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SCENARIO AND TESTING RESULT

KTF UI'S WEBSITE

BY BIGBANG

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In this documentation, we will be describing the details of the tests that need to be performed for each target test item that was identified. These tests will be organized into the following sections:

1. Unit Testing
2. Function Testing
3. User Interface Testing
4. Load and Stress Testing
5. Configuration Testing
6. Security and Access Control Testing

Moreover, for each of these test motivators, test cases will be described in detail. For each test case, we will provide a description of the test case, the inputs (or steps to reproduce) of the test case, and the outputs (the expected results) of the test case.

1. Unit Testing

Unit testing will test individual components along with their functions in isolation. This low level form of testing will include black box testing and white box testing. In black box testing, the function's boundaries will be tested to see if any errors occur there. White box testing will verify that all the paths in the function are correct through basis path testing.

1.1 Function `pureal_init_style`

Initiation of `style.css` file.

1.1.1 *Black Box Testing*

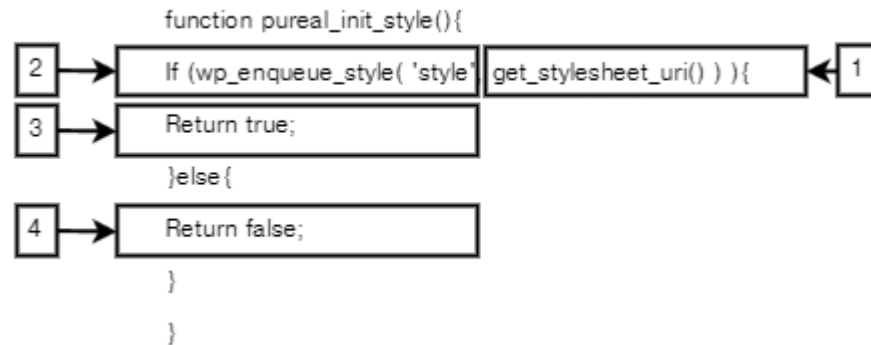
Test case 1 => `style.css` file existed

Test case 2 => `style.css` file not existed

Tester Name	Marvin Mitchell	
Test Date	April, 25th 2016	
Test Case	1	2
Expected Results	The web styling will works	The web work will properly, but there is no styling
Actual Results	The web styling works	The web work properly, but there is no styling
Bug Found?	No	No

1.1.2 White Box Testing

Basis Path Testing

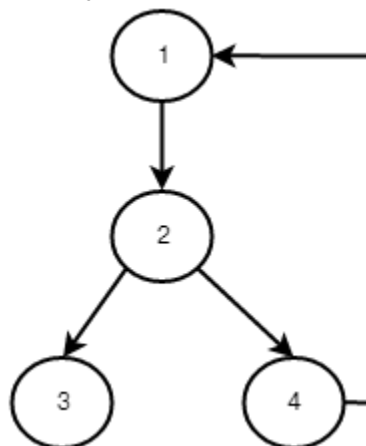


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Style.css file existed
Results	Function will return true

