

White box Testing (cont) and Test Plan

SE 323 Software Construction Testing and Maintenance

Triangle Problem Revise your works

Short circuit evaluation

- **minimal evaluation**, or **McCarthy evaluation**
- Opposite of eager evaluation
- semantics of some Boolean operators in some programming languages in which the second argument is executed or evaluated only if the first argument does not suffice to determine the value of the expression

Short circuit evaluation

- And operator (&&)
 - If the first operator is false
 - Always return false
 - No need to execute the next operator
- Or operator (||)
 - If the first operator is true
 - Always return true
 - No need to execute the next operator

Short circuit evaluation

- For eager evaluation in java
 - And (&)
 - Or (|)
- May differ regarding to the programming language

With Short circuit

- The control flow graph is too complicated

With the given control flows

- Find the cyclometric complexity value
- Create paths which cover statement criteria

With the given control flows

- Find the path which cover branch coverage (condition coverage)
- Try to find less than the cyclometric complexity value
- And the test data

In a real word application

- Tester could not find all the paths and finding the test data
- AS the state explosion problem, and the infeasible path

The problems

- The state explosion
 - Loops create many states
- Infeasible path
 - There are a path, but it could not be executed due to the source code
 - If (true)

How they do?

- Combine the black box testing
- Finding the test data
- Run the test suite
 - Test suite = set of test cases
- Finding the % coverage
 - 97% coverage
 - % coverage caution !!! Framework generated code should not be count!

Back to the Control flow

- How many statements in the Control flow graph?
- How many branch to coverage?

With the given test data

a	b	c
2	8	200
3	3	2
3	4	5

What is the expected value?

What is the percent coverage for statement coverage,

Test Plan Documents

- There are many levels of test
- The document for each level are different
- The test plan consists of
 - Test objective
 - Test cases
 - Appendix

Test objective

- Prepare an introduction
 - Description of problems to be solve by application
 - Risk, proposes, objectives, benefit
 - Executive summary of application and test plan
- Define high-level functional requirements
 - Define only business function not application function
- Identify Manual/Automated Test types

Test objective

- Identify the test exit criteria
 - Scheduled testing time has expired
 - Some predefined number of defects discovered
 - All the formal test execute without detecting any effects
 - Combination of all the above
- Establish regression test strategy
 - All test suite should rerun for each new iteration
 - Test automation can be used
 - Regression test that repeat other test should be removed

Test Objective

- Organize the test team
 - Human resource allocation + responsibility
 - Should be professional QA specialist + executive sponsor, users, technical operations, data base administrator, ...
 - Area of responsibility
 - Testing the application
 - Overall testing processes -> test manager
 - Test manager
 - Test team


Test Objective

- Establish a test environment
 - Physical framework, technologies, and tools
 - Define the dependencies
 - Seeking for information from some dependencies from previous project
- Create a test schedule
 - Testing steps, task
 - Start and end dates and responsibilities

Test Objective

- Select the test tool
 - Effective for testing environment
- Establish defect recording/ tracking procedure
 - Defects report

Defect ID	Module Name	Release version	Summary	Description	Steps to Reproduce	Expected Result	Actual Result	Defect Severity	Defect Priority	Assigned to	Status
1122	Login Page	1.0	Forgot password link is not working	Nothing happens when user clicks on forgot password link. Only the page gets refreshed	<ul style="list-style-type: none">• Navigate to www.helpingtesters.com/login.• Enter username and click on "Forgot Password" link• Enter email id and click send.• Login to your email with your personal email id and password.	Link for resetting password should be present	Email is not sent	High	Medium	XYZ	Open
1232	Blog page	1.0	Blog page navigation doesn't work	User is unable to navigate to other blog pages	<ul style="list-style-type: none">• Navigate to www.helpingtesters.com/blog.• Scroll down and click on pagination	User should be navigated to the next page	Page refreshes and user remains on the same	High	High	ABC	Resolved
1474	Ecourse page	1.0	User is unable to enroll into new courses	User can't buy or opt for new courses	<ul style="list-style-type: none">• Navigate to www.helpingtesters.com/ecourse.• Click on a new course and click on enroll button.• Navigate back to ecourse page and check whether the new course is added	Newly added course should be visible in the dashboard	Courses are not added	Critical	High	PQR	Closed

 HelpingTesters		
Total bugs encountered		3
Bugs in	Open state	1
	Resolved state	1
	Closed state	1
Open Bugs with	High Priority	2
	Medium Priority	1
	Low Priority	0
Release version		1.0
Published date		09-11-2017

