

HACETTEPE UNIVERSITY COMPUTER SCIENCE AND ENGINEERING DEPARTMENT BBM384

DEL5 SOFTWARE TEST REPORT

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Project Name: PATATES

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PATATES Software Test Report

1. Introduction

1.1 Purpose and Scope

The main purpose of this document is describe and explain the testing part of the project. Software Test Report includes methods of testing. Describes how to proceed the testing part of project. Also this document includes results of tests and some other informations like time, retest needed etc. But detailed information of every single test is located on Test Case Definiton document.

Software Test Report document also contains criterias for evaluating tests. This means what makes the test completed, what are restriction and discarded reactions etc.

1.2 Descriptions and Abbreviations

STR Software Test Report

UC Use Case

OBS Online Book Store

TC Test Case

2. Descriptions of Test Activities

2.1 Document Security

Test documents include a lot of secret informations. So test documents are very important documents and they must store securily. Our all files and document will be stored on GitHub. They can be accessible only by authorized persons. They are team members and course instructors for this project. Also this documents can be changed by only team members.

2.2 Data Recording, Reduction and Analysis

Manuel test method will be used for Patates OBS. The data which will be used while testing and the test result data will be stored in Test Case Definition document. Also data is selected manuelly.

To decrease the testing part duration and provide consistency, we tests the codes while we are coding. Basically we consider this as unit test. Every code blocks,

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functions, classes are tested while they are coding. The important thing is it working correctly. If it provides correct responses, this means we can add this unit (or code blocks, methods etc) to project.

3. Test Preparation

3.1 Hardware Preparation

Test will be done with both emulator and real phones. So as hardware, you need an Android phone to install the apk of application.

3.2 Software Preparation

The only software need to test is Android Emulator.

While testing the application, although we know the background of project, we will make black box testing. Black box test is a test that tester doesn't know about the code, implementations or design. Black box tests test the functionalities and requirements. Actually we know all of them but we will test by acting as user. Users will not know the background of application. Black box tests can be applicable fastly and also the test will be done with an end-user perspective.

There is another test method similar with black box. This is use cases test method. This methods exist on different scenarios based on user activites. Both black box method and use case method do not test the algorithm. They test the requirement and possible user activites.

3.3 Other Pre-test Preparations

Test cases which located on Test Case Definition document are created by tester of team. While designing these test cases, he considered user behaviours and expectations. A test case created for every single use case. So every use case will be tested at the end. To provide stability, every different scenario had to be considered by tester. Software, design and user mistakes must be catched by these test cases. So test case designing is very important and complex progress.

The important point which should be mentioned is testing while developing. Our developers test the part they code while coding and before the commit. This makes next part which will be developed is layered on more consistent base. Developers are not worried about what if the previous part cause an arror while developing. Also testing while developing decrease the last exhaustive testing time before the release.

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4. Test Results

Use Case Number	Use Case Name	Test Case Description File Name	Retest?	Number of Activity Paths Tested	Number of Non-working Activity Paths	The time spent (minutes)*
1	Register	Register module testing. OBS-TC-001	No	4	0	10
2	Login	Login testing. OBS-TC-002	No	4	0	5
3	Logout	Logout testing. OBS-TC-003	No	1	0	2
4	View Book List	Test of listing the books. OBS-TC-004	No	1	0	2
5	Search	Search books. OBS-TC-005	Yes	3	0	10
6	Filter Searching	Filter the books and list. OBS-TC-006	Yes	1	0	15
7	View Categories	See the categories page. OBS-TC-007	No	1	0	5
8	View Book Page	See details of book. OBS-TC-008	No	1	0	10
9	View Comments	View comments of a book. OBS-TC-009	No	1	0	4
10	View Cart	See shopping cart. OBS-TC-010	No	1	0	1
11	Add to Cart	Adding book to shopping cart. OBS-TC-011	No	1	0	1
12	Drop from Cart	Dropping book from the cart. OBS-TC-012	No	1	0	1
13	Select/Add Credit Card	Maintaining credit cards. OBS-TC-013	Yes	2	0	10
14	Select/Add Address	Maintaining addresses. OBS-TC-014	No	2	0	10
15	Select Shipping Firm	Selecting shipping firm. OBS-TC-015	No	1	0	1
16	Use Discount Code	Using discount code. OBS-TC-016	No	5	0	10
17	Give Order	Giving order. OBS-TC-017	No	1	0	60
18	View Orders/ Detail of an Order	View orders and order detail. OBS-TC-018	No	1	0	5