Path 2	1-2-4
Variables	Style.css not existed
Results	Function will return false

Path diagram for function *pureal_init_style*



1.2 Function `pureal_init_wp_setup`

Initiation of wordpress related file and functions through wordpress hooks

1.2.1 *Black Box Testing*

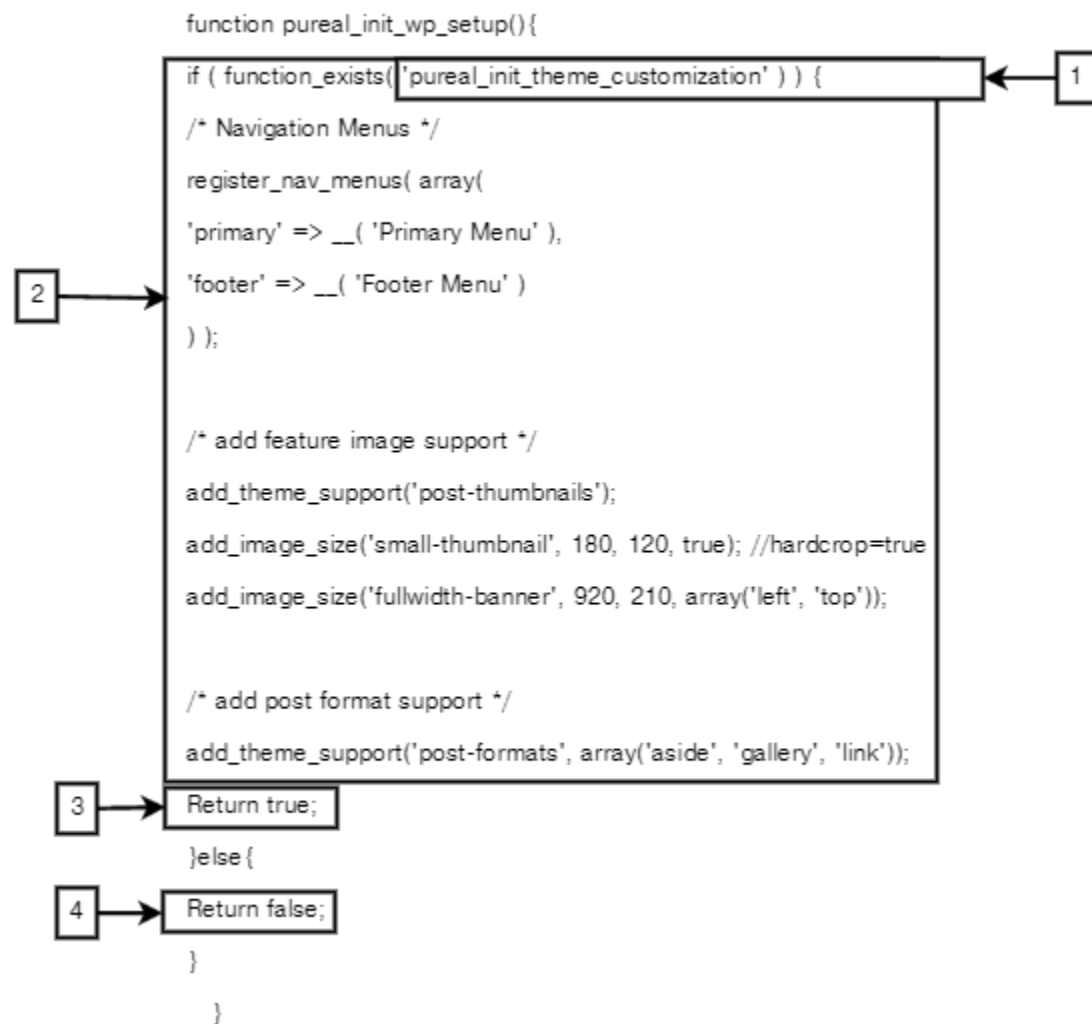
Test case 1 => correct function call

Test case 2 => wrong function call

Tester Name	Marvin Mitchell	
Test Date	April, 25th 2016	
Test Case	1	2
Expected Results	The function will return true	The server will throw an error
Actual Results	The function return true	The server throw an error
Bug Found?	No	No

1.2.2 White Box Testing

Basis Path Testing

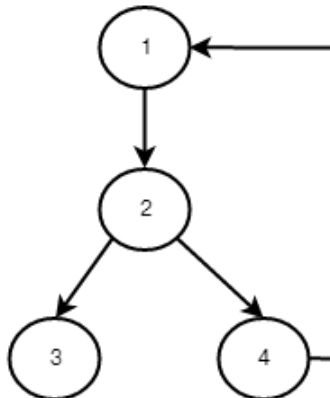


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Function existed
Results	Function return correct

