# TEST RESULTS

# for

# Book Shop Automation Software

**Version 1.0 approved**

**Presented by**

**Rameshwar Bhaskaran (14CS30027)**
**Aditya Bhagwat (14CS30002)**
**Group 55**

**IIT Kharagpur**
**April 13, 2016**

# Contents


**1 White Box Testing** **4**
- 1.1 Unit test results . . . 4
  - 1.1.1 BookDao class - getBookByISBN()) . . . 4
  - 1.1.2 BookDao class - addBook()) . . . 4
  - 1.1.3 BookDao class - getInventoryLevel() . . . 4
  - 1.1.4 TransactionDao class - getStatistics() . . . 4
  - 1.1.5 NotInCollectionDao class - addRequest() . . . 5
  - 1.1.6 VendorDao class - searchVendorById() . . . 5
  - 1.1.7 NotInCollectionDao class - viewRequests() . . . 5

**2 Black Box testing** **6**
- 2.1 Generate receipt feature . . . 6
  - 2.1.1 Case when no such book exists . . . 6
  - 2.1.2 Case when book does not have enough copies . . . 7
  - 2.1.3 Case when successful . . . 8
- 2.2 View statistics . . . 9
  - 2.2.1 Case when incorrect date is entered manually . . . 10
  - 2.2.2 Case when the query is successful . . . 11
- 2.3 Update database . . . 12
  - 2.3.1 Case when the book does not exist . . . 12
  - 2.3.2 Case when incorrect details are entered . . . 13
  - 2.3.3 Case when publisher is not registered . . . 14
  - 2.3.4 Case when vendor is not registered . . . 15
  - 2.3.5 Case when full details aren't entered in the book entry form . . . 16
  - 2.3.6 Case when all form entries are entered successfully . . . 17
  - 2.3.7 Case when book already exists . . . 18
- 2.4 View Inventory level . . . 20
  - 2.4.1 Case when successful . . . 20
- 2.5 Query for book . . . 21
  - 2.5.1 Case when book exists . . . 21
  - 2.5.2 Case when book is not in the database . . . 22
  - 2.5.3 Case when book is not in stock . . . 23
- 2.6 View Not In Collection requests . . . 24

**3 System testing** **25**
- 3.0.1 Performance Criteria . . . 25

3.0.2 Function validation . . . . . 25

# 1 White Box Testing

## 1.1 Unit test results

### 1.1.1 BookDao class - getBookByISBN())

- Input: 2000
- Condition: The returned book's ISBN is actually 2000
- Expected Output: null(No such book in database
- RESULT: PASS

### 1.1.2 BookDao class - addBook())

- Input: A new book with ISBN 123456
- Condition: Check if the book exists now in the table
- Expected result: YES
- RESULT:PASS

### 1.1.3 BookDao class - getInventoryLevel()

- Input: ISBN=10192
- Expected output: 0
- Output: 0
- RESULT:PASS

### 1.1.4 TransactionDao class - getStatistics()

- Input: Start date is more than end date
- Expected output: No results except default result header
- Output: Only result headers received
- RESULT: PASS

### 1.1.5 NotInCollectionDao class - addRequest()

- Input: A new request for a book: ISBN-12213 ,Book Title -"Agatha",Author name ="ABC",PublisherName="Marvel"
- Expected output: Inserts correctly into database. No exceptions unhandled
- Output: Inserts correctly
- RESULT:PASS

### 1.1.6 VendorDao class - searchVendorById()

- Input: ISBN=1000
- Expected output: True
- Output: True
- RESULT:PASS

### 1.1.7 NotInCollectionDao class - viewRequests()

- Input: Query for getting requests
- Condition: Is ISBN 123 present?(data validated by database)
- Expected output: Yes
- Output: Yes
- RESULT: PASS

# 2 Black Box testing

## 2.1 Generate receipt feature

### 2.1.1 Case when no such book exists

**Expected output: Error Dialog appears**

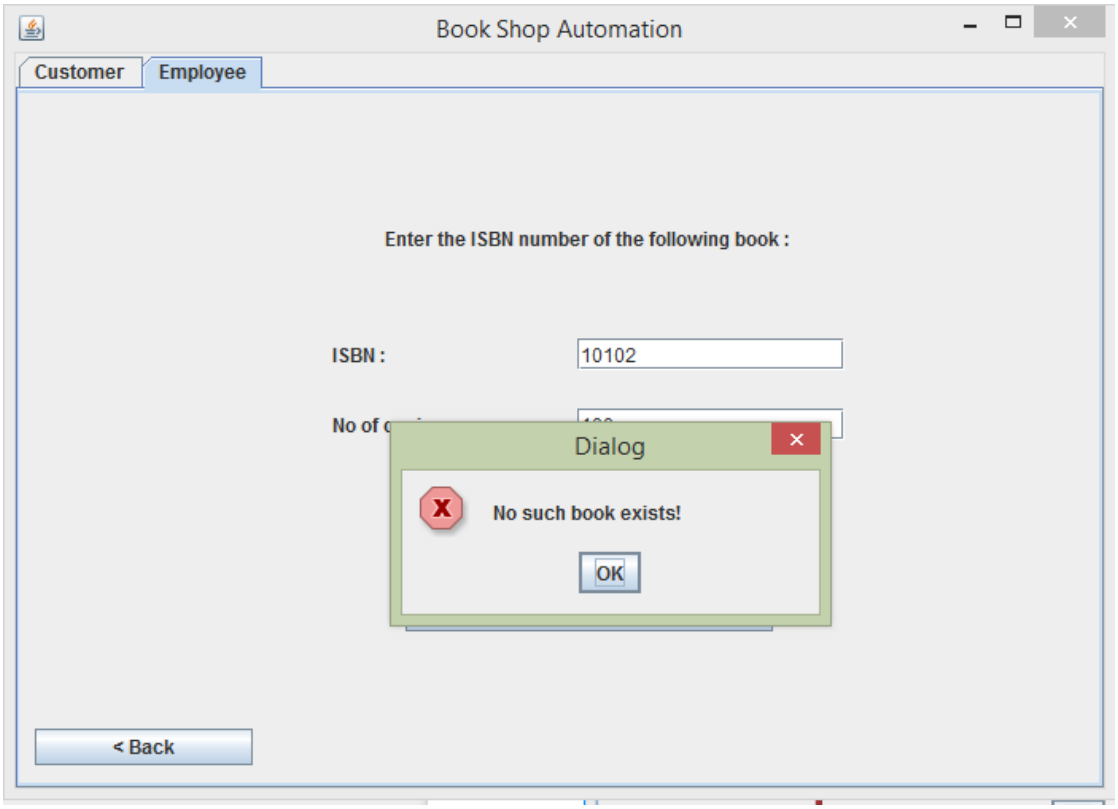


Figure 2.1: Error dialog shown.

