Inventory Management With Focus on Sports Complex Of IITJ

TEST REPORT

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1.0 INTRODUCTION

1.1 PURPOSE

The main Purpose of this test report is to detect any defects that my have occurred during development phase of the software. To deliver error free and quality software, this test report is very helpful. It can also be used to check if all the functionalities are delivered as mentioned in the SRS document.

2.0 TEST PLAN

We are doing testing level specific test plans and under this also we are following unit test plan and system test plan.

For unit testing we have taken open function from each class because that is the only function interacting with user and taking input and can be considered for testing except it there is a function get valid input in many classes so we have tested it for one class.

For testing we have used normal random testing generation method because in our implementation we have very simple function which checks input in certain ranges only so it is quite obvious to generate cases which are exhaustive.

3.0 DETAILS OF UNIT TESTING

3.1 ControlStudent::open()

3.1.1 Student Login

3.1.2 Features to be tested

3.1.2.1 Student can login with his/her username and password if it matches with that in database

3.1.3 Item Pass/Fail Criteria

- 3.1.3.1 If Student enters valid username and password than he is shown next window showing options that he/she can access.
- 3.1.3.2 If Student enters invalid username and password than he is taken back to the window asking him to select from student login or secretary login or exit.

Test Number	Input/ Local Variable	Expected Output	Actual Output	Pass/Fail
3.1.1	Username – xyz Password – 123	Show Application Home	Showing Application Home	Pass
3.1.2	Username – verma.17 Password – sexy_launda	Show Student Homepage	Showing Student Homepage	Pass

3.2 Secretary::open()

3.2.1 Secretary Login

3.2.2 Features to be tested

3.2.2.1 Secretary can login with his/her username and password if it matches with that in database

3.2.3 Item pass/fail criteria

- 3.2.3.1 If Secretary enters valid username and password than he is shown next window showing options that he/she can access.
- **3.2.3.2** If Secretary enters invalid username and password than he is taken back to the window asking him to select from student login or secretary login or exit.

Test Number	Input/ Local Variable	Expected Output	Actual Output	Pass/Fail
3.2.1	username – verma.17 password – sexy_launda	Show Application Home	Showing Application Home	Pass
3.2.2	username – devade.1 password – adi	Show Secretary Homepage	Showing Secretary Homepage	Pass

3.3 IssueItem ::open()

3.3.1 Issue Equipment

3.3.2 Features to be tested

- 3.3.2.1 Student/Secretary can only issue equipment if his/her dues are cleared
- 3.3.2.2 Student/Secretary can issue a maximum of five equipment at a time
- 3.3.2.3 Student/Secretary can only issue equipment if guard is verified by matching password with database.

3.3.3 Item pass/fail criteria

- 3.3.3.1 Software must display "Please Clear Previous Dues" message if Dues of the student/secretary requesting the issue is not zero. And Should not make change in database.
- 3.3.3.2 Software must display "You Have Already Issued Five Equipment" message if student/secretary have already issued five equipment. And should not make change in database.
- 3.3.3.3 Software must display "Guard not verified, Please try Again" message if password of guard is not matched with the database. And should not make change in database.
- 3.3.3.4 Software must make change in database if every above criteria is fulfilled.

Test Number	Input/ Local Variable	Expected Output	Actual Output	Pass/Fail
3.2.1	1 (dues not cleared)	Should go back to Homepage	Showing Homepage	Pass
3.2.2	12 (dues not cleared)	Should ask for valid input	Showing message to enter valid input	Pass
3.2.3	2 (dues not cleared)	Should show Application Home	Showing Application Home	Pass
3.2.4	1 (Already issued five equipment)			

3.4 ReturnItem :: open()

3.4.1 Return Equipment: student can submit the already issued equipment.

3.4.2 Features to be tested:

- **3.4.2.1** Check if at least one equipment is already issued.
- **3.4.2.2** Checks for the status of the returned equipment if that is damaged or not.
- 3.4.2.3 Checks the validity of guard password
- **3.4.2.4** Actual Date of return is compared with expected date of return so as to add dues accordingly.

