

References

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Appendix A

Main Controller of the system

Book_controller.php is the base which includes all the major functions of the system.

```
<?php
```

```
if (!defined('BASEPATH'))
```

```
    exit('No direct script access allowed');
```

```
class Book_controller extends CI_Controller {
```

```
    public function index() {
```

```
        $this->viewCategories();
```

```
    }
```

```
    public function viewAllBooks() {
```

```
        if ($this->session->userdata('logged_in')) {
```

```
            $bk_model = new Book_model_service();
```

```
            $data['book_details'] = $bk_model->mGetAllBooks();
```

```
            $partials = array('content' => 'books/all_books'); //load the view
```

```
            $this->template->load('template/main_template', $partials, $data); //load the template
```

```
        } else {
```

```
            redirect('login/login_controller');
```

```
        }
```

```
    }
```

```
    public function viewCategories() {
```



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```

if ($this->session->userdata('logged_in')) {
    $bk_model = new Book_model_service();
    $data['book_cats'] = $bk_model->mGetAllCategories();
//    $data['recom_books']=$bk_model->mGetRecomsByUserHitCount();
    $partials = array('content' => 'books/categories'); //load the view
    $this->template->load('template/main_template', $partials, $data); //load the template
} else {
    redirect('login/login_controller');
}
}

public function getBookByCategory($cat_id) {
    if ($this->session->userdata('logged_in')) {
        $bk_model = new Book_model_service();
        $data['book_details'] = $bk_model->mGetBookByCategory($cat_id);
        $data['book_category'] = $bk_model->mGetCategoryById($cat_id);
        $partials = array('content' => 'books/all_books'); //load the view
        $this->template->load('template/main_template', $partials, $data); //load the template
    } else {
        redirect('login/login_controller');
    }
}

public function loadViewAddBook() {
    $book_model = new Book_model_service();
    $data['book_cats'] = $book_model->mGetBookCategories();
    $data['authors'] = $book_model->mGetAuthors();
    $data['publishers'] = $book_model->mGetPublishers();
    $partials = array('content' => 'books/add_book'); //load the view
    $this->template->load('template/main_template', $partials, $data); //load the template
}

```

```

public function loadViewAddCategory() {
    $partials = array('content' => 'books/add_category'); //load the view
    $this->template->load('template/main_template', $partials); //load the template
}

public function loadViewAddAuthor() {
    $partials = array('content' => 'books/add_author'); //load the view
    $this->template->load('template/main_template', $partials); //load the template
}

public function loadViewAddPublisher() {
    $partials = array('content' => 'books/add_publisher'); //load the view
    $this->template->load('template/main_template', $partials); //load the template
}

public function saveNewBook() {
    $book_model = new Book_model_service();
    $isbn = $this->input->post('isbn');
    $book_name = $this->input->post('book_name');
    $description = $this->input->post('description');
    $category = $this->input->post('category');
    $author = $this->input->post('author');
    $publisher = $this->input->post('publisher');
    $edition = $this->input->post('edition');
    $available_books=$this->input->post('available_books');
    $no_of_books = $this->input->post('no_of_books');
    $status = $this->input->post('status');
    $this->load->library('upload');
    $thumb = $_FILES['thumb']['name'];
    $path = base_url() . 'resources/books/';
    $allowedExts = array("gif", "jpeg", "jpg", "png");
    $temp = explode(".", $_FILES["thumb"]["name"]);

```

```

$extension = end($temp);

if ((($_FILES["thumb"]["type"] == "image/gif") || ($_FILES["thumb"]["type"] ==
"image/jpeg") || ($_FILES["thumb"]["type"] == "image/jpg") || ($_FILES["thumb"]["type"]
== "image/pjpeg") || ($_FILES["thumb"]["type"] == "image/x-png") ||
($_FILES["thumb"]["type"] == "image/png")) && in_array($extension, $allowedExts)) {

    if ($_FILES["thumb"]["error"] > 0) {

        echo "Return Code: " . $_FILES["thumb"]["error"] . "<br>";

    } else {

        //echo "Upload: " . $_FILES["thumb"]["name"] . "<br>";

        //echo "Type: " . $_FILES["thumb"]["type"] . "<br>";

        // echo "Size: " . ($_FILES["thumb"]["size"] / 1024) . " kB<br>";