Path 2	1-2-4
Variables	Function not existed
Results	Function return false

Path diagram for function *pureal_init_wp_setup*



1.3 Function *pureal_sanitize_image*

Filter images to be included in the post

1.3.1 **Black Box Testing**

Test case 1 => the file is not image

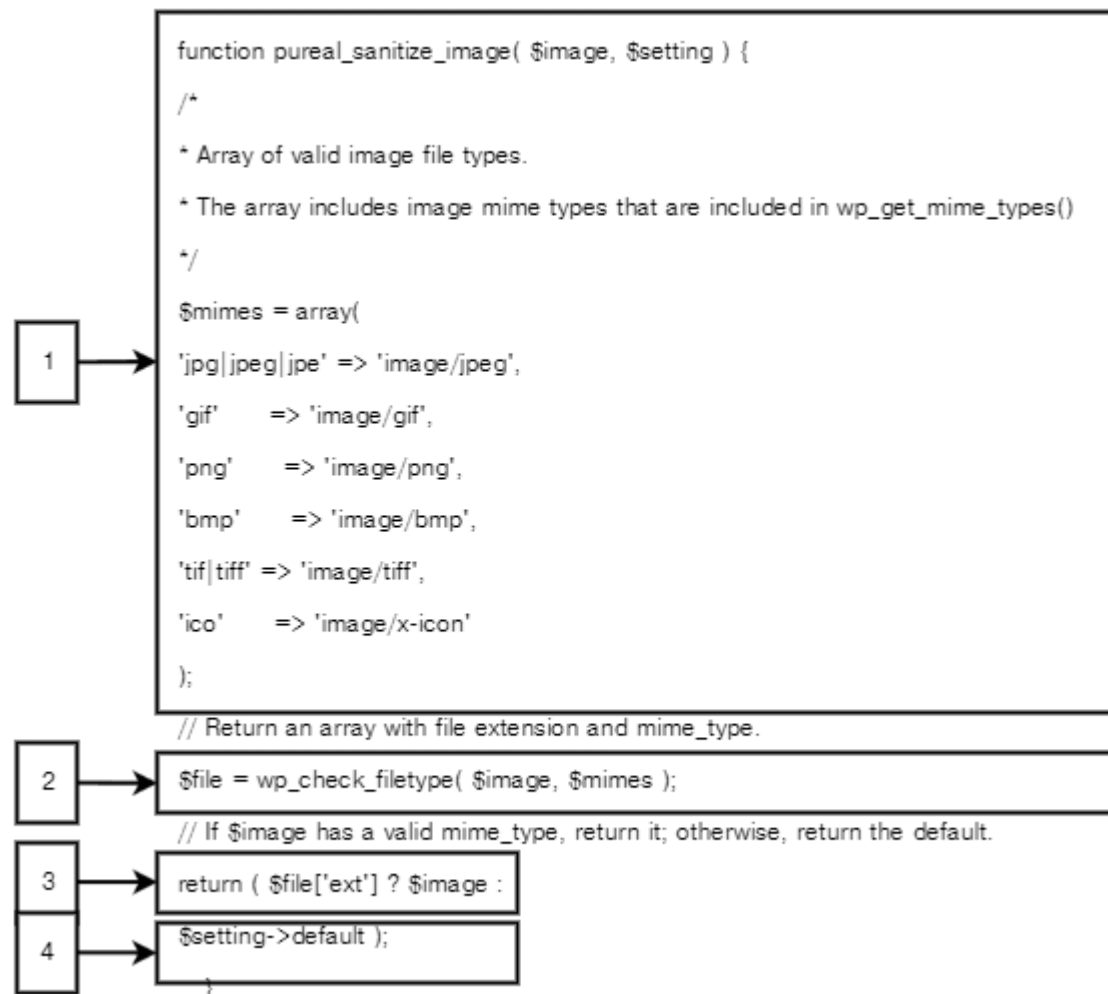
Test case 2 => the file is an unknown image

Test case 3 => the file is an image

Tester Name	Marvin Mitchell		
Test Date	April, 25th 2016		
Test Case	1	2	3
Expected Results	The function will return false	The function will return false	The function will return true
Actual Results	The function return false	The function return false	The function return true
Bug Found?	No	No	No

