            echo "<b>图书信息显示</b>";

            echo "<hr>";
            $sql = "SELECT * from lib_book where bno = '$bno' and title
= '$title' and category = '$class' and press = '$press' and year = $year
and price = $price and author = '$author' ";
            $result = mysql_query($sql);

            echo "<b>"."书名"."</b>"."  "."类别"."  "."出版商"."  ".

"时间"." ";

            echo "作者" . "  " ."价格" . "  " . "总量"."  " . "库存量";

            echo "<br />";
            echo "<br />";
            while($row = mysql_fetch_array($result)){
                echo     "<b>".$row['title']."</b>"          .      "
" .$row['category'] . "  " . $row['press']."  " . $row['year'];
                echo $row['author'] . "   " .$row['price'] . "   " .
$row['total']."  " . $row['stock'];
                echo "<br />";
            }

        }
        else {

            //---------- 文 件 上 传 ------------- 批 量 处 理 模 块
-------------
            if  ((($_FILES["file"]["type"]   ==   "text/plain"))&&
($_FILES["file"]["size"] < 20000)){
                if ($_FILES["file"]["error"] > 0){
                    echo "Return Code: " . $_FILES["file"]["error"] .
"<br>";
                }
                else{

                    echo "文件名称: " . $_FILES["file"]["name"] ."<br>";

                    echo "文件格式: " . $_FILES["file"]["type"] ."<br>";
```

```php
                        echo "文件大小: " . ($_FILES["file"]["size"] / 1024) .
" Kb<br>";

                        echo "<hr>";

move_uploaded_file($_FILES["file"]["tmp_name"],"E:\\wamp\\www\\lib\\upl
oad\\" . $_FILES["file"]["name"]);
            //----------------- 进 行 文 件 内 容 操 作
--------------------------------
                    if (file_exists("E:\\wamp\\www\\lib\\upload\\" .
$_FILES["file"]["name"])){
                        $filename = "E:\\wamp\\www\\lib\\upload\\" .
$_FILES["file"]["name"];
                        $file = fopen($filename, "r") or exit ("unable to
open<br>");
                        while (!feof($file)){
                            $line = fgets($file);
                            $lt = trim($line);
                            $lt = trim($lt,'( ');
                            $lt = trim($lt,')');
                            list
($bno,$category,$title,$press,$year,$author,$price,$num) = split(", ",
$lt);
                            $sql = "SELECT * from lib_book where bno =
'$bno' and title = '$title' and category = '$category' and press = '$press'
and year = $year and price = $price and author = '$author' ";
                            $result = mysql_query($sql);
                            $book_get = mysql_fetch_array($result);
                            if ($book_get){
                                $sql = "UPDATE lib_book set stock =
stock+$num,total = total+$num where bno = '$bno' and title = '$title' and
category = '$class' and press = '$press' and year = $year and price = $price
and author = '$author' ";
                                //dump($sql);
                                $update = mysql_query($sql);

                                echo "图书名称:$title  :";

                                echo "原有图书数量增加！";

                                echo "<br>";
                                echo "<br>";
                            }
                            else{
```

```php
                                    $sql    =    "INSERT    INTO    lib_book
values('$bno','$category','$title','$press',$year,'$author',$price,$num
,$num)";

                                    //dump($sql);

                                    $insert = mysql_query($sql);

                                    //dump($insert);

                                    echo "图书名称：$title   :";

                                    echo "新图书增添成功！";

                                    echo "<br>";
                                }

                            }
                            fclose($file);

                        }
                    }
                }
                else{

                    $this->error('请上传 txt 文件');

                }
            }
        mysql_close($con);

            $this->assign('name',$_COOKIE['name']);
            $this->assign('pwd',$_COOKIE['pwd']);
            $this->display();

    }
```

4   查询书

Search 预处理模块与 enroll 预处理相同

```html
<!DOCTYPE html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>图书馆--图书查询</title>

<link rel="stylesheet" href="__PUBLIC__/css/form.css" type="text/css"
/>
```

```html
	<script                                       type="text/javascript"
src="__PUBLIC__/js/jquery-1.2.6.js"></script>
	</head>
	<body>
		<form action="{:U('book_search')}" method="post">

		<h1>图书馆--图书查询</h1>

		<div align="center">
		<div class="contentA">
			<div class="row">

				<div class="left">书名</div>

				<div    class="right"><input    name="title"    type="text"
class="text" /></div>
				<div class="clear"></div>
			</div>
			<div class="row">