### 2.1.2 Case when book does not have enough copies

**Expected output: Error Dialog appears**

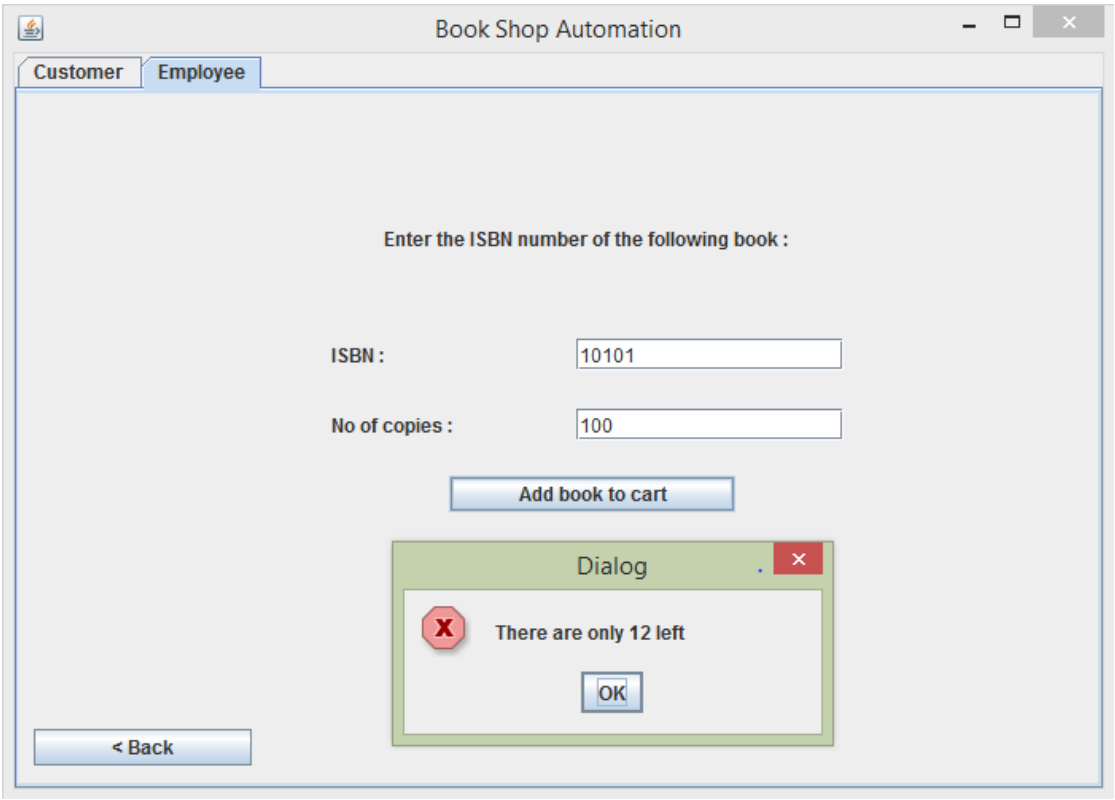


Figure 2.2: Error dialog shown.

### 2.1.3 Case when successful

**Expected output:PDF Viewer appears**

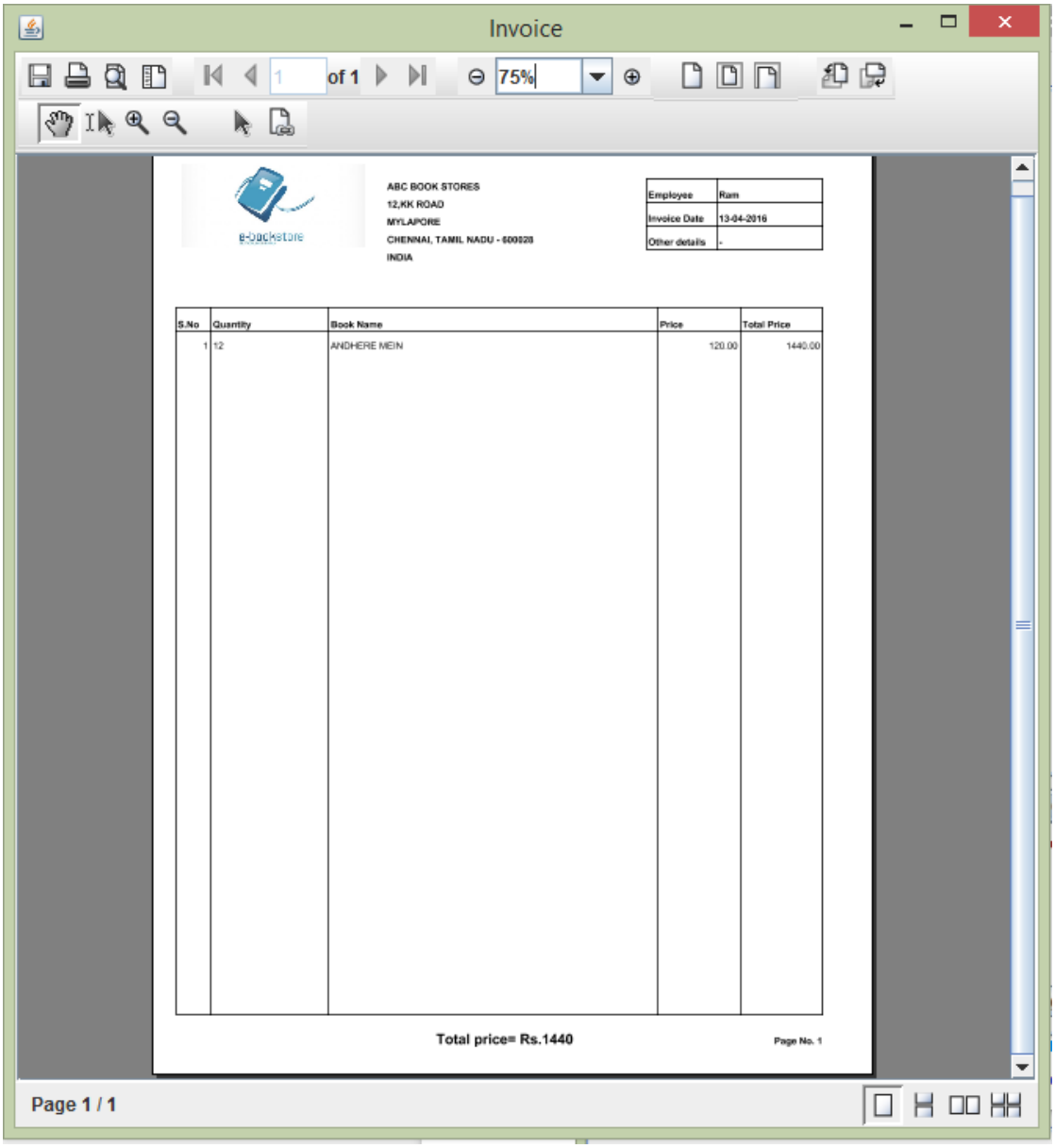


Figure 2.3: Pdf viewer appears.

## 2.2 View statistics

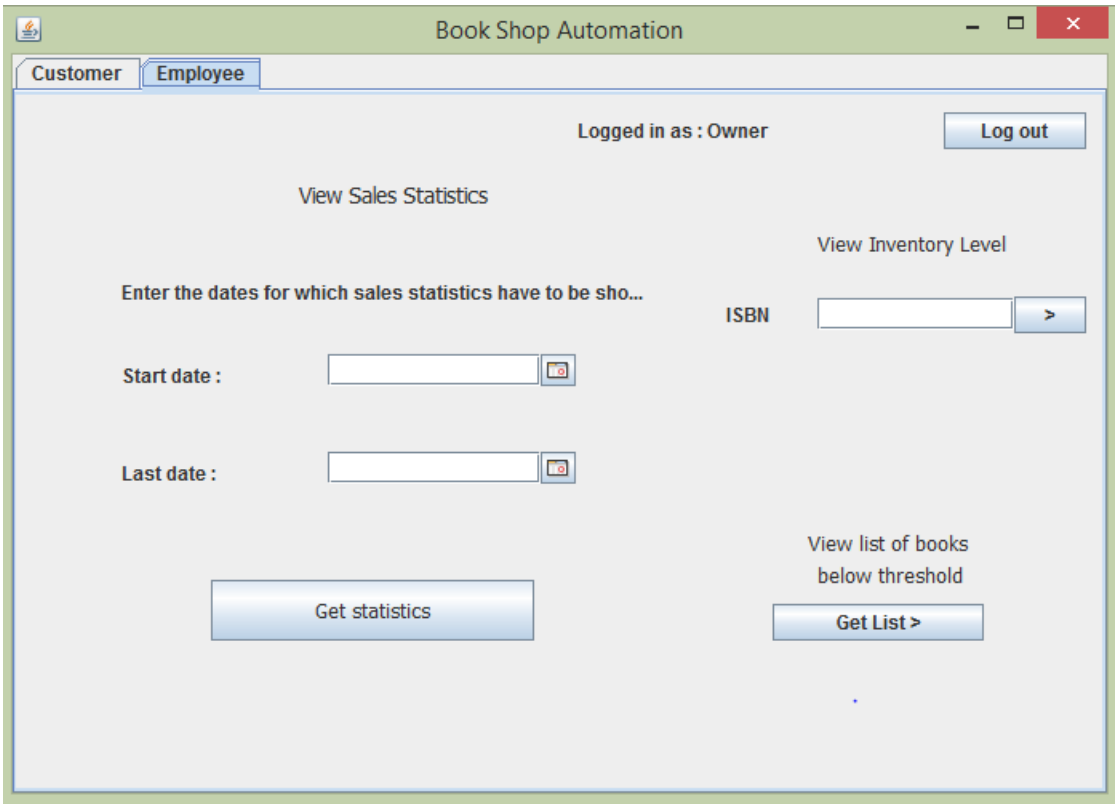


Figure 2.4: Owner panel.