1.3.2 White Box Testing

Basis Path Testing

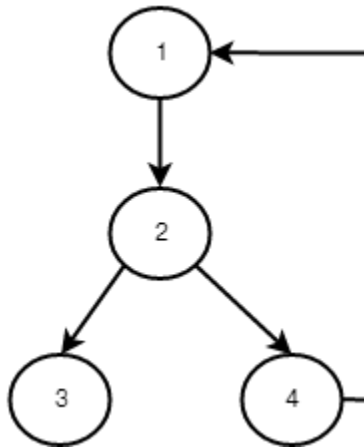


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	File is an image with valid mime type
Results	Function return correct

Path 2	1-2-4
Variables	File is an image without valid mime type or not an image
Results	Function return false and back to default

Path diagram for function *pureal_sanitize_image*



1.4 Function *pureal_init_widget*

Initialize widget location for wordpress

1.4.1 Black Box Testing

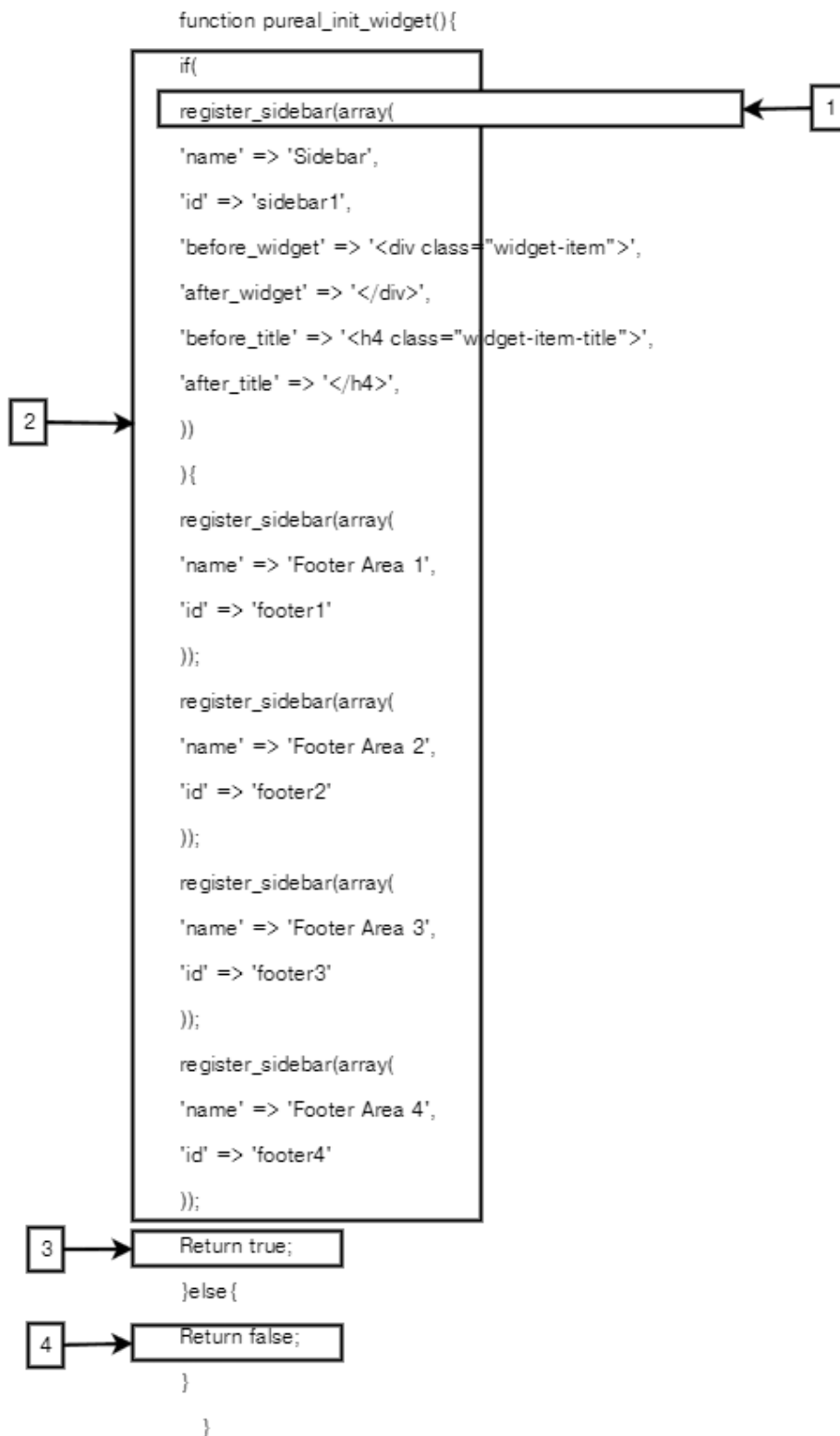
Test case 1 => wrong widget location

Test case 2 => wrong wordpress function call

Tester Name	Marvin Mitchell	
Test Date	April, 25th 2016	
Test Case	1	2
Expected Results	The function will return false	The server will throws an error
Actual Results	The function return false	The server throws an error
Bug Found?	No	No

1.4.2 White Box Testing

Basis Path Testing

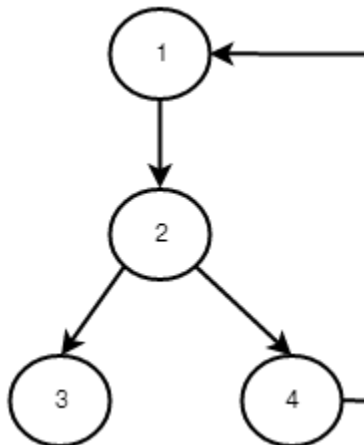


Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Name and id are registered
Results	Function return correct

Path 2	1-2-4
Variables	Name and id are not registered
Results	Function return false

Path diagram for function *pureal_init_widget*



1.5 Function *pureal_set_excerpt_length*

Edit paragraph excerpt length