				<div class="left">类别</div>

				<div   class="right"><select   name="class"   style="width:
195px">

					<option value=></option>

					<option value="科学">科学</option>

					<option value="社会科学">社会</option>

					<option value="教科书">教育</option>

					<option value="当代小说">当代小说</option>

					<option value="小说">小说</option>

					<option value="数学">数学</option>

					<option value="美术">美术</option>

					<option value="历史">历史</option>

					<option value="漫画">漫画</option>

					<option value="地理">地理</option>

					<option value="文学">文学</option>
```

```html
            <option value="computer">计算机</option>

          </select></div>
        <div class="clear"></div>
      </div>

      <div class="row">

        <div class="left">出版商</div>

        <div   class="right"><input   name="press"   type="text"
class="text" /></div>
        <div class="clear"></div>
      </div>
      <div class="row">

        <div class="left">作者</div>

        <div   class="right"><input   name="author"   type="text"
class="text" /></div>

        <div class="clear"></div>
      </div>
    </div>
    <hr />
      <div class="contentA">
      <div class="row">

        <div class="left">年份区间(前)</div>

        <div   class="right"><input   name="year1"   type="text"
class="text" />
        </div>

        <div class="left">年份区间(后)</div>

        <div   class="right"><input   name="year2"   type="text"
class="text" /></div>
        <div class="clear"></div>
      </div>
      <div class="row">

        <div class="left">价格区间(小)</div>

        <div   class="right"><input   name="price1"   type="text"
class="text" /></div>

        <div class="left">价格区间(大)</div>

        <div   class="right"><input   name="price2"   type="text"
```

```html
class="text" /></div>
                <div class="clear"></div>
            </div>
        </div>
        <hr />
            <div class="contentA">
            <div class="row">
                <div class="left">Account type</div>
                    <div class="right">
                        <select name="sort" style="width: 195px">

                        <option  value="title"  selected="selected"> 书 名
</option>

                        <option value="category">类别</option>

                        <option value="price">价格</option>

                        <option value="year">时间</option>

                        <option value="author">作者</option>

                        <option value="stock">库存</option>

                        <option value="total">总数</option>

                    </select></div>
                <div class="clear"></div>
                </div>
                <div class="clear"></div>
            </div>
        </div>

        <input name="submit" type="submit" value="查询" />

        </div>
    </form>
    <form action="{:U('welcome')}" method="post">
        </br></br><hr>
        <input type="hidden" name="username" value={$name} />
        <input type="hidden" name="password" value={$pwd} />

        <input type="submit" name="submit" value="返回主菜单" />

    </form>
    <div style="text-align:right;clear:both"><br>
    xinhao
```

```
    </div>
    </body>
</html>
```

数据处理模块：book_search

```php
    if (!IS_POST) _404('页面不存',U('index'));


        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];

        if (!$admin) $this->error('登陆超时',U('index'));


        $con = mysql_connect("localhost","root","");
            if (!$con)
            {
                die('Could not connect: ' . mysql_error());
            }
        mysql_select_db("lib", $con);
        $sql = "SELECT * FROM lib_book WHERE ";

        echo "<b>查询结果:</b>";

        echo "<hr>";
        if ($_POST['title']) $sql = $sql."title = '".$_POST['title']."'
and ";
        if    ($_POST['class'])    $sql    =    $sql."category    =
'".$_POST['class']."' and ";
        if ($_POST['press']) $sql = $sql."press = '".$_POST['press']."'
and ";
        if    ($_POST['author'])    $sql    =    $sql."author    =
'".$_POST['author']."' and ";
        if ($_POST['year1']) $sql = $sql."year >= ".$_POST['year1']."
and ";
        if ($_POST['year2']) $sql = $sql."year <= ".$_POST['year2']."
and ";
        if ($_POST['price1']) $sql = $sql."price >= ".$_POST['price1']."
and ";
        if ($_POST['price2']) $sql = $sql."price <= ".$_POST['price2']."
and ";
        $sql = $sql." 1 ";
        $sql = $sql."order by ".$_POST['sort']." ,bno ";
```

```
        $result = mysql_query($sql);

        echo "<b>"."书名"."</b>" . "   " ."类别" . "   " . "出版商"."   " .
"时间 " . "   "." 作者 " . "   " ." 价格 " . "   " . "总量"."   " . "库存量";

        echo "<br />";
        echo "<br />";
        while($row = mysql_fetch_array($result)){
            echo "<b>".$row['title']."</b>"  . "   " .$row['category'] .
"   " . $row['press']."   " . $row['year'];
            echo  $row['author']  . "   "  .$row['price']  . "   "  .
$row['total']."   " . $row['stock'];
            echo "<br />";
        }
        mysql_close($con);