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19	Leave Comment	Leave comment to a book. OBS-TC-019	No	1	0	10
20	View Profile / Edit Profile	View and edit profile. OBS-TC-020	Yes	4	0	30
21	Change Password	Change password. OBS-TC-021	No	4	0	30
22	Change Notification Settings	Change notification settings. OBS-TC-022	Yes	1	0	60
23	Contact with Admins/See FAQ	Contact with admins and see FAQ. OBS-TC-023	No	2	0	20
24	Change Languages	Change language of app. OBS-TC-024	No	1	0	40
25	See "About Us"	See about us section. OBS-TC-025	No	1	0	5
26	Delete Account	Delete account. OBS-TC-026	No	1	0	5
27	See Sales Reports	See sales reports. OBS-TC-027	No	1	0	5
28	Add Book	Add book to system. OBS-TC-028	No	2	0	40
29	Update/Delete Book	Update or delete book from system. OBS-TC-029	No	1	0	40
30	See/Delete User	See or delete user from system. OBS-TC-030	No	1	0	10
31	See/Confirm Order	See or confirm order. OBS-TC-031	No	1	0	40
32	Add Shipping Firm	Add shipping firm. OBS-TC-032	No	2	0	5
33	Update/Delete Shipping Firm	Delete or update shipping firm. OBS-TC-033	No	3	0	5
34	Add Campaign/Discount Code	Add campaign or discount code. OBS-TC-034	No	2	0	10
	TOTAL			60	0	~10 Hours

^{*}Because of we used manuel testing method, the time spent (minutes) is not the exact time of testing. These are approximate values.

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4.1 Criteria for Evaluating Results

Completing the test does not mean the test is succesfull. There may be some other criterias. For example test may give correct response but if it responses with delay, that means there is a problem and this test failed. These criterias are described below. Some criterias compulsory for overall test cases but some of them may be specialized by test cases.

General Criterias:

- Every process must be done in milliseconds. Because speed is very important point for users. Nobody loves waiting. If some test cases has delay, at first, the test must be repeated. Because there may be external factors like poor internet connection for user. If delay is continuing, this means we need to improve something.
- There must be no crash or interrupts. If users faced with a system error etc. this
 means there is a problem with out exception handling. All possible user actions
 must be considered and they must be handled.
- For every exception, a proper and easy-to-understand warning should be displayed.
- Every test case must give responses which are located on Test Case Description document. Some tests will be done directly seeing these responses. Some other cases will specialized below.

• Specialized Criterias:

- Logout (OBS-TC-003)

According to our first plan and design, user would be redirected to main page as guest in logout use case. But we changed the design and user will be stay on options page after logout as guest.

View Book List (OBS-TC-004)

There there types of book lists. First one is at main page, user will see two group of books called "Weekly Discounts" and "Most Purchased". The second one will seen by clicking the search button at main page. All books without any restriction will be listed with pagination. The third one is categorized list. At the categories page, there will be different categories. By clicking any category, user will see books related with the category. If all of them working properly, the test must be completed.

Search Book (OBS-TC-005)
 While searching book, if you want to find a book includes Turkish letters like 'ş' and search it with 's' instead of 'ş' system cannot find the book. You must search

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with original letters of the book or auther name. But upper and lower letters may be discarded. Searching 'A' and 'a' are same thing.

- View Categories (OBS-TC-007)

At the categories page, system will categories. For this test case, the language of categories will be discarded while testing.

- Add Book to Cart (OBS-TC-011)

System allows user to add maximum 10 pieces of a book to cart. While add operation, stock does not controlled. Because in system design, admin will control the stock and confirm or reject the order.

Select/Add Credit Card (OBS-TC-013)

While adding new credit card, only card in system will be allowed. If you add a card not in system, you will see an error while giving order. The purpose of that, controling the money in the card is increasing/decreasing by giving order or canceling order.

Use Discount Code (OBS-TC-016)

For an order, only one discount code can be used. Every try to use discount code, system will calculate the new cost by on total cost if code is valid. Every application of discount code, calculation does not process on discounted cost. This allow user to change the coupon code while completing order.

Leave Comment (OBS-TC-019)

At the first version of application, we designed comments as only who purchased book can make comment and only one comment. We changed this feature as every logined user can make any number of comments. And there is a little point, after commenting on a book, comment stars may not be updated without refreshing the book page. This should be discarded while testing.

View/Edit Profile (OBS-TC-020)

Mail address cannot be updated and if you want to update profile, you need to fill the phone number blank.

- Change Password (OBS-TC-021)

There is two password change method. First one, guest clicks password forget button and enter email. With mail, user can update password. The second one, logined user can change password by entering old password and new pasword two times at change password screen.

Change Language (OBS-TC-024)

When language change, book names, description of books, comments and categories will still their original language. They can be discarded.

Delete Account (OBS-TC-026)

Deleted accounts are not deleted from system completely. They mark as inactive. So they will be stored in Firebase but cannot be used by users.

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5. References

- Test Case Definition Document
- Software Requirement Document
- Configuration and Change Management Document
- Risk Management Document
- Software Design Description Document
- Architecture Notebook Document
- Use Case Definition Document