1.5.1 **Black Box Testing**

Test case 1 => set the excerpt to be higher than 0

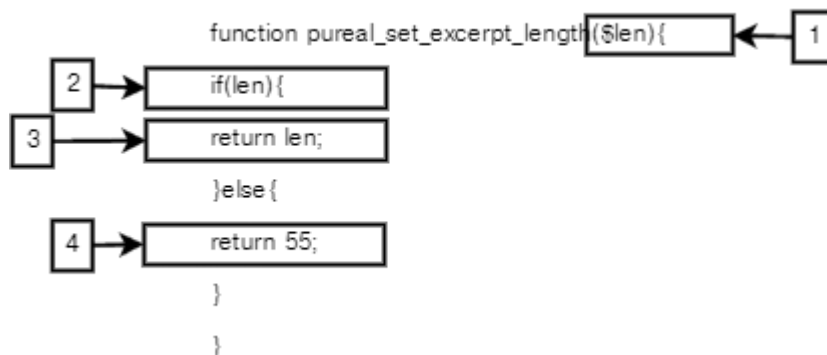
Test case 2 => set the excerpt to 0

Test case 3 => set the excerpt to be lower than 0

Tester Name	Marvin Mitchell		
Test Date	April, 25th 2016		
Test Case	1	2	3
Expected Results	The paragraph will be trimmed to the specified excerpt length	The paragraph will return false and input the default length	The paragraph will return false and input the default length
Actual Results	The paragraph trimmed to the specified excerpt length	The paragraph return false and input the default length	The paragraph return false and input the default length
Bug Found?	No	No	No

1.5.2 White Box Testing

Basis Path Testing

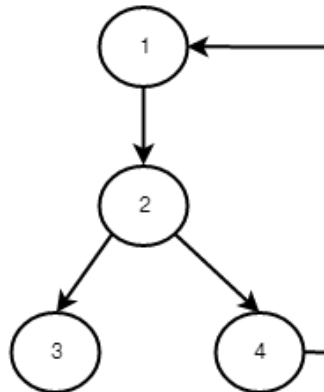


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 2	1-2-3
Variables	Length input higher than 0
Results	Function return true and input the length

Path 2	1-2-4
Variables	Length input is 0 or less
Results	Function return false and input the default

Path diagram for function *pureal_set_excerpt_length*



1.6 Function *pureal_init_theme_customization*

Initialization of theme customizer API. Customizer API responsible for dynamically change the theme styling.