	A	B	C
1	Category	Label	Value
2	Bug ID	ID number	#123
3		Name	CART - Unable to add new item to my cart
4		Reporter	Mike A
5		Submit Date	03/04/16
6	Bug overview	Summary	When my cart contains one item, I am unable to add a second item via the add to cart button on a product page
7		URL	www.example.com/product/abc
8		Screenshot	www.example.com/screenshot123
9	Environment	Platform	Macintosh
10		Operating System	OS X 10.12.0
11		Browser	Chrome 53
12	Bug details	Steps to reproduce	add one item to cart > go to product abc via the search bar > add new item to cart via "add to cart" button (see screenshot) > go to cart
13		Expected result	The cart should contain 2 items
14		Actual result	The cart contains only 1 item
15	Bug tracking	Description	/
16		Severity	Major
17		Assigned to	/
18	Notes	Priority	High
19		Notes	/

Defect Summary By Status						
Sprint #	Closed	In Progress	New	Ready To Retest	Reopened	Total By Sprint
Sprint# 1	1	1	1	1	2	6
Sprint# 2	1	2	2	1	1	7
Sprint# 3	2	1	2	1	1	7
Total By Sprint	4	4	5	3	4	20

Using application Git hub

[Pricing] - Update the price to \$29 #6

Edit New issue

Open garygaspar opened this issue 13 minutes ago · 0 comments



garygaspar commented 13 minutes ago

Owner + @

Summary:
The price mentioned on the pricing page is not correct

Steps to Reproduce:
Go to the pricing page

Expected Results
The price for the basic plan should be \$29

Actual Results:
The price for the basic plan is currently be \$25

More Info

Source URL: <https://www.shopify.com/pricing>

Screenshot: [link](#)

Browser	Chrome 53.0.2785.143
Screen Size	1440 x 900
Viewport Size	1440 x 873
Zoom Level	100%
Pixel Ratio	@1x
OS	OS X 10.12.0
User Agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/53.0.2785.143 Safari/537.36

Projects

None yet

Labels

bug

Milestone

No milestone

Assignees

garygaspar

1 participant




Notifications

Unsubscribe

You're receiving notifications because you were assigned.

Lock conversation

Using application Jira

 Marker / MAR-131

[Pricing] - Update the price to \$29

Edit

Comment

Assign


To Do

In Progress

Workflow ▾

Admin ▾

Details

Type:	 Bug	Status:	TO DO (View workflow)
Priority:	↑ High	Resolution:	Unresolved
Labels:	None		
Environment:	> — Browser Chrome 54.0.2840.71 Screen Size 1920 x 1200 Viewport Size 1607 x 920 Zoom L...		

Description

Summary:
The price mentioned on the pricing page is not correct

Steps to Reproduce:
Go to the pricing page

Expected Results
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Actual Results:
The price for the basic plan is currently \$25

—


Source URL: <https://www.shopify.com/pricing>


Attachments


Drop files to attach, or [browse](#).




People

Assignee:  gary
[Assign to me](#)

Reporter:  Christophe Han

Votes: 

Watchers:  [Stop watching th](#)

Dates

Created: 1 minute ago

Updated: 1 minute ago

Agile

[View on Board](#)

HipChat discussions

Do you want to discuss this issue? [Connect](#)

Connect

Dismiss

Using application GitLab

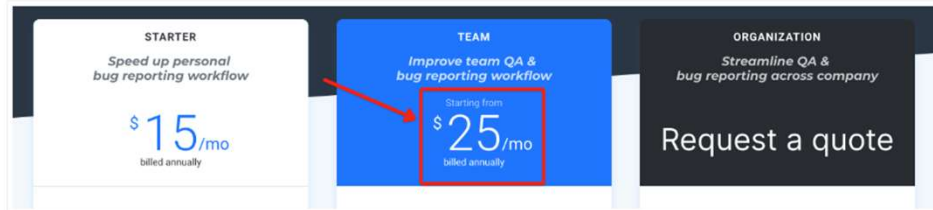
Gary > issue-tracker-private > Issues > #3

Open Opened 3 minutes ago by  Gary

Close issue

New issue

[Pricing] - Update the price to \$29



Summary: The price mentioned on the pricing page is not correct

Expected Results: The price for the Team plan should be \$29


Actual Results: The price for the Team plan should be \$25

More Info

Source URL: <https://marker.io/pricing>

Browser	Chrome 69.0.3497.100
Screen Size	1920 x 1080
OS	OS X 10.12.6
Viewport Size	1440 x 873
Zoom Level	100%
Pixel Ratio	@1x

Todo >>

Assignee Edit
 Gary
@garygasparcloud

Epic
This feature is locked. [Upgrade plan](#)


Milestone Edit
None


Time tracking ?
No estimate or time spent


Due date Edit
Nov 16, 2018 - remove due date

Labels Edit
Bug

Weight
This feature is locked. [Upgrade plan](#)

Confidentiality Edit
 Not confidential

Lock issue Edit
 Unlocked

1 participant


Notifications ☒

What in side the test cases

- The test script
 - The script which the testers must execute to test
 - For login successfully system
 1. lunch application
 2. Enter email, password and hit login
- The script can be reused
 - However, the flow may be change
 - The new test script required
 - The expected value may be change regarding to the input