### 2.2.1 Case when incorrect date is entered manually

**Expected output: Error dialog appears**

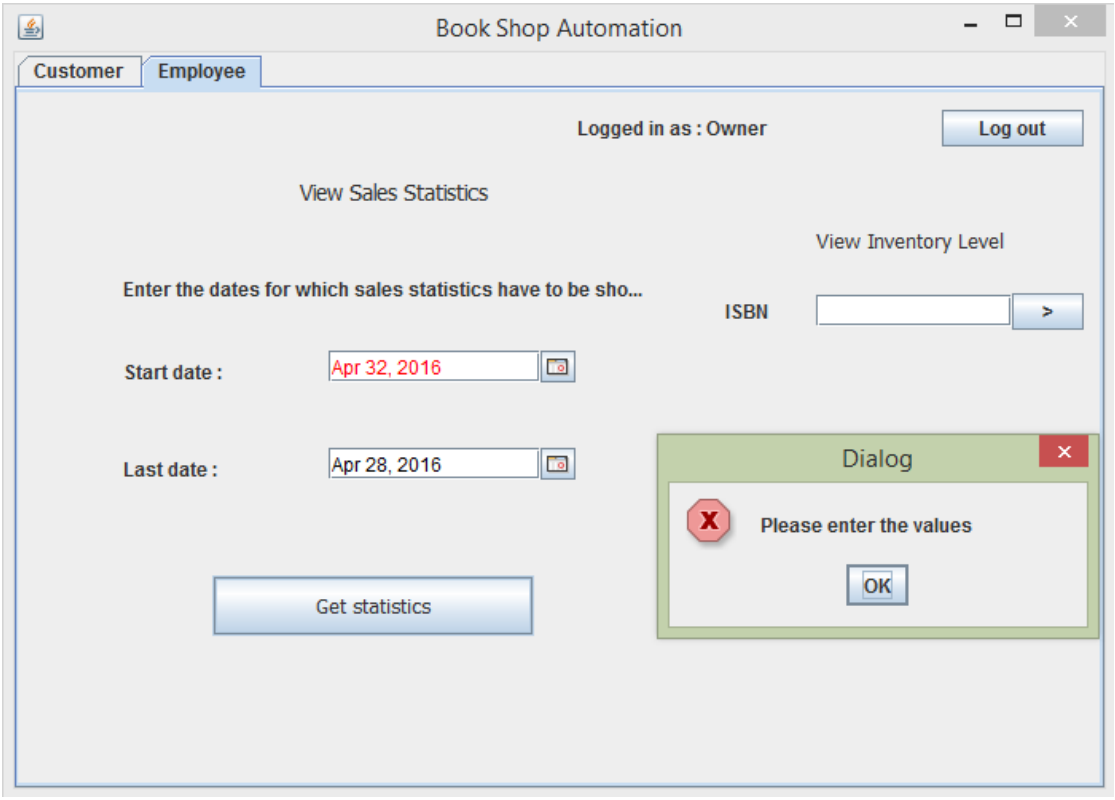


Figure 2.5: Error shown.

### 2.2.2 Case when the query is successful

**Expected output: Statistics shown**

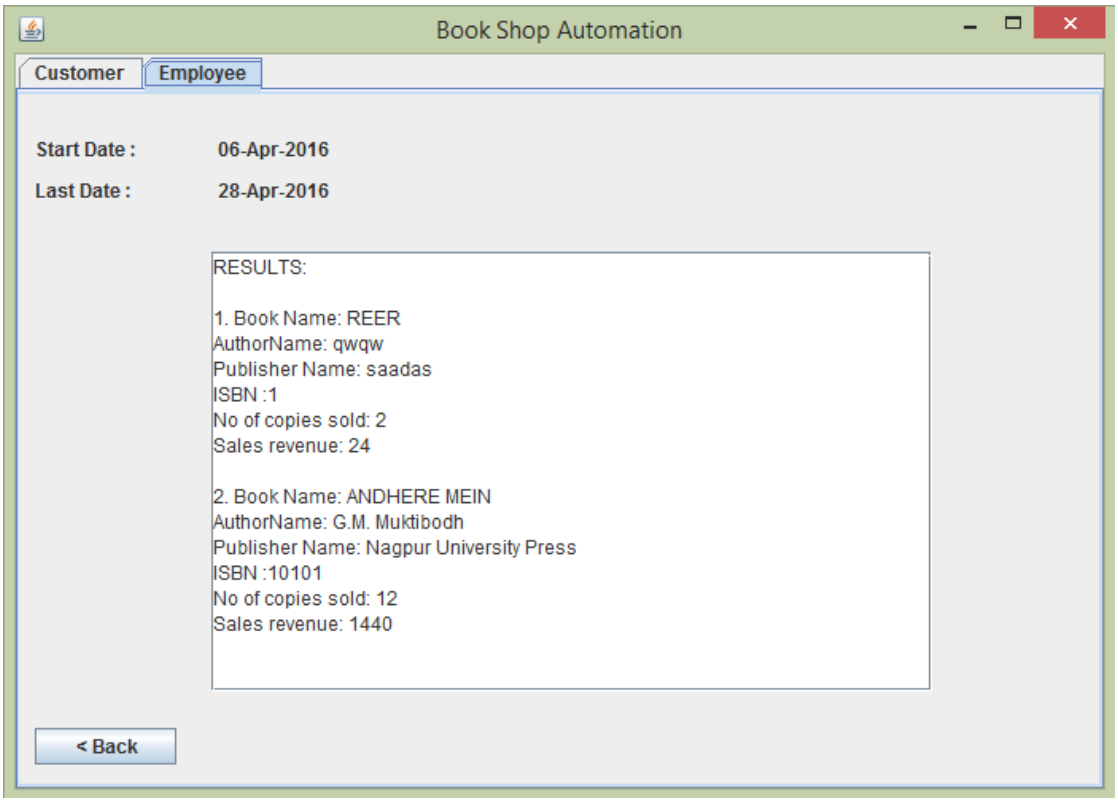


Figure 2.6: Statistics shown.