1.6.1 Black Box Testing

Test case 1 => wrong Customizer function call

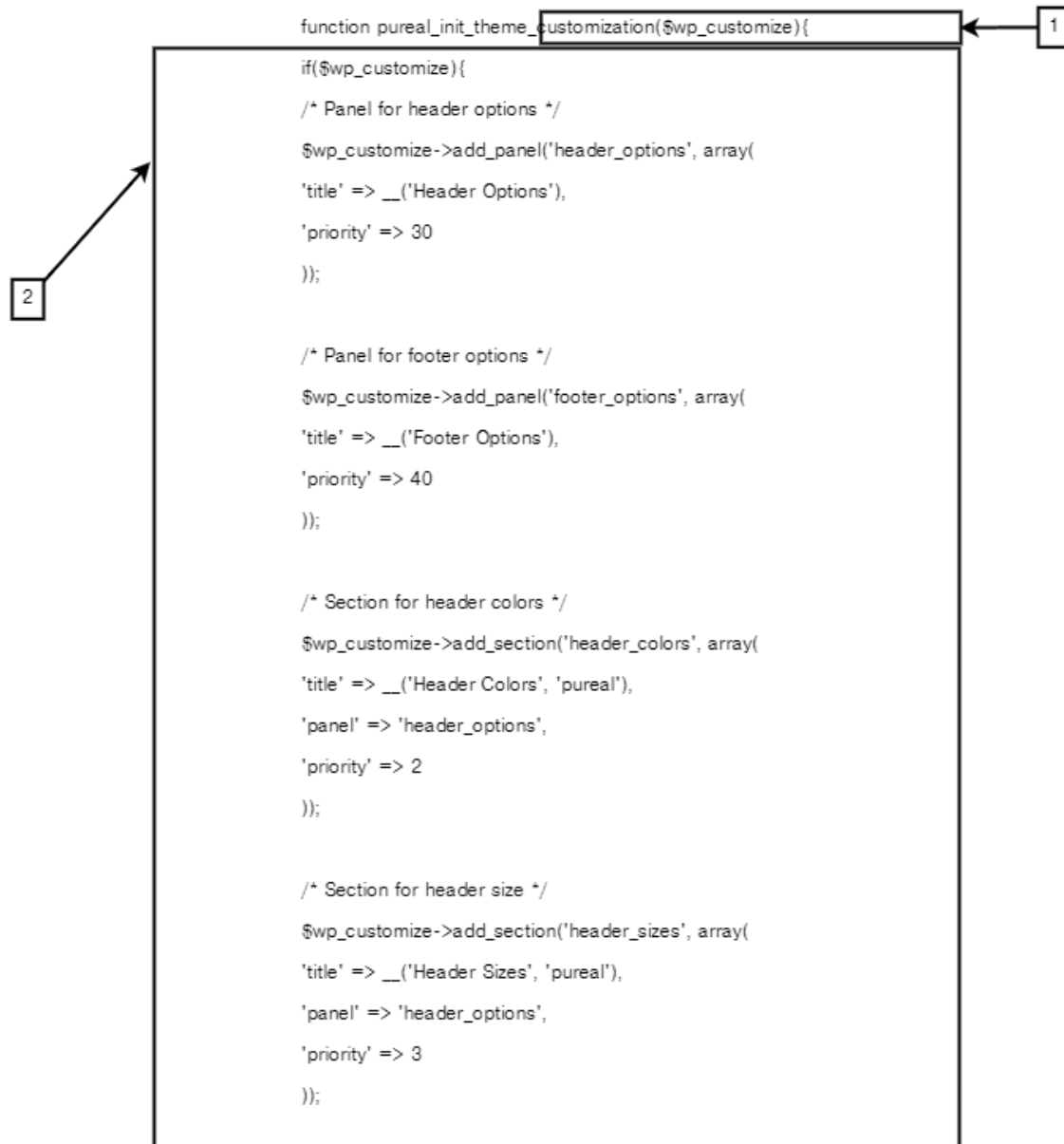
Test case 2 => call the right Customizer function call