What inside the test case

- The test case
 - The test data and the expected output
 - Use to execute the test

Test Scenario ID	Login-1	Test Case ID	Login-1A				
Test Case Description	Login – Positive test case	Test Priority	High				
Pre-Requisite	A valid user account	Post-Requisite	NA				
Test Execution Steps:							
S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
1	Launch application	https://www.facebook.com/	Facebook home				
2	Enter correct Email & Password and hit login button	Email id : test@xyz.com Password: *****	Login success				

Test Scenario ID		Login-1		Test Case ID		Login-1B	
Test Case Description		Login – Negative test case		Test Priority		High	
Pre-Requisite		NA		Post-Requisite		NA	
Test Execution Steps:							
S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
1	Launch application	https://www.facebook.com/	Facebook home				
2	Enter invalid Email & any Password and hit login button	Email id : invalid@xyz.com Password: *****	The email address or phone number that you've entered doesn't match any account. Sign up for an account.				
3	Enter valid Email & incorrect Password and hit login button	Email id : valid@xyz.com Password: *****	The password that you've entered is incorrect. Forgotten password?				

Provided test data

- Prepare for test
 - Data base required in most application

Username	Password
test@xyz.com	abcdef
valid@xyz.com	123312




Running the test

- Generate report
- Indicate pass/fail test

Test Scenario ID	Login-1	Test Case ID	Login-1A				
Test Case Description	Login – Positive test case	Test Priority	High				
Pre-Requisite	A valid user account	Post-Requisite	NA				
Test Execution Steps:							
S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
1	Launch application	https://www.facebook.com/	Facebook home	Facebook home	IE-11	Pass	[Priya 10/17/2017 11:44 AM]: Launch successful
2	Enter correct Email & Password and hit login button	Email id : test@xyz.com Password: *****	Login success	Login success	IE-11	Pass	[Priya 10/17/2017 11:45 AM]: Login successful

Test Scenario ID	Login-1		Test Case ID	Login-1B			
Test Case Description	Login – Negative test case		Test Priority	High			
Pre-Requisite	NA		Post-Requisite	NA			
Test Execution Steps:							
S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
1	Launch application	https://www.facebook.com/	Facebook home	Facebook home	IE-11	Pass	[Priya 10/17/2017 11:44 AM]: Launch successful
2	Enter invalid Email & any Password and hit login button	Email id : invalid@xyz.com Password: *****	The email address or phone number that you've entered doesn't match any account. Sign up for an account.	The email address or phone number that you've entered doesn't match any account. Sign up for an account.	IE-11	Pass	[Priya 10/17/2017 11:45 AM]: Invalid login attempt stopped
3	Enter valid Email & incorrect Password and hit login button	Email id : valid@xyz.com Password: *****	The password that you've entered is incorrect. Forgotten password?	The password that you've entered is incorrect. Forgotten password ?	IE-11	Pass	[Priya 10/17/2017 11:46 AM]: Invalid login attempt stopped

Test report example

SAP		INTEGRATION TEST DOCUMENT																													
		Mass Reversal Recurring Entry																													
		File Name: FICO_GL11_RECURRENJE_MASS RVRS.Docx																													
Process Owner:	Mapk, Marcus	SAP Release:	R/3 ECC 6.0																												
		Status:	PASSED																												
SCENARIO DESCRIPTION:	Mass Reversal Recurring Journal Entry																														
CASE DESCRIPTION:	Mass reversal of Recurring Journal Entry posted to GL in error.																														
		RUN DATE:	1/30/13 Client 280																												
<div> <div>+</div> <div>SETUP DATA / CONDITIONS</div> </div> <table border="1"> <thead> <tr> <th>DATA OBJECT</th> <th>VALUE/CODE</th> <th>DESCRIPTION</th> <th>COMMENTS AND NOTES</th> </tr> </thead> <tbody> <tr> <td>Company Code</td> <td>1000</td> <td></td> <td></td> </tr> <tr> <td>Debit Account</td> <td>911008</td> <td>General Ledger Account</td> <td></td> </tr> <tr> <td>Credit Account</td> <td>153200</td> <td>General Ledger Account</td> <td></td> </tr> <tr> <td>Document number</td> <td>100585373</td> <td></td> <td>Document number from original document posted</td> </tr> <tr> <td>Document number</td> <td></td> <td></td> <td>Document number from original document posted</td> </tr> <tr> <td>...</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				DATA OBJECT	VALUE/CODE	DESCRIPTION	COMMENTS AND NOTES	Company Code	1000			Debit Account	911008	General Ledger Account		Credit Account	153200	General Ledger Account		Document number	100585373		Document number from original document posted	Document number			Document number from original document posted	...			
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Debit Account	911008	General Ledger Account																													
Credit Account	153200	General Ledger Account																													
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Last changed on:		Last changed by:		Version: 1.0	Page: 1 of 4																										

QA