3.4.3 Item pass/fail criteria:

- **3.4.3.1** Database will be updated accordingly if equipment gets submitted successfully.
- **3.4.3.2** System checks if there is at least one equipment is issued to the student and shows them to return.
- **3.4.3.3** System adds the submitted equipment in the database according to it's damaged status.

Test Number	Input / Local Variable	Expected Output	Actual Output	Pass / Fail
3.4.1	1 (No Equipment Issued)	Show Student / Secretary Homepage	Showing Student / Secretary Homepage	Pass
3.4.2	2 (No Equipment Issued)	Show Applicatio n Homepage	Showing Applicatio n Homepage	Pass
3.4.3	12 (No Equipment Issued)	Ask for valid input	Showing a message asking for valid input	Pass

3.5 Dues :: open()

3.5.1 Check Dues and pay dues:

Student can check and pay their dues if any.

3.5.2 Features to be tested:

- **3.5.2.1** Checks for the due amount of currently logged in user.
- **3.5.2.2** Paying dues by the amount entered by user.
- **3.5.2.3** Update database (new due amount of user) accordingly.

3.5.3 Item pass/fail criteria:

- **3.5.3.1** If successfully shows the correct due amount of currently logged in user.
- **3.5.3.2** Takes only valid amount of money as input for due payment.
- **3.5.3.3** Deduct the due amount of user by entered amount.

Test Number	Input / Local Variable	Expected Output	Actual Output	Pass / Fail
3.5.1	Nil	Show dues of the student/sec retary	Showing dues of the student/sec retary	Pass
3.5.2	(dues = 10) 1 11	Ask for a valid amount to be paid	Showing a message asking for valid amount to pay	Pass
3.5.3	(dues = 10) 1 5	Make changes in	Made changes in	Pass

database, show "your dues : 5 "	database and showing " your dues: 5 "
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3.6 ViewbyOutstandingcontroller::open()

3.6.1 View All Outstanding Equipment: secretary can view all the issued equipment and their other issue history such as who is carrying which equipment and from when etc. Can be checked y secretary.

3.6.2 Features to be tested:

- **3.6.2.1** If it shows all the outstanding equipment correctly to the secretary.
- **3.6.2.2** Go to the homepage if secretary enters 1 as input.
- **3.6.2.3** Go to the Application Homepage (Logged out).

3.6.3 Item pass/fail criteria:

- **3.6.3.1** Shows all the content of outstanding database to the secretary.
- **3.6.3.2** Enters the desired secretary homepage or application homepage according to the input entered by user.

Test Number	Input / Local Variable	Expected Output	Actual Output	Pass / Fail
3.6.1	Nil	Show all outstandin g equipment	Showing all outstandin g equipment	Pass
3.6.2	1	Go back to Secretary Homepage	Showing secretary homepage	Pass

3.7 Viewbyavailabilitycontroller::open()

3.7.1 View All Available Equipment: secretary can view all the available equipment which are currently available in the inventory which can be used for issuing to any student.

3.7.2 Features to be tested:

- **3.7.2.1** If it shows all the Available equipment correctly to the secretary.
- **3.7.2.2** Go to the homepage if secretary enters 1 as input.
- **3.7.2.3** Go to the Application Homepage (Logged out).

3.7.3 Item pass/fail criteria:

- **3.7.3.1** Shows all the content of available database to the secretary.
- **3.7.3.2** Enters the desired secretary homepage or application homepage according to the input entered by user.
- **3.7.3.3** Accepts only valid input if entered by user otherwise should ask again for valid input.

3.8 ViewByCategorycontroller::open()

3.8.1 View By Equipment Category: secretary can view all the equipment of any given equipment category.

3.8.2 Features to be tested:

- **3.8.2.1** If it can shows the correct amount of equipment of given category and their issue details if they are already issued to someone.
- **3.8.2.2** Shows from both available and outstanding equipment.
- **3.8.2.3** Takes the valid input from secretary for next step.
- **3.8.2.4** If it Goes to the homepage successfully if secretary enters 8 as input.