Tester Name	Marvin Mitchell	
Test Date	April, 25th 2016	
Test Case	1	2
Expected Results	The server will throw an error.	The styling of the theme will be able to change dynamically according to the user needs
Actual Results	The server throw an error.	The styling of the theme able to change dynamically according to the user needs

Bug Found?	No	No
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1.6.2 White Box Testing

Basis Path Testing



```

/* Header Link Color */
$wp_customize->add_setting('header_link_color', array(
    'default' => '#fff',
    'transport' => 'postMessage'
));

$wp_customize->add_control(new WP_Customize_Color_Control($wp_customize,
    'header_color_control', array(
        'label' => __('Header Link Color', 'pureal'),
        'section' => 'header_colors',
        'settings' => 'header_link_color'
    ) ));

.....

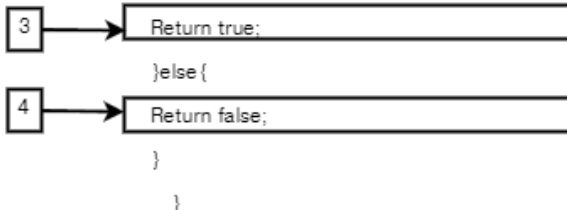
/* Footer Link Hover Color and opacity */
$wp_customize->add_setting('footer_link_hover_color', array(
    'default' => '#fff',
    'transport' => 'postMessage'
));

$wp_customize->add_control(new WP_Customize_Color_Control($wp_customize,
    'footer_link_hover_control', array(
        'label' => __('Footer Link Hover Color', 'pureal'),
        'section' => 'footer_colors',
        'settings' => 'footer_link_hover_color'
    ) ));

$wp_customize->add_setting('footer_link_hover_opacity', array(
    'default' => 70,
    'transport' => 'postMessage'
));

$wp_customize->add_control('footer_link_hover_opacity_control', array(
    'label' => __('Footer Link Hover Opacity', 'pureal'),
    'type' => 'range',
    'section' => 'footer_colors',
    'settings' => 'footer_link_hover_opacity'
));

```

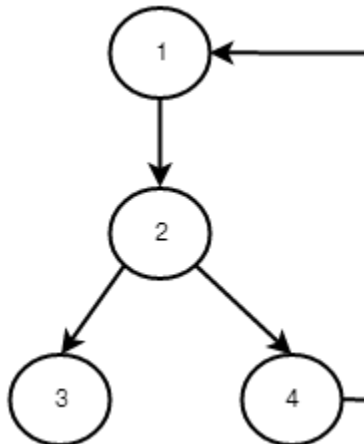


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Function customizer existed
Results	Function return correct

Path 2	1-2-4
Variables	Function customizer not existed
Results	Function return false