        // echo "Temp file: " . $_FILES["thumb"]["tmp_name"] . "<br>";

        if (file_exists("upload/" . $_FILES["thumb"]["name"])) {

            //echo $_FILES["thumb"]["name"] . " already exists. ";

        } else {

            move_uploaded_file($_FILES["thumb"]["tmp_name"], $path .
$_FILES["thumb"]["name"]);

            //die;

        }

    }

} else {

    echo "Invalid file";

    // die;

}

$save_status = $book_model->mSaveNewBook($isbn, $book_name, $description,
$category, $publisher, $author, $thumb, $edition, $no_of_books, $available_books, $status);

if ($save_status == 1) {

    redirect(site_url() . '/book/book_controller/viewCategories');

}

}

```



```

public function saveNewCategory() {
    $book_model = new Book_model_service();
    $category = $this->input->post('category');
    $status = $this->input->post('status');
    $save_status = $book_model->mSaveNewCategory($category, $status);
    if ($save_status == 1) {
        redirect(site_url() . '/book/book_controller/viewCategories');
    }
}

```

```

public function saveNewAuthor() {
    $book_model = new Book_model_service();
    $author = $this->input->post('author');
    $status = $this->input->post('status');
    $save_status = $book_model->mSaveNewAuthor($author, $status);
    if ($save_status == 1) {
        redirect(site_url() . '/book/book_controller/viewCategories');
    }
}

```

```

public function saveNewPublisher(){
    $book_model = new Book_model_service();
    $publisher = $this->input->post('publisher');
    $status = $this->input->post('status');
    $save_status = $book_model->mSaveNewPublisher($publisher, $status);
    if ($save_status == 1) {
        redirect(site_url() . '/book/book_controller/viewCategories');
    }
}

```

```

public function loadSearchView() {
    $partials = array('content' => 'books/search_books');
    $this->template->load('template/main_template', $partials);
}

```

```

public function searchBooks() {
    $book_model = new Book_model_service();
    $title = $this->input->post('title');
    $isbn = $this->input->post('isbn');
    $author = $this->input->post('author');
    $category = $this->input->post('category');
    $publisher = $this->input->post('publisher');
    $keyword = $this->input->post('keyword');
    $data['search_results'] = $book_model->mSearchBooks($title,
    $isbn,$author,$category,$publisher,$keyword);
    $partials = array('content' => 'books/search_results');
    $this->template->load('template/main_template', $partials, $data);
}

```



```

function loadReserveView($book_id){
    $book_model = new Book_model_service();
    $data['book_id']=$book_id;
    $data['book_details']=$book_model->mBookDetailsById($book_id);

```

```

$partials = array('content' => 'books/reserve_books');
$this->template->load('template/main_template', $partials, $data);
}

```

```

function reserveBook($bk_id,$avail_books){
    $book_model=new Book_model_service();

    $user_id=$this->session->userdata('user_id');
    $book_id=$bk_id;
    $available_books=$avail_books;
    $reserved_books=$book_model->mGetReservedBookCount($user_id);
    $reservation_status=$book_model->mCheckStatus($book_id,$user_id);

    if(count($reserved_books)<3){
        if($reservation_status){

            if($available_books>=1){
                $reserve_status=$book_model->mReserveBook($user_id,$book_id,$avail_books);
                if($reserve_status==1){
                    $data['book_details']=$book_model->mBookDetailsById($book_id);
                    $data['message']='Book Reserved Successfully !';
                    $partials = array('content' => 'books/reserve_books');
                    $this->template->load('template/main_template', $partials, $data);
                }
            }
            else{
                $data['book_details']=$book_model->mBookDetailsById($book_id);
                $data['message']='Error Occured !';
                $partials = array('content' => 'books/reserve_books');
                $this->template->load('template/main_template', $partials, $data);
            }
        }
    }
    else{

```



```

    $data['book_details']=$book_model->mBookDetailsById($book_id);
    $data['message']='Sorry, insufficient books for reservation !';
    $partials = array('content' => 'books/reserve_books');
$this->template->load('template/main_template', $partials, $data);
}

}
else{
    $data['book_details']=$book_model->mBookDetailsById($book_id);
    $data['message']='Sorry, you have already reserved this book !';
    $partials = array('content' => 'books/reserve_books');
$this->template->load('template/main_template', $partials, $data);