## 2.3 Update database

### 2.3.1 Case when the book does not exist

**Expected output: Error Dialog**

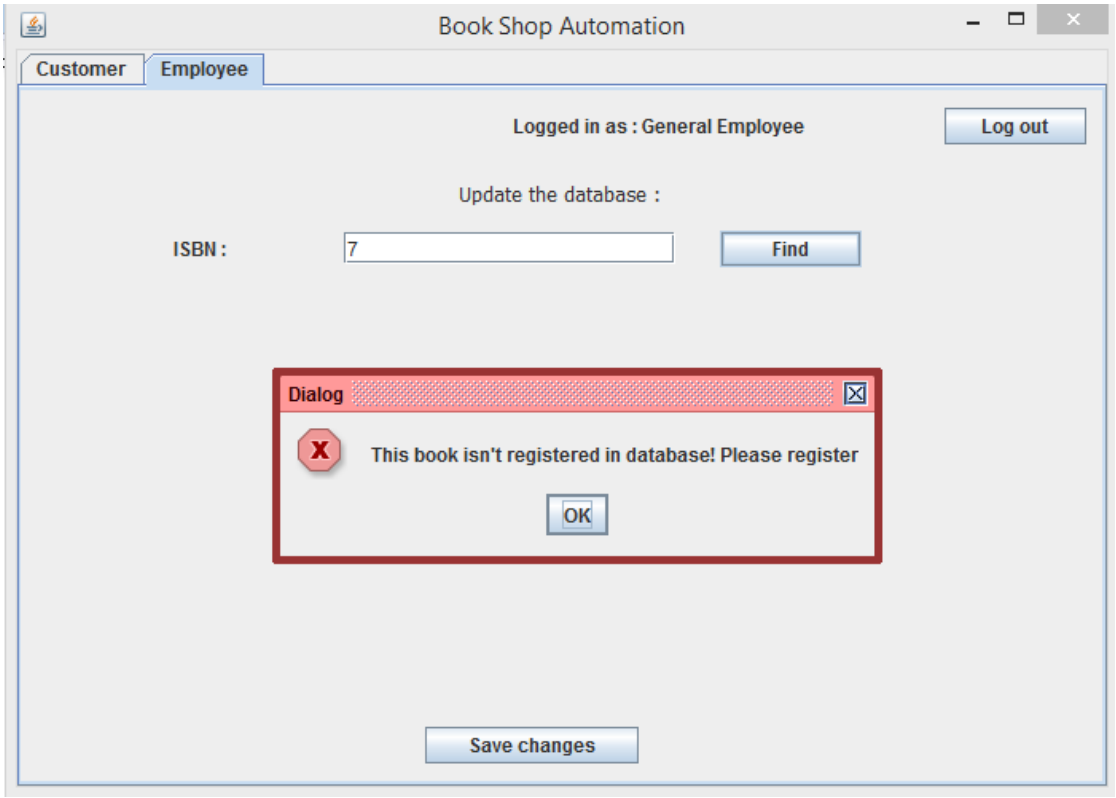


Figure 2.7: Error Dialog Shown.

### 2.3.2 Case when incorrect details are entered

**Case when fields have wrong values.**

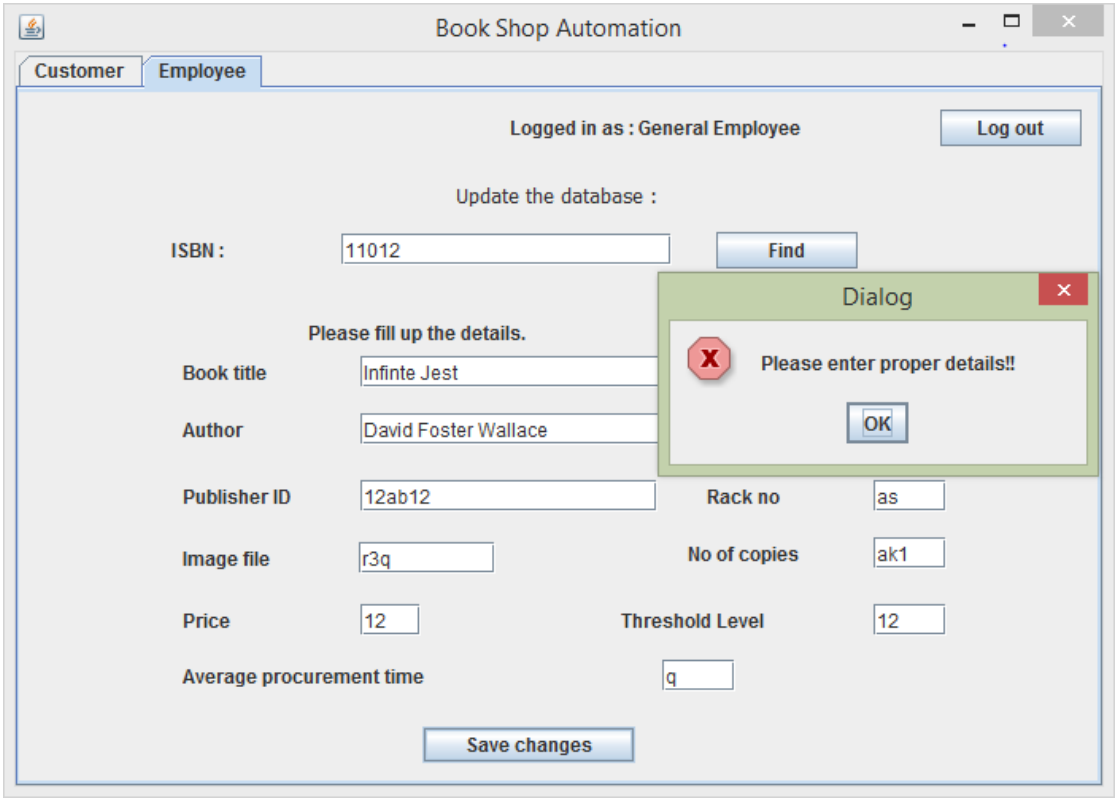


Figure 2.8: Error Dialog Shown.