        $this->assign('name',$_COOKIE['name']);
        $this->assign('pwd',$_COOKIE['pwd']);
    $this->display();
```

5   借书

预处理与上面相同 检查管理员信息

前端：

```
<!DOCTYPE html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>图书馆 - 借书</title>

<link rel="stylesheet" href="__PUBLIC__/css/form.css" type="text/css"
/>
<script                                        type="text/javascript"
src="__PUBLIC__/js/jquery-1.2.6.js"></script>
</head>
<body>
    </br></br>

    <h1>图书馆 - 借书</h1></br></br>

    <hr>
    <form action="{:U('book_borrow')}" method="post">
    <div align="center">
```

```html
<h3>借书信息</h3>

<div class="contentA">
    <div class="row">

        <div class="left">借书证卡号</div>

        <div class="right">
            <input name="uid" type="text" class="text" />
        </div>
        <div class="clear"></div>
    </div>
    <div class="row">

        <div class="left">书籍编号</div>

        <div class="right">
            <input name="bid" type="text" class="text" />
        </div>
        <div class="clear"></div>
    </div>
    <div class="row">

        <div class="left">书籍名称</div>

        <div class="right">
            <input name="bname" type="text" class="text" />
        </div>
        <div class="clear"></div>
    </div>

</div>

<input name="Button1" type="submit" value="借书" />

</div>
</form>

<form action="{:U('welcome')}" method="post">
    </br></br><hr>
    <input type="hidden" name="username" value={$name} />
    <input type="hidden" name="password" value={$pwd} />

    <input type="submit" name="submit" value="返回主菜单" />

</form>
<div style="text-align:right;clear:both"><br>
xinhao
```

```
    </div>
    </body>
</html>
```

后端：

```php
public function book_borrow(){

        if (!IS_POST) _404('页面不存',U('index'));


        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];

        if (!$admin) $this->error('登陆超时',U('index'));


        $uid = I('uid');
        $bid = I('bid');
        $name = I('bname');

        if (!$uid && !$bid && !$name) $this->error('请输入信息');

        $con = mysql_connect("localhost","root","");
            if (!$con)
            {
                die('Could not connect: ' . mysql_error());
            }
        mysql_select_db("lib", $con);

        //得到用户

        $sql = "SELECT * FROM lib_card where cno = '$uid'";
        $user_real = mysql_query($sql);
        $user = mysql_fetch_array($user_real);
        if ($user['cno']) {
            echo "欢迎"."    <b>".$user['name']."</b>    借书证号：".$user['cno'];
            echo "<hr />";

            echo "<b>借书记录：</b>";

            echo "<br />";

        }
        else{
```

```php
            if ($uid) $this->error('借书证不存在');
        }
        //列出用户的信息
        if ($user['cno']){
            $sql = "SELECT * FROM lib_borrow,lib_book WHERE lib_book.bno
= lib_borrow.bno AND lib_borrow.cno = $uid order by lib_book.bno";
            $result = mysql_query($sql);
            if ($result){

                echo "图书编号     图书名称        "."   借书时间            归
还时间";

                echo "<br />";
                while($row = mysql_fetch_array($result)){
                    echo $row['bno']  .  "  "  .$row['title']  .  "  "  .
$row['borrow_date']." " . $row['return_date'];
                    echo "<br />";
                }
            }

        }
        //借书或者列出所借书的信息
        if ($bid || $name){
            $sql = "SELECT * FROM lib_book where";
            if ($bid) $sql = $sql." lib_book.bno = $bid";else if ($name)
$sql = $sql." lib_book.title = '$name'";
            $result = mysql_query($sql);
            $book = mysql_fetch_array($result);
            $bno = $book['bno'];
            if ($bno){

                //----------显示图书信息------------------
                echo "<hr />";
                echo "<b>所借书:《".$book['title'] ."》 的信息:</b>";
                echo "<br />";
                $ans_num = $book['stock'];
                echo "还剩余 ".$book['stock']." 本";
                echo "<br />";
```

```php
//借书
if ($user['cno'] && $ans_num > 0){
        $sql = "UPDATE lib_book  SET stock = (stock - 1) WHERE
lib_book.bno = '$bno'";
        $result = mysql_query($sql);
        //dump($result);

        //if ($result) echo "借出";

