# BIT246[:](https://webems.rmit.edu.vn/exchweb/bin/redir.asp?URL=http://blackboard.rmit.edu.vn/webapps/portal/tab/_1_1/%2520/webapps/portal/frameset.jsp?tab_id=_2_1%26url=%252fwebapps%252fblackboard%252fexecute%252flauncher%253ftype%253dCourse%2526id%253d_922_1%2526url%253d) Object Oriented RAD

# Assignment 4 – RoR Project – Book Management Application

**Due Date: Week 13 (Last week of the semester)**

**Hurdle task and Demonstration: Week 13**

**Assignment Weightage: 25%**

**This Assignment contains DEMONSTRATION and A HURDLE TASK – Question Answer session – the task that must be passed to pass the whole Assignment or phases of Assignment. No Demonstration No marks.**

**You have to submit the source code of your project with a full screenshot of your project. Please note the system time of your computer must be included in the screenshot.**

The project is to be delivered at the end of the semester.

The essence of this project is to develop a **Book Management Application** that allows users to view books and filter the preferred books by different categories. Besides, the application provides the admin user to manage book and category information with authentication required. Due to time restraints, some of the application requirements are kept simple. You need to develop a fully functional Book Management system in Rails. There are two main requirements of the application of a Book Management with categories and comments:

1. **Book Management Frontend:** It is the public-facing area for frontend users and displays all books. The book portal holds all books (visible for all visitors) and any visitor can view and search books by categories.
2. **Book Management Admin Console:** It is the admin area of the Book Management Application where book and category can be created, edited, or deleted. It holds all the functionality of management. A registered user/admin (after login) can add/edit/delete book and add/edit/delete category of a book.

**1. Book Management Frontend:**

Following are the specifications of the book portal, which will have open public access and user registration / login is not required. The Book portal holds all available books under specific categories.

**Home Page**The home page must

* Display the last 3 new release books at the home page, and the books should be ordered by date (most recent first).
* Show [Search] facility.
* Show list of books categories.

**The home page layout looks like**

Graphical user interface, text, application

Description automatically generated

**Individual Book**

* Individual book page displays the title of the book, category of the book, author of the book, the date of book published, price of the book, description/information about the book.
* Anyone can view the book listing and details.

**Individual book display layout looks like**

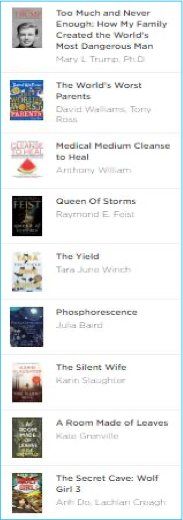
A picture containing qr code

Description automatically generated

**Search Page**

* The portal has search facility to search based on the book categories.
* The search results should be displayed like list of the available books in the selected categories.

**Search page display layout looks like**



**2. Book Management Admin Console:**

Following are the specifications of Admin console which is accessible to registered Admin only.

* Logged in Admin user should be able to view all book, add new book / edit / delete the **books** and **categories**. The admin console page looks like:

Graphical user interface, text, application

Description automatically generated

* The book categories manage collection of books (Category ID and Category Name). For example:
* Fantasy.
* Sci-Fi.
* Mystery.
* Thriller.
* Romance.
* Westerns.
* Dystopian.
* Contemporary
* An Admin user is authenticated by UserName and Password. It allows the admin to log in and able to perform Add/Edit/Delete books and Categories.
* Create book page shows a form to enter the book details (Title, Creation Date, Category, Content). After the form submission, the book info. is created in the database. Implement few data validations by using any technic you know e.g., name of title cannot be empty.
* Edit book pages allows to edit an existing book details in a form.
* Deleting a book allows the book information to be deleted after confirmation by the admin.