Path diagram for function *pureal_init_theme_customization*



1.7 Function *pureal_update_custom_css*

The function needed to update style.css dynamically

1.7.1 Black Box Testing

Test case 1 => wrong function call

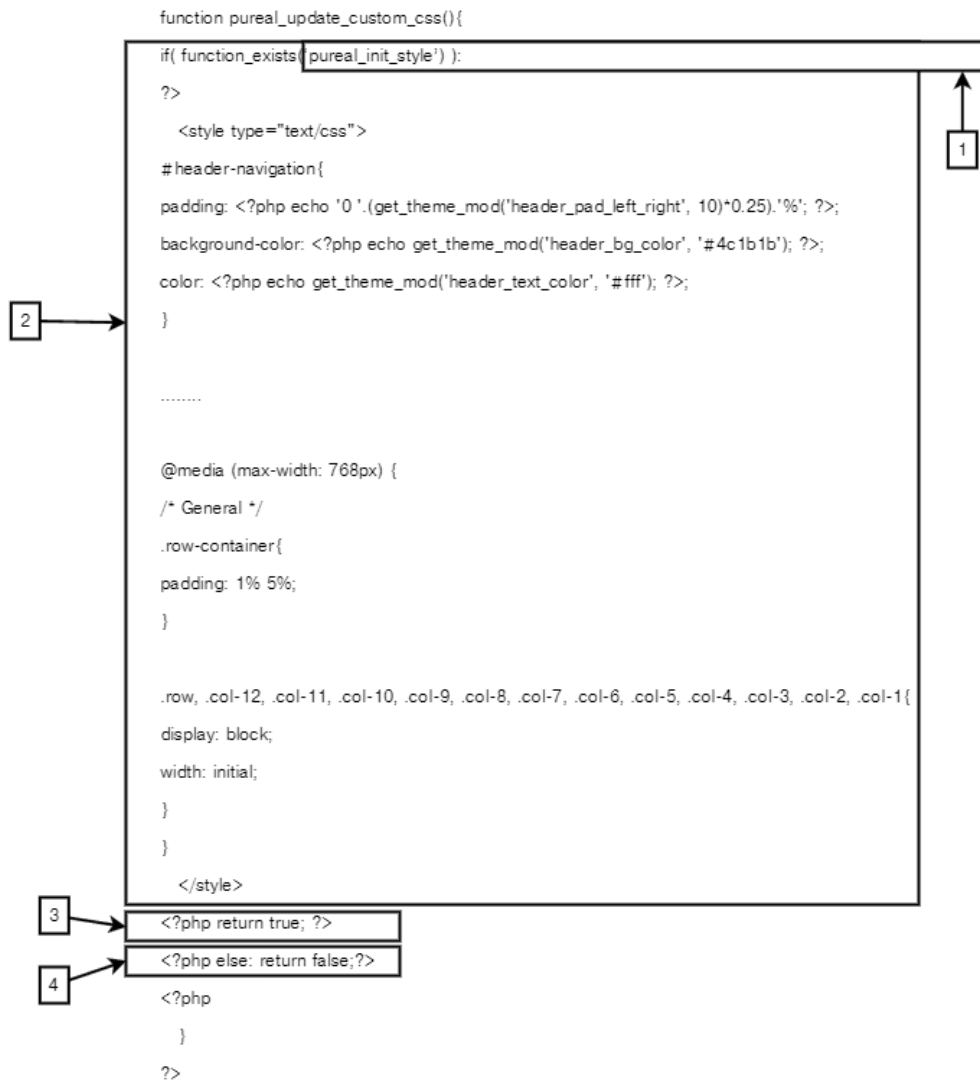
Test case 2 => Wrong css property

Test case 3 => right function call

Tester Name	Marvin Mitchell		
Test Date	April, 25th 2016		
Test Case	1	2	3
Expected Results	The server will throw an error	The web styling will behave weird.	The style.css file will be updated accordingly.
Actual Results	The server throw an error	The web styling behave weird.	The style.css file updated accordingly.
Bug Found?	No	No	No

1.7.2 White Box Testing

Basis Path Testing

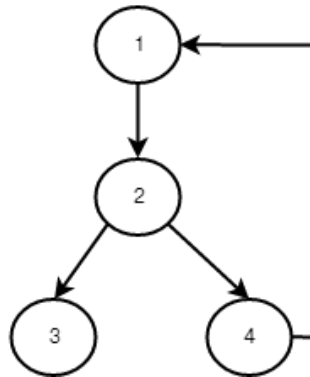


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Function <i>pureal_init_style</i> existed
Results	Php return correct

Path 2	1-2-4
Variables	Function <i>pureal_init_style</i> not existed
Results	Php return false

Path diagram for function *pureal_update_custom_css*



1.8 Function *pureal_preview_js*

The javascript needed for Customizer API to dynamically change the theme styling

1.8.1 Black Box Testing