        $time = date('Y-m-d');
        $sql = "INSERT  INTO  lib_borrow  values
('$uid','$bno','$time',NULL,".$_COOKIE['uid'].")";
        //dump($sql);
        $result = mysql_query($sql);

        if ($result) $this->success('成功借出 !!! ');

        echo "<br/>";

        echo "还剩余 ".($ans_num-1)." 本";
    }

    else if ($ans_num > 0){

        $this->error('请输入您的借书证号');

    }
    else{
        $sql = "SELECT * FROM  lib_borrow,lib_book  WHERE
lib_book.bno = lib_borrow.bno and  lib_book.bno = '$bno'";
        $sql = $sql."order by borrow_date desc ";
        $result = mysql_query($sql);
        if ($result){
            $row = mysql_fetch_array($result);
            $bdate = strtotime($row['borrow_date']);

            echo   "  最 近 归 还 时 间 :
".date('Y-m-d',$bdate+30*24*60*60);$row['borrow_time']."       "     .
$row['return_time'];

            echo "<br />";
        }
    }
}
else{

    $this->error('您要的书不存在');
```

```
                }
            }
        $this->assign('name',$_COOKIE['name']);
        $this->assign('pwd',$_COOKIE['pwd']);
        $this->display();
    }
```

6 还书

预处理相同

前端：

```
<!DOCTYPE html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>图书馆 - 还书</title>

<link rel="stylesheet" href="__PUBLIC__/css/form.css" type="text/css"
/>
<script                                              type="text/javascript"
src="__PUBLIC__/js/jquery-1.2.6.js"></script>
</head>
<body>
    </br></br>

    <h1>图书馆 - 还书</h1></br></br>

    <hr>
    <form action="{:U('book_return')}" method="post">
    <div align="center">

    <h3>借书信息</h3>

    <div class="contentA">
        <div class="row">

            <div class="left">借书证卡号</div>

            <div class="right">
                <input name="uid" type="text" class="text" />
            </div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">书籍编号</div>
```

```html
                <div class="right">
                    <input name="bid" type="text" class="text" />
                </div>
                <div class="clear"></div>
            </div>
            <div class="row">

                <div class="left">书籍名称</div>

                <div class="right">
                    <input name="bname" type="text" class="text" />
                </div>
                <div class="clear"></div>
            </div>
        </div>

        </div>

        <input name="Button1" type="submit" value="还书" />

        </div>
    </form>

    <form action="{:U('welcome')}" method="post">
        </br></br><hr>
        <input type="hidden" name="username" value={$name} />
        <input type="hidden" name="password" value={$pwd} />

        <input type="submit" name="submit" value="返回主菜单" />

    </form>
    <div style="text-align:right;clear:both"><br>
    xinhao
    </div>
    </body>
</html>
```

后端代码：

```php
public function book_return(){

        if (!IS_POST) _404('页面不存',U('index'));

        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];
```

```php
if (!$admin) $this->error('登陆超时',U('index'));


$uid = I('uid');
$bid = I('bid');
$name = I('bname');

if (!$uid && !$bid && !$name) $this->error('请输入信息');

$con = mysql_connect("localhost","root","");
    if (!$con)
    {
        die('Could not connect: ' . mysql_error());
    }
mysql_select_db("lib", $con);

//得到用户

$sql = "SELECT * FROM lib_card where cno = '$uid'";
$user_real = mysql_query($sql);
$user = mysql_fetch_array($user_real);
$cno = $user['cno'];
if ($cno) {

    echo "欢迎"."    <b>".$user['name']."</b>    借书证号：".$user['cno'];

    echo "<hr />";

    echo "<b>借书记录：</b>";

    echo "<br />";
}
else{

    if ($uid) $this->error('借书证不存在');

}

//列出用户的信息

if ($cno){
    $sql = "SELECT * FROM lib_borrow,lib_book WHERE lib_book.bno = lib_borrow.bno AND lib_borrow.cno = $uid order by lib_book.bno,lib_borrow.return_date";
    $result = mysql_query($sql);
    if ($result){