}
}
else{
    $data['book_details']=$book_model->mBookDetailsById($book_id);
    $data['message']='Sorry, you cannot reserve more than 3 books !';
    $partials = array('content' => 'books/reserve_books');
$this->template->load('template/main_template', $partials, $data)
}

}

public function loadReservationsView(){
    $book_model=new Book_model_service();

    $data['book_details']=$book_model->mReservationDetails();
    $partials = array('content' => 'books/reservation_list');
$this->template->load('template/main_template', $partials, $data);

```



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```

}

public function bookRecommendations(){

    $book_model=new Book_model_service();

    $user_id=$this->session->userdata('user_id');

    $recommendations=$book_model->mGetRecommendations($user_id);

    return $recommendations;

}

public function getBookById($bk_id) {

    if ($this->session->userdata('logged_in')) {

        $bk_model = new Book_model_service();

        $data['book_details'] = $bk_model->mGetBookById($bk_id);

        $partials = array('content' => 'books/all_books');//load the view
        $this->template->load('template/main_template', $partials, $data); //load the template
    } else {

        redirect('login/login_controller');

    }

}

public function getPastReservations(){

    $book_model=new Book_model_service();

    $user_id=$this->session->userdata('user_id');

    $past_reservations=$book_model->mGetPastReservations($user_id);

    return $past_reservations;

}

}

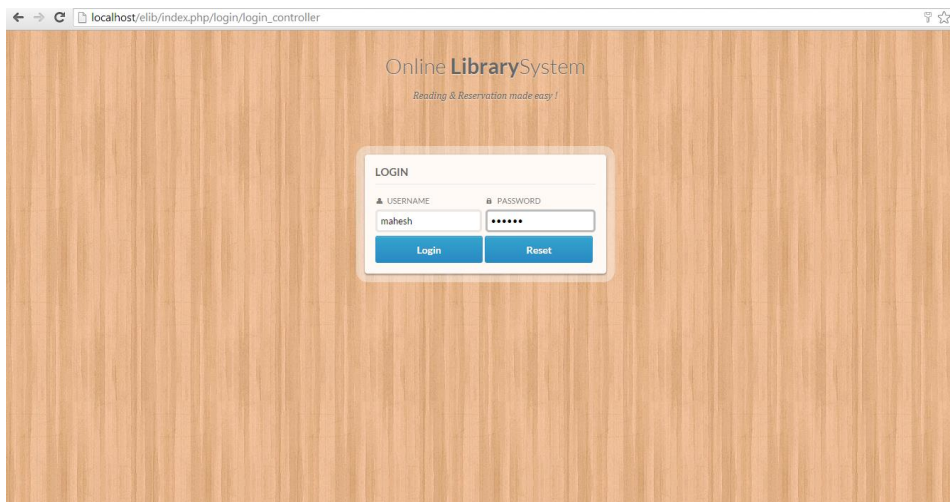
```