### 2.3.3 Case when publisher is not registered

**Expected output: Publisher not registered dialog pops up**

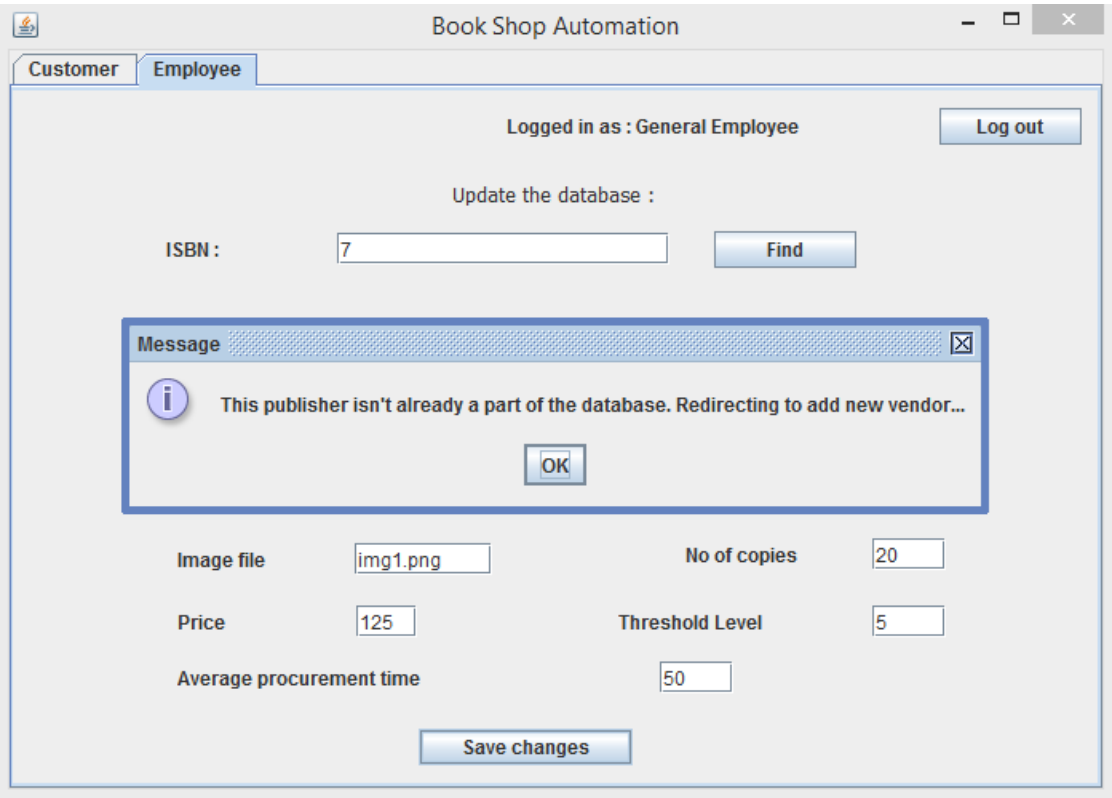


Figure 2.9: Publisher not registered dialog pops up

### 2.3.4 Case when vendor is not registered

**Expected output: Vendor not registered dialog pops up**

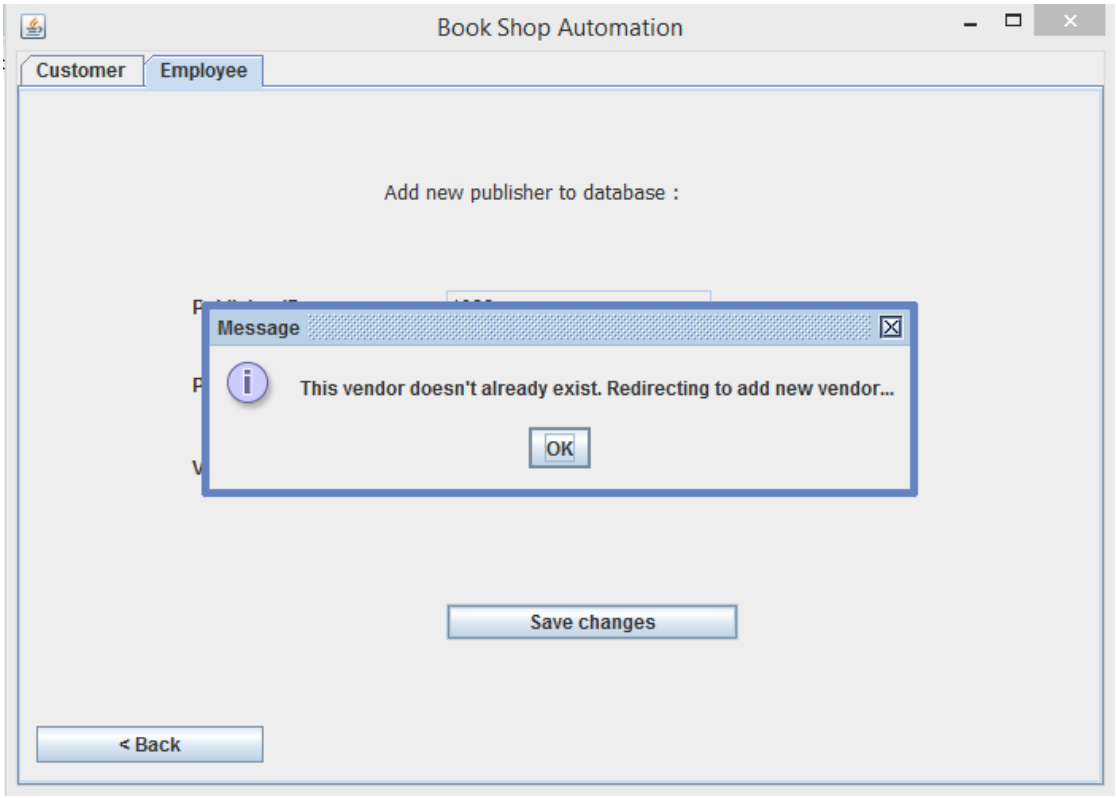


Figure 2.10: Vendor not registered dialog pops up

### 2.3.5 Case when full details aren't entered in the book entry form

**Expected output: Error dialog pops up**

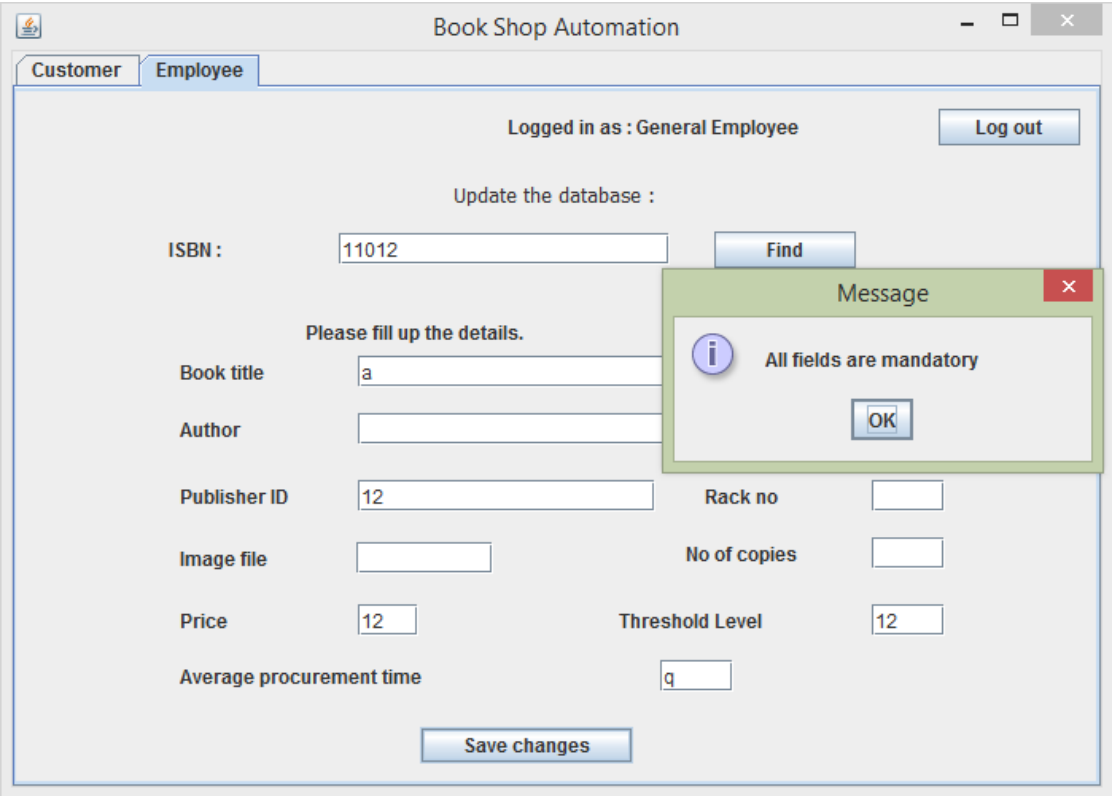


Figure 2.11: Error dialog pops up

### 2.3.6 Case when all form entries are entered successfully

**Expected output: Return back to the update database panel**

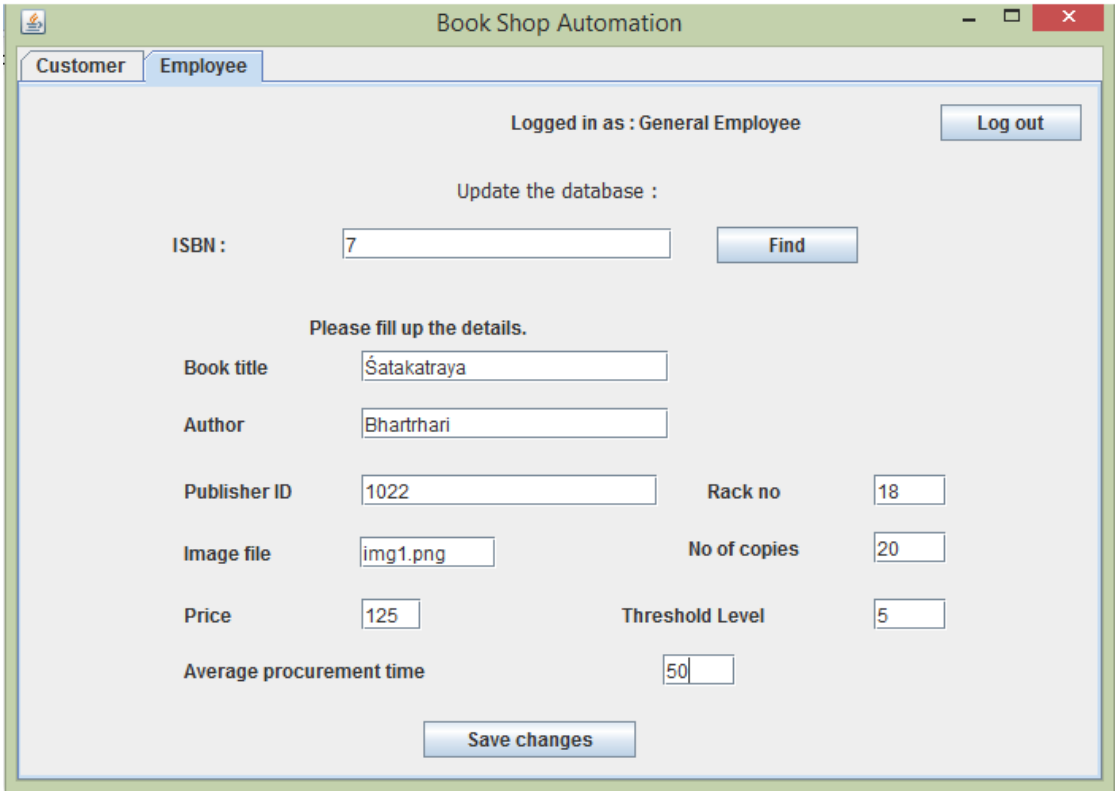


