

# Foundations of Java Programming and Core Java

## Week- 3 Graded Project [ 20 Marks ]

### Topics Covered:

- Core Java II

### Domain:

Full Stack Foundation

### Objective:

You are assigned to write a program for the BookStore management system.

### Problem Statement:

Magic of Books is a Book store which deals with book. All the inventory of the store is been managed manually. But now as store is expending its becoming difficult to manage it manually. Books store wants to have a book managment system with following features.

### User Stories:

1. As an Admin, I can add a new book ✓
2. As an Admin, I can delete a book ✓
3. As an Admin, I can update a book ✓
4. As an Admin, I can display all the books ✓
5. As an Admin, I can see the total count of the books ✓
6. As an Admin, I can see the all the books under Autobiography genre
7. As an Admin, I can arrange the book in the following order
  - price low to high
  - price high to low ✓
  - best selling

### Instructions:

1. The book class should have following attributes:-

Name

Price

Genre

noOfCopiesSold

2. Use map to store books in key value pair where key is **book Id** and value is **Book object**

3. Use **generic** as and when possible to restrict the collection.

4. Create book as a pojo. ✓

5. Create **MagicOfBooks** class to define **all the functionality related methods**. ✓

6. Use **custom exceptions** to share the proper error message to the user when the user uses the application

7. Zero marks will be awarded if the code throws compile time error. Partial marking will be done only if the code has no compile time error

## Boilerplate :

Click here to get the boilerplate

<https://gitlab.com/hcl45/assignments/week4>

## Grading Rubrics :

Implementation	Minimum Marks
Add a Book	2
Delete a Book	2
Update a Book	2
Display a Book	2
Book Count	2
Autobiography Books	2
Price low to high	1
Price high to low	1
Best Selling	1
Classes creation	1
Use of Map	1
Use of Generics	1
Custom Exception	2