Appendix B

Screens of the System

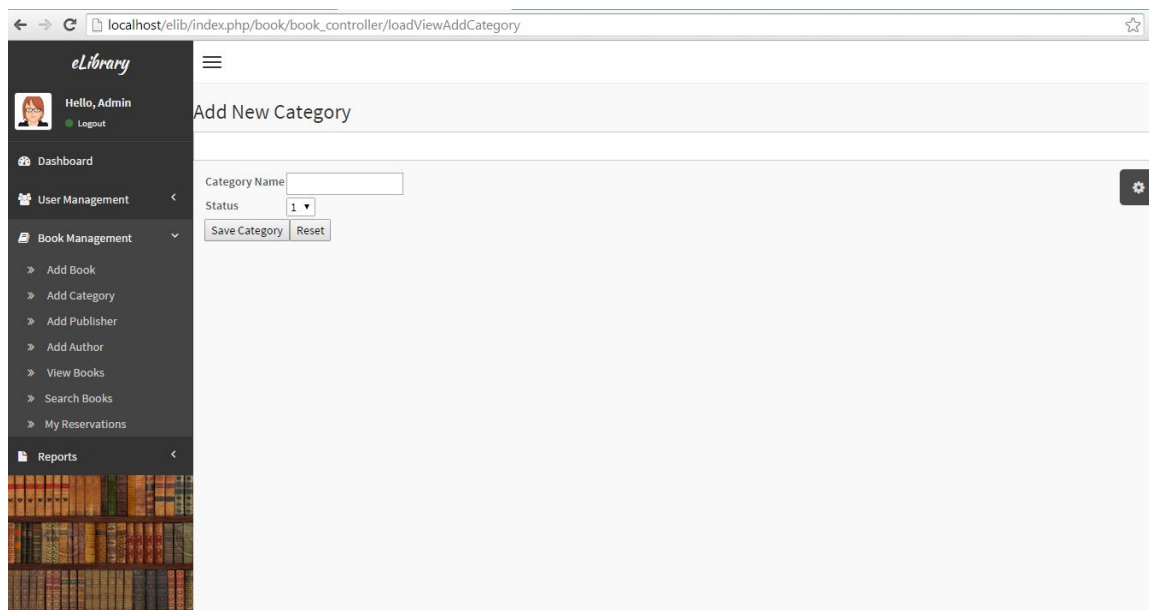
Login Screen



Admin Console



Add book category



The screenshot shows a web browser window with the URL `localhost/elib/index.php/book/book_controller/loadViewAddCategory`. The page title is "Add New Category". On the left, there is a sidebar menu for "eLibrary" with a user profile "Hello, Admin" and a "Logout" button. The sidebar includes sections for "Dashboard", "User Management", "Book Management" (with sub-items: Add Book, Add Category, Add Publisher, Add Author, View Books, Search Books, My Reservations), and "Reports". The main content area contains a form with a "Category Name" input field, a "Status" dropdown menu set to "1", and "Save Category" and "Reset" buttons. A gear icon for settings is visible in the top right corner of the form area.

Add new publisher



The screenshot shows a web browser window with the URL `localhost/elib/index.php/book/book_controller/loadViewAddPublisher`. The page title is "Add New Publisher". The sidebar menu is similar to the previous screenshot, but the "Book Management" sub-items are "View Books", "Search Books", and "My Reservations". The main content area contains a form with a "Publisher Name" input field containing the text "University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk", a "Status" dropdown menu, and "Save Publisher" and "Reset" buttons. A gear icon for settings is visible in the top right corner of the form area.

Add new author

The screenshot shows a web browser window with the URL `localhost/elib/index.php/book/book_controller/loadViewAddAuthor`. The page title is "Add New Author". On the left, there is a sidebar menu with the following items: Dashboard, User Management, Book Management (with sub-items: Add Book, Add Category, Add Publisher, Add Author, View Books, Search Books, My Reservations), and Reports. The main content area contains a form with the following fields: "Author Name" (text input), "Status" (dropdown menu with "1" selected), and two buttons: "Save Author" and "Reset". The top navigation bar includes the "eLibrary" logo, a user profile for "Admin" with a "Logout" link, and a hamburger menu icon. The bottom of the sidebar features a decorative image of a bookshelf.

Add new user

The screenshot shows a web browser window with the URL `localhost/elib/index.php/user/user_controller/loadViewAddUser`. The page title is "Add New User". The top navigation bar includes the "eLibrary" logo, a user profile for "Admin" with a "Logout" link, and a hamburger menu icon. The main content area features a large banner for the "University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations" with the website address `www.lib.mrt.ac.lk`. Below the banner is a form with the following fields: "Username" (text input), "Password" (text input), "Re-enter Password" (text input), "Email" (text input), and "Status" (dropdown menu with "1" selected). There are "Save User" and "Reset" buttons at the bottom of the form. The left sidebar menu is identical to the previous screenshot, showing options like Dashboard, User Management, Book Management, and Reports. The bottom of the sidebar features a decorative image of a bookshelf.

Library member area

localhost/elib/index.php/book/book_controller

Apps Google Maps Lesson 11: Passing f...

eLibrary

Hello, Mahesh
Logout

Dashboard

Home

Book Management

- View Books
- Search Books
- My Reservations
- Books Suggestions - Most Viewed
- Books Suggestions - Reservation Related
- Books Suggestions - Most Preferred

Book Categories

Category

- Science
- Economics
- Logic
- Literature
- Computer
- Mathematics
- Finance
- History
- Automobile



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