# **Test Plan Report**

(Name of the Product)

# **Books management System**

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### 1.0 INTRODUCTION

The Books Management System is a system to record the information of books in a store. The books' information is in the form of following attributes: title, author, year of publication and the ISBN number of the book. Book stores require this kind of systems to keep track of books present in the store and retrieve book information easily. User can insert new books, update existing ones, search for them and delete them as well.

#### 2.0 OBJECTIVES AND TASKS

### 2.1 Objectives of Test Plan

Objective of the test plan is to describe scenarios to be tested and covering corner cases of the application as well.

### 2.2 Tasks of Test Plan

Sr. No	#Business Requirements (BR)	#Functional Requirements (FR)	#Test Scenarios (TS)	#Testing Approaches /Strategies (TA)
01	Operations on existing book records	Updation, Searching, Deletion	Update book, Search a book, Delete a book, validation on all fields	Functional Testing (Standard Testing) - Unit Testing
02	Operations to create new book records	Insertion, View All	Insert a book, View all books, validation on all fields	- Integration Testing

# 3.0 SCOPE General

Scope of the Test Plan will be testing all the fundamental validation units and modules , and further test the integration of all the CRUD operations on the application.

### **4.0 TESTING STRATEGY**

- 1. Functional testing
- 2. Unit testing
- 3. Integration Testing

Approac h	Type of Testing	Manua Using Devic e	l Testing Using Emulat or	Automate d Testing on Device	Tools/APIs/Libraries
Standard	Unit Testing	Yes	No	No	1. Unittest
Testing (Functional Testing)	Integration Testing	Yes	No	No	(python unit testing framework)

# **4.1 Unit Testing**

MODULE/FUNCTIONALITY NAME:	Insert
UNIT/CLASS:	Database
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRECOND ITION	TEST DATA	EXPECTED RESULT	POST CONDITIO N	ACTUAL RESULT	STATUS (PASS/FAIL)
1	Non numeric year as input	-	insert(title="b ook",author=" author",year= "abcd",isbn=" isbn0001")	Input should be rejected	Insert return false	Input is rejected	Pass
2	Empty fields in input	-	insert(title="", author="",yea r="1990",isbn ="")	Input should be rejected	Insert returns false	Input is rejected	Pass
3	Floating point value in year field as input	-	insert(title="b ook",author=" author",year= "1922.6",isbn ="isbn0001")	Input should be rejected	Insert returns false	Input is rejected	Pass
4	Too short title as input	-	insert(title="b",author="author",year="19"89",isbn="isb"10001")	Input should be rejected	Insert returns false	Insert return true	Fail
5	Too short author as input	-	insert(title="b ook",author=" a",year="1999 ",isbn="isbn0 001")	Input should be rejected	Insert returns false	Insert returns true	Fail

MODULE/FUNCTIONALITY NAME:	View
UNIT/CLASS:	Database
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRECOND ITION	TEST DATA	EXPECTED RESULT	POST CONDITION	ACTUAL RESULT	STATUS (PASS/ FAIL)
6	View all	Atleast	view()	All	Pre	Records	Pass
	the records	one		records	condition	are	
		record		should be	should	extracte	
		present		extracted	hold true	d	
		in DB					

MODULE/FUNCTIONALITY NAME:	Search
UNIT/CLASS:	Database
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRECOND ITION	TEST DATA	EXPECTED RESULT	POST CONDITION	ACTUAL RESULT	STATUS (PASS/ FAIL)
7	No parameter passed to search	-	Search(""," ","","")	Query should be rejected	Search returns false	Query is rejected and returns false	Pass

# **4.2 Integration Testing**

PROJECT NAME:	Book Management System
MODULE/FUNCTIONALITY:	INSERT
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRE- CONDITION	TEST DATA	EXPECTED RESULT	POST CONDITION	ACTUAL RESULT	STATUS (PASS/FAIL)
8	INSERT a	-	Title="test",	Record	The	Record	Pass
	valid book		Author="test",	is	record	is	
	record		year="1990",	inserted	inserted	inserted	
			isbn="ISBN000		is found		
			"		using		
					search		

PROJECT NAME:	Book Management System
MODULE/FUNCTIONALITY:	UPDATE
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRE- CONDITION	TEST DATA	EXPECTE D RESULT	POST CONDITION	ACTUAL RESULT	STATUS (PASS/FAIL)
9	UPDATE	A valid	Title="test",	Record	The	Record	Pass
	an	entry is	Author="test",	is	existing	is	
	existing	present	year="1990",	updated	record	updated	
	book	in DB	isbn="ISBN000",		is		
	record		updatedisbn =		updated		
			"isbn001"				

PROJECT NAME:	Book Management System
MODULE/FUNCTIONALITY:	DELETE
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRE- CONDITION	TEST DATA	EXPECTE D RESULT	POST CONDITION	ACTUAL RESULT	STATUS (PASS/FAIL)
10	DELETE	A valid	Title="test",	Record	The	Record	Pass
	an	entry is	Author="test",	is	existing	is	
	existing	present	year="1990",	deleted	record	deleted	
	book	in DB	isbn="ISBN000"		is		
	record				deleted		

PROJECT NAME:	Book Management System
MODULE/FUNCTIONALITY:	SEARCH
CREATED BY:	-
DATE OF CREATION:	-
DATE OF REVIEW:	-

TEST CASE ID	TEST CASE	PRE- CONDITION	TEST DATA	EXPECTED RESULT	POST CONDI TION	ACTUAL RESULT	STATUS (PASS/FAIL)
11	SEARCH	A valid	Title="test",	Record is	-	Record is	Pass
	an	entry is	Author="test",	extracted		extracted	
	existing	present	year="1990",				
	book	in DB	isbn="ISBN000"				
	record						

## **5.0 HARDWARE REQUIREMENTS**

- 1.4GB RAM
- 2. 100MB HDD
- 3. i5- 8<sup>th</sup> gen processor

## **6.0 SOFTWARE REQUIREMENTS**

- 1. Ubuntu 20.04 (focal fossa)
- 2. Python 3
- 3. Python tkinter
- 4. Sqlite DB
- 5. Python unittest

### 7.0 FEATURES TO BE TESTED

- 1. Insertion of records
- 2. Updation of records
- 3. Retrieval of records
- 4. Deletion of records
- 5. Validation of input

### 8.0 FEATURES NOT TO BE TESTED

1. GUI of the applications - ( GUI testing is not under the scope of this test plan )

## 9.0 DELIVERABLES

Deliverable	Date / Milestone
Test Plan	-
Test Result Report	-

## **10.0 TOOLS**

1. Python modules - (unittest)

## 11.0 APPROVALS

Name (In Capital Letters) Signature Date 1.