Figure 2.12: Save changes

### 2.3.7 Case when book already exists

**Expected output: Show dialog and show no of copies panel**

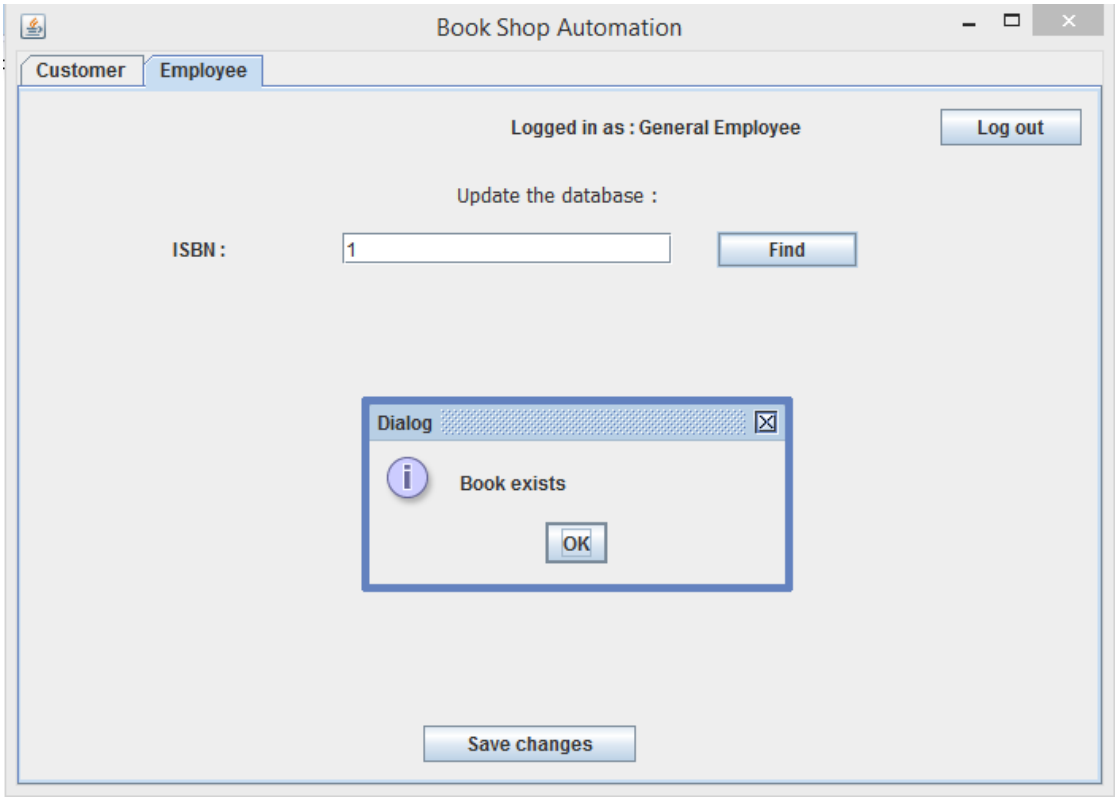


Figure 2.13: Dialog shown

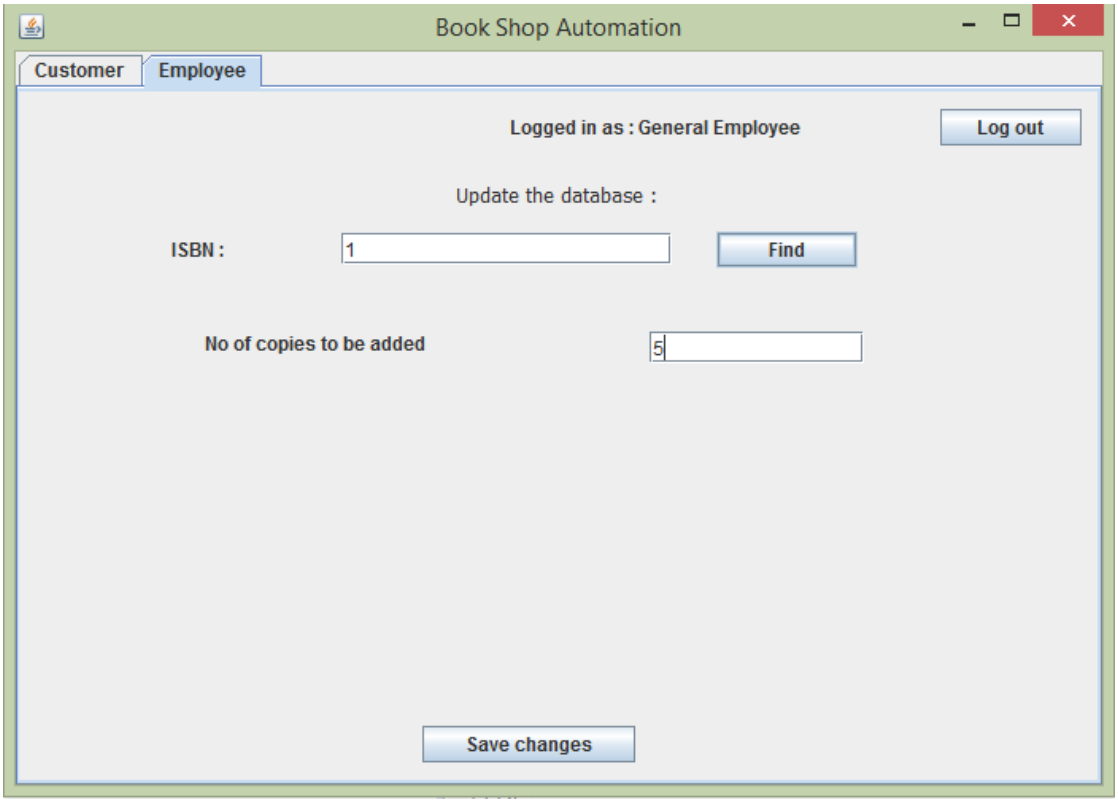


Figure 2.14: No of copies panel shown

## 2.4 View Inventory level

### 2.4.1 Case when successful

**Expected output: Show level**

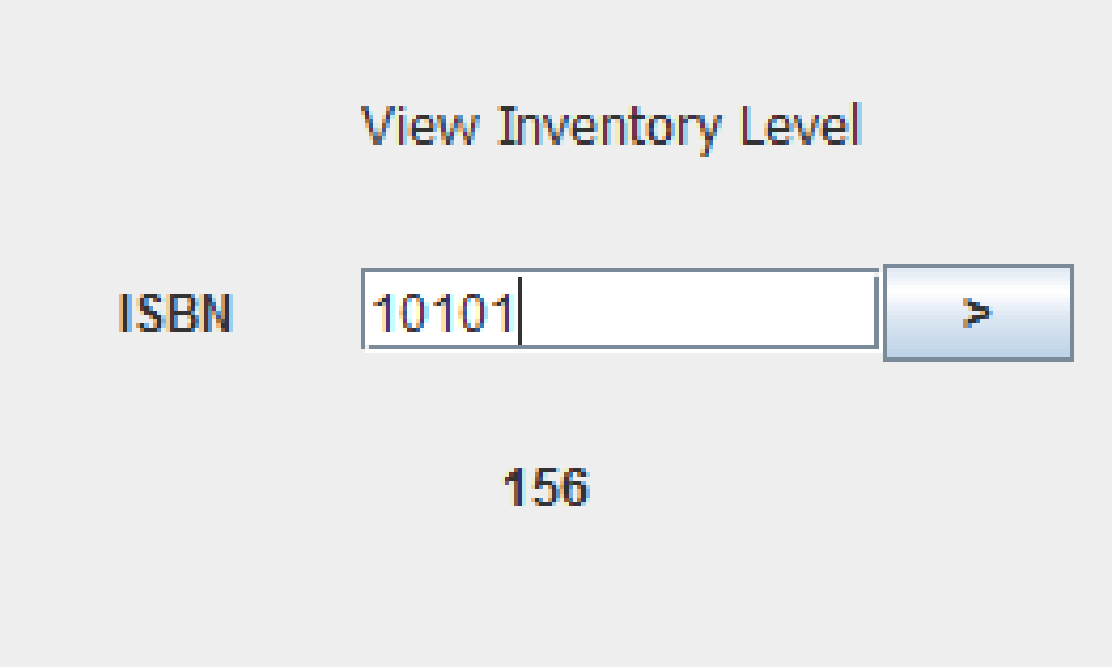


Figure 2.15: Answer shown

## 2.5 Query for book

### 2.5.1 Case when book exists

**Expected output: Show the entries**

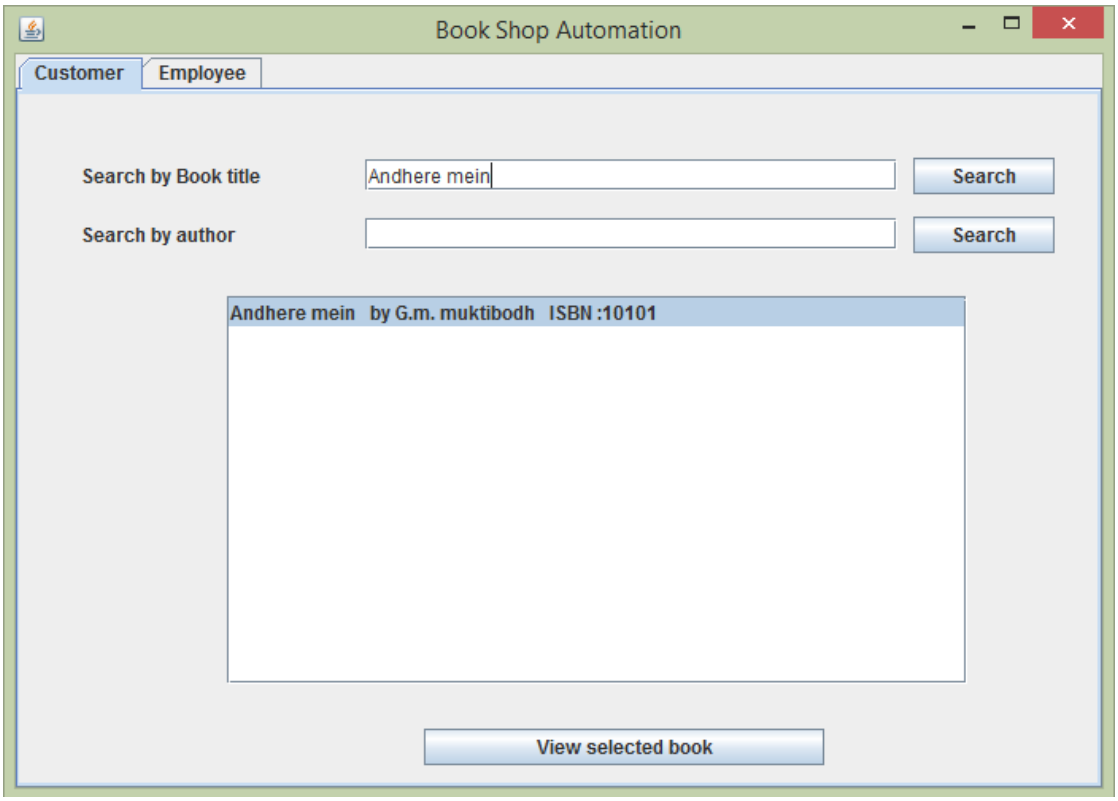


Figure 2.16: Entries populated

### 2.5.2 Case when book is not in the database

**Expected output: Show the procurement form**

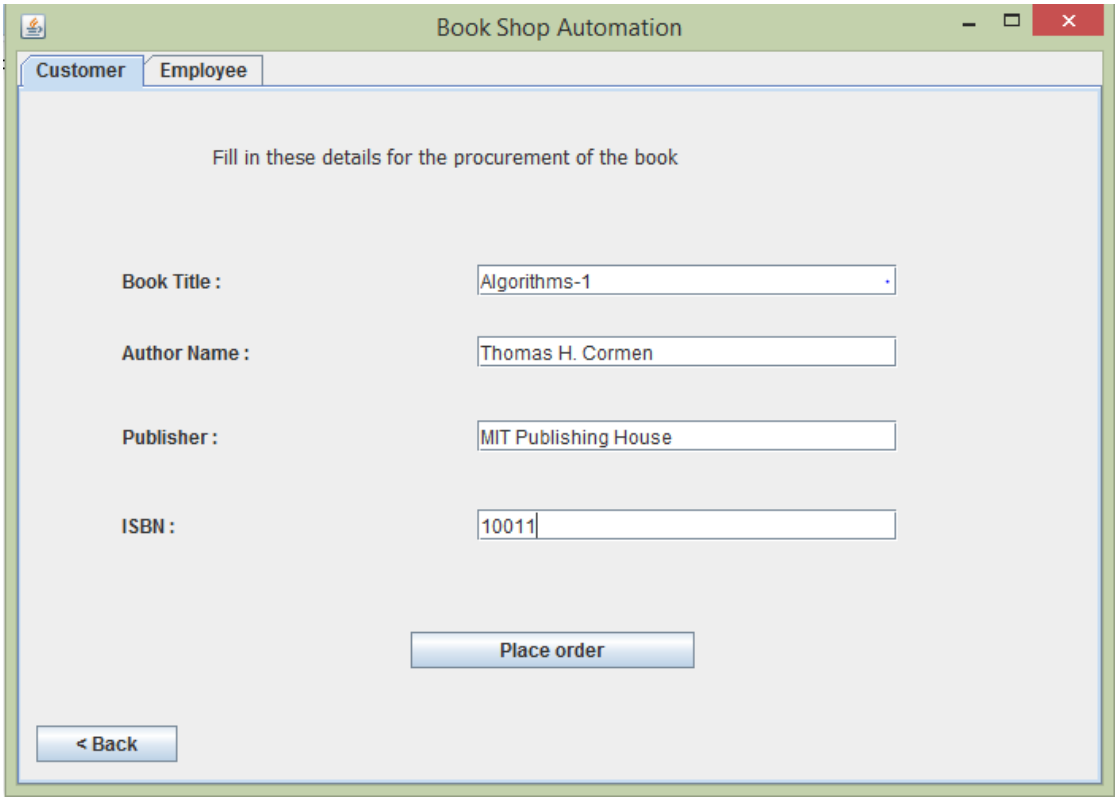