        echo "图书编号    图书名称        "."    借书时间        归
```

```
还时间";
                echo "<br>";
                while($row = mysql_fetch_array($result)){
                    echo $row['bno'] . " " .$row['title'] . " " .
$row['borrow_date']." " . $row['return_date'];
                    echo "<br />";
                }
            }
            //借书或者列出所借书的信息
            if ($bid || $name){
                $sql = "SELECT * FROM lib_book where";
                if ($bid) $sql = $sql." lib_book.bno = $bid";else if
($name) $sql = $sql." lib_book.title = '$name'";
                $result = mysql_query($sql);
                $book = mysql_fetch_array($result);
                $bno = $book['bno'];
                if ($bno){
                    echo "<hr>";
                    echo "所要还的书为<b>《".$book['title']."》</b>";
                    echo "<br>";
                    echo "<br>";
                    $sql = "SELECT * from lib_borrow where bno = '$bno'
and cno = '$cno' order by return_date limit 1";
                    $record = mysql_query($sql);
                    $re_in = mysql_fetch_array($record);
                    $in = $re_in['return_date'];
                    $out = $re_in['borrow_date'];
                    //dump($re_in);
                    //dump($re_in);
                     //还书
                    if ($in==NULL && $out){
                        $sql = "UPDATE lib_book  SET stock = (stock + 1)
WHERE lib_book.bno = '$bno'";
                        $result = mysql_query($sql);
                        //dump($result);
                        $time = date('Y-m-d');
                        $sql = "UPDATE lib_borrow  SET return_date =
'$time' WHERE bno = '$bno' and cno = '$cno' order by return_date limit 1";
                        //dump($sql);
                        $result = mysql_query($sql);
```

```php
                        if ($result) $this->success('成功还书');

                        echo "<br/>";
                    }
                    else{

                        $this->error('你并没有成功借过这本书或已经还过这

本书！');

                    }

                }
                else {

                    $this->error('这本书你并未成功借到');

                }
            }
        }
        else {

            $this->error('请输入您的借书证号');

        }
        mysql_close($con);

        $this->assign('name',$_COOKIE['name']);
        $this->assign('pwd',$_COOKIE['pwd']);
        $this->display();
    }
```

7　管理借书证

预处理相同

前端代码：

```html
<!DOCTYPE html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>图书馆 - 借书证管理</title>

<link rel="stylesheet" href="__PUBLIC__/css/form.css" type="text/css" />
<script                                           type="text/javascript"
src="__PUBLIC__/js/jquery-1.2.6.js"></script>
</head>
```

```
<body>
    </br></br>

    <h1>图书馆 - 借书证管理</h1></br></br>

    <hr>
    <form action="{:U('card_manage')}" method="post">
    <div align="center">

    <h3>借书证信息</h3>

    <div class="contentA">
        <div class="row">

            <div class="left">借书证卡号(7)</div>

            <div class="right">
                <input name="cno" type="text" class="text" />
            </div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">姓名</div>

            <div class="right">
                <input name="name" type="text" class="text" />
            </div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">部门</div>

            <div class="right">
                <input name="department" type="text" class="text" />
            </div>
            <div class="clear"></div>
        </div>
        <div class="row">

            <div class="left">类别</div>

            <div class="right"><select name="type" style="width: 195px">

                <option value="U">本科生</option>

                <option value="T">教师</option>

                <option value="G">研究生</option>
```

```html
                </select></div>
            <div class="clear"></div>
        </div>
    </div>

    </div>
    <br>

    <input name="button" type="submit" value="添加" />

               &n
bsp;

    <input name="button" type="submit" value="查询" />

               &n
bsp;

    <input name="button" type="submit" value="删除" />

    </div>
</form>

<form action="{:U('welcome')}" method="post">
    </br></br><hr>
    <input type="hidden" name="username" value={$name} />
    <input type="hidden" name="password" value={$pwd} />

    <input type="submit" name="submit" value="返回主菜单" />

</form>
<div style="text-align:right;clear:both"><br>
xinhao
</div>
</body>
</html>
```

后端处理代码

```php
public function card_manage(){

        if (!IS_POST) _404('页面不存',U('index'));

        $condition['username']=$_COOKIE['name'];
        $condition['password']=$_COOKIE['pwd'];
        $result = M('user')->where($condition)->select();
        $admin = $result['0'];

        if (!$admin) $this->error('登陆超时',U('index'));
```

```php
        $cno = $_POST['cno'];
        $name = $_POST['name'];
        $department = $_POST['department'];
        $type = $_POST['type'];
        $c = $_POST['button'];
        $con = mysql_connect("localhost","root","");
        if (!$con) {
            die('Could not connect: ' . mysql_error());
        }
        mysql_select_db("lib", $con);


        if ($c == "删除"){

            if (!$cno || !$name || !$department || !$type){

                $this->error("请完善删除信息!!!");