- **3.8.2.5** If it Goes to the Application Homepage successfully if secretary enters 9 as valid input (Logged out).
- **3.8.2.6** Input from 1-7 will be used for equipment category option selection.
- 3.8.2.7 Will be asked to reenter valid input until a valid 1-9 input is not entered by secretary.

3.8.3 Item pass/fail criteria:

- **3.8.3.1** If on any input it shows a list of available and outstanding equipment of that equipment category.
- **3.8.3.2** It takes only valid input from 1 to 9.

Test Number	Input / Local Variable	Expected Output	Actual Output	Pass / Fail
3.8.1	1	Show count of all available equipment and all outstandin g equipment of category at position 1	Showing count of all available equipment and all outstandin g equipment of category at position	Pass
3.8.2	8	Go back to Secretary Homepage	Showing Secretary Homepage	Pass

3.9 Viewstudentduescontroller::open()

3.9.1 Check Dues of other students: Secretary can check dues of all the students in the institute.

3.9.2 Features to be tested:

- **3.9.2.1** If it shows the correct dues amount of student of the roll number entered by secretary.
- **3.9.2.2** Takes only valid roll number as input if they exists in database.
- **3.9.2.3** In case of wrong roll number shows the same page.
- **3.9.2.4** If it successfully lands to the secretary homepage if secretary enters 2 as input.
- **3.9.2.5** If it successfully lands to the application homepage if secretary enters 3 as input.

3.9.3 Item pass/fail criteria:

- **3.9.3.1** If on any valid roll number entered by secretary if it shows correct due amount of the student of that particular roll number.
- **3.9.3.2** It should take only valid numbers as input.
- **3.9.3.3** Roll number entered by secretary should be valid and should be present in database.
- **3.9.3.4** Enters the desired secretary homepage or application homepage according to the input entered by user.
- **3.9.3.5** Accepts only valid input if entered by user otherwise should ask again for valid input.

Test Number	Input / Local Variable	Expecte d Output	Actual Output	Pass / Fail
3.9.1	1 B19CSE001 (existing in database)	Show dues of roll	Showing dues of the roll	Pass

		number entered	number B16CS017	
3.9.2	1 B19CSE005 (existing in database) 1	Show same page	Showing same page	Pass
3.9.3	1 B19CSE200 (not existing in database)	Show message "Entered Roll Number Doesn't Exist"	Showing message "Entered Roll Number Doesn't Exist"	Pass

3.10 AddItem::open()

3.10.1 Add new item: secretary can add any new equipment in the database.

3.10.2 Features to be tested:

- **3.10.2.1** Entered number of equipment of the category selected by secretary should be added to the database in the available equipment.
- **3.10.2.2** Added equipment can be issued to the students.
- **3.10.2.3** Secretary can add any number of product of any category as entered as input.
- **3.10.2.4** Asks for valid input until a valid input is entered by secretary.

3.10.3 Item pass/fail criteria:

- **3.10.3.1** If entered amount of given category is added into the available equipment database.
- **3.10.3.2** It should take only valid numbers as input.
- **3.10.3.3** Enters the desired secretary homepage or application homepage according to the input entered by user.

4.0 DETAILS OF SYSTEM TESTING

Step	TEST STEP/ INPUT	Intended Result	Actual Result	Pass/Fail
1	Log in as Student/Secretary -	Remove equipment data from available	Removed equipment data	Pass

	> issued equipment -> select equipment	and add to outstanding database	from available and add to outstanding database	
2	Login as Secretary / Student -> return equipment -> select equipment	Add equipment to available and remove from outstanding	Added equipment to available and removed from outstanding	Pass
3	Login as Secretary / Student -> check dues	Show dues of the student/secretary	Showing dues of the student/secretary	Pass
4	Login as Secretary/Student - > check dues -> pay dues -> enter amount	Deduct dues of the student/secretary by the entered amount	Deducted dues of student/secretary by the entered amount	Pass
5	Login as Secretary - > add new equipment -> select equipment -> enter quantity	Add new equipment of selected category and quantity in the available data	Added new equipment of selected category and quantity in the available data	Pass

Testing Report

All Tests Reported in the above Test Report are verified and validated. There were no tests which were found to be invalid during this testing procedure.