**Plagiarism**

All used sources must be properly acknowledged with references and citations, if you did not create it. Quotations and paraphrasing are allowed but the sources must be acknowledged. Failure to do so is regarded as plagiarism and the minimum penalty for plagiarism is failure for the assignment. The act of given your assignment to another student is classified as a plagiarism offence. Copying large chucks and supplying a reference will result in zero marks as you have not contributed to the report. Copying from Youtube or other videos is also plagiarism (including transcripts). Citation in a video can be included as credits at the end.

**Late Submission**

**Late submission of assignments will be penalised as follows:**

* For assignments 1 to 10 days late, a penalty of 5% (of total available marks) per day.
* For assignments more than 10 days late, a penalty of 100% will apply. Which means, the assignment will not be marked and attract a fail grade.

Your submission must be compatible with the software (PDF/Word/Video/Zip) in Melbourne Polytechnic, Computer Laboratories/Classrooms.

**Extensions:**

Under normal circumstances, extensions will not be granted. In case of extenuating circumstances—such as illness—a Special Consideration form, accompanied by supporting documentation, must be received before 3 working days from the due date. If granted, *an extension will be only granted only by the time period stated on the documentation; that is, if the illness medical certificate was for one day, an extension will be granted for one day only*. *Accordingly, the student must submit within that time limit.*

Penalties may apply for late submission without an approved extension.

**Penalties:**

Academic misconduct such as cheating and plagiarism incur penalties ranging from a zero result to program exclusion.

**ASSIGNMENT OVERVIEW AND FEEDBACK SUMMARY**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| All Assignments and feedback are provided via the Moodle site and in classes. | | | | | |
| Assignment Tasks: | **Due Date** | **SLOs** | **CLOs** | **Weight** | **Comments** |
| A1 Class Test – Two written Assignments of key concepts of object-oriented programming and design, including syntax and semantics of the programming language. | Week 4 - Test A  Week 10 - Test B | 1,2,3,4 | 1 | 20% | Individual |
| A2 Ruby Project – Suggested topic: Development and demonstration of an original advanced application system based on. Suggested topic  Submission 1 (5%) : Working with Files and Folders  Submission 2 (15%): Working with Files and folders by using Ruby gems  Submission 3 (15%): Working with Files and folders by using rails | Week 6 - Submission 1  Week 8 - Submission 2  Week 12 - Submission 3 | 1,2,3 | 1,3 | 35% | Individual |
| A3 Video Presentation – Suggested topci: A report and presenation to demonstrate an understanding of Ruby programming concept | Week 14 | 4 | 3 | 20% | Individual |
| A4 RoR Project – Suggested topic: Development and demonstration of a web-based application using MVC for multiple CRUDs for multiple models | **Week 13** | **1,2,3** | **1,3** | **25%** | **Individual** |

**Rubric for Assignment 4**

**No Demonstration No marks**

|  |  |
| --- | --- |
| **Marking Week** | **Possible marks** |
| **Penalty – No Comments** | **-5** |
| **Penalty – Errors (Syntax/runtime)** | **-25** |
| **Penalty – No Demonstration** | **-100** |
| **Penalty – No Full Screenshot of your project** | **-25** |
| **Overall User interface** | **5** |
|  |  |
| **Book Management Frontend** | **55** |
| **Home Page** | **4** |
| * Whether given a satisfying answer | **6** |
| **Books Page** | **6** |
| * Whether given a satisfying answer | **9** |
| **Individual Page** | **4** |
| * Whether given a satisfying answer | **6** |
| **Search facility** | **8** |
| * Whether given a satisfying answer | **12** |
|  |  |
| **Book Admin console** | **40** |
| **Book Operations (Add/Edit/Delete)** | **4** |
| * Whether given a satisfying answer | **6** |
| **Book Latest Listing** | **4** |
| * Whether given a satisfying answer | **6** |
| **Category Operations (Add/Edit/Delete/List)** | **4** |
| * Whether given a satisfying answer | **6** |
| **Update Category of a Book** | **4** |
| * Whether given a satisfying answer | **6** |
|  |  |
| **Total Marks** | **100** |