Figure 2.17: Procurement form shown

### 2.5.3 Case when book is not in stock

**Expected output: Show dialog on viewing**

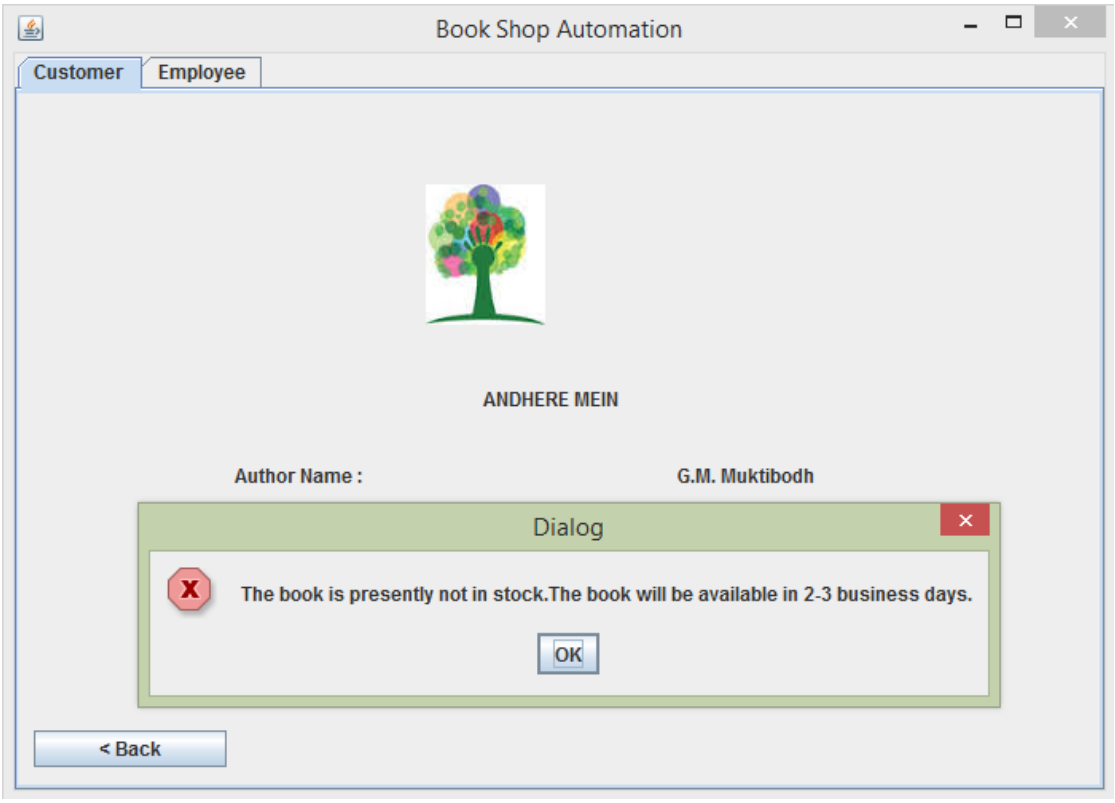


Figure 2.18: Not in stock dialog shown

## 2.6 View Not In Collection requests

**Expected output: Show requests**

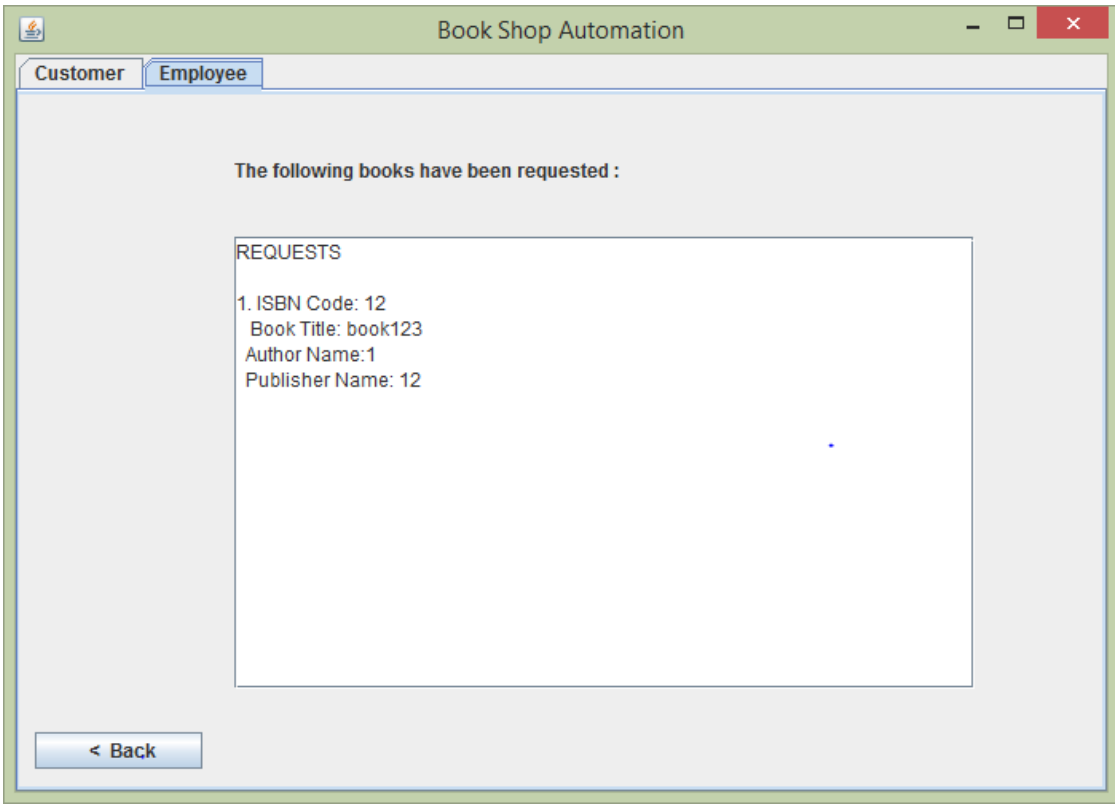


Figure 2.19: Requests shown

# 3 System testing

## 3.1 Performance Criteria

- Due to the initial loading of the configurations by the Hibernate framework, the system lags a bit but gives competently fast results subsequently.
- Also, the PDF viewer takes up some time to load in certain cases. However, as it is an external PDF viewer, the setting up is expected to take time.

## 3.2 Function validation

- All major use cases mentioned in the SRS are compared with the functionalities in the software
- **Generate Receipt:**
  Pdf is generated. **WORKS AS EXPECTED**
- **Query for book**
  Results are shown. **WORKS AS EXPECTED**
- **View Requests**
  Results are shown. **WORKS AS EXPECTED**
- **View statistics**
  Results are shown. **WORKS AS EXPECTED**
- **View inventory level**
  Level is displayed. **WORKS AS EXPECTED**
- **Request for book**
  Request successfully sent. **WORKS AS EXPECTED**
- **Update database**
  Both deletion and addition of books(already/not already) present possible.
  **WORKS AS EXPECTED**
- **Number of requests updated when not in stock**
  Requests are appropriately incremented when the customer views the book.
  **WORKS AS EXPECTED**