            }else {
                $sql = "SELECT * FROM lib_card where ";
                if ($cno) $sql = $sql."cno = '$cno' AND ";
                if ($name) $sql = $sql."name = '$name' AND ";
                if ($department) $sql = $sql."department = '$department' AND
";
                if ($type) $sql = $sql."type = '$type' AND ";
                $sql = $sql."1 order by cno";
                //dump($sql);
                $result = mysql_query($sql);

                echo "<b>"."姓名"."</b>" . "  " ."借书证号" . "  " . "部门"."
" . "类别"." ";

                echo "<hr />";
                while($card = mysql_fetch_array($result))
                {
                    echo "<b>".$card['name']."</b>" . "  " .$card['cno'] .
"  " . $card['department']."  " . $card['type']." ";
                    echo "<br />";
                }
                $sql = "DELETE FROM lib_card where ";
                if ($cno) $sql = $sql."cno = '$cno' AND ";
                if ($name) $sql = $sql."name = '$name' AND ";
                if ($department) $sql = $sql."department = '$department' AND
";
                if ($type) $sql = $sql."type = '$type' AND ";
```

```php
            $sql = $sql."1";
            //dump($sql);
            $result = mysql_query($sql);
            //dump($result);
            if ($result) {

                $this->success("删除成功!!!");

            }
            else {

                $this->error("删除失败，请核对信息!!!");

            }

        }
    }

    else if ($c == "查询"){
        $sql = "SELECT * FROM lib_card where ";
        if ($cno) $sql = $sql."cno = '$cno' AND ";
        if ($name) $sql = $sql."name = '$name' AND ";
        if ($department) $sql = $sql."department = '$department' AND ";
        if ($type) $sql = $sql."type = '$type' AND ";
        $sql = $sql."1 order by cno";
        //dump($sql);
        $result = mysql_query($sql);

        echo "<b>"."姓名"."</b>" . "  " ."借书证号" . "  " . "部门"."  " .
"类别"." ";

        echo "<hr />";
        while($card = mysql_fetch_array($result))
        {
            echo "<b>".$card['name']."</b>" . "  " .$card['cno'] ."  " .
$card['department']."  " . $card['type']." ";
            echo "<br />";
        }
    }
    else if ($cno && $name && $type && $department){
        $sql = "INSERT into lib_card values(";
        $sql = $sql."'$cno',";
        $sql = $sql."'$name', ";
        $sql = $sql."'$department', ";
        $sql = $sql."'$type'";
        $sql = $sql.")";
```

```
    //dump($sql);
    $result = mysql_query($sql);
    //dump($result);
    if ($result) {

        $this->success("添加成功!!!");

        echo "请记住您的借书证号:<b>".$cno."</b>";

    }
}
else {

    $this->error("请完善注册信息!!!");

}

mysql_close($con);

$this->assign('name',$_COOKIE['name']);
$this->assign('pwd',$_COOKIE['pwd']);
$this->display();
}
```

5 界面效果

登陆界面:

点击 go 如果密码错误,提示:错误并跳回

:(

您并不是管理者或密码错误

页面自动 跳转 等待时间： 3

如果正确：

进入管理界面：

图书入库：

图书馆--图书添加

图书编号(8)	[ ]
书名	[ ]
类别	[▼]
出版商	[ ]
作者	[ ]
年份	[ ]
价格	[ ]

[添加]

批量添加图书　　[选择文件] 未选择文件

[上传]

[返回主菜单]

xinhao

图书查询：

图书馆--图书查询

书名	[ ]
类别	[▼]
出版商	[ ]
作者	[ ]

年份区间(前)	[ ]
年份区间(后)	[ ]
价格区间(小)	[ ]
价格区间(大)	[ ]

Account type　　[书名   ▼]

[查询]

[返回主菜单]

xinhao

借书

图书馆 - 借书

借书信息

借书证卡号	[ ]
书籍编号	[ ]
书籍名称	[ ]

[借书]

[返回主菜单]

xinhao

还书

图书证管理

图书馆 - 借书证管理

借书证信息

借书证卡号(7)

姓名

部门

类别　本科生

添加　查询　删除

返回主菜单

xinhao

6　其他

任务分工:

资料收集查询:辛浩

技术准备:辛浩

实现:辛浩

文档:辛浩

采用的技术：

Php:thinkPHP 框架

Html
Mysql

感想：

使用 thinkPHP 框架比较方便，可以实现函数之间的跳转，并且能方便的渲染，mysql

对 php 的接口使用比较方便。

对数据库设计中要学会使用 ER 模型，先设计好框架，再继续实施会比较方便。

在对系统安全方面，通过设置 cookie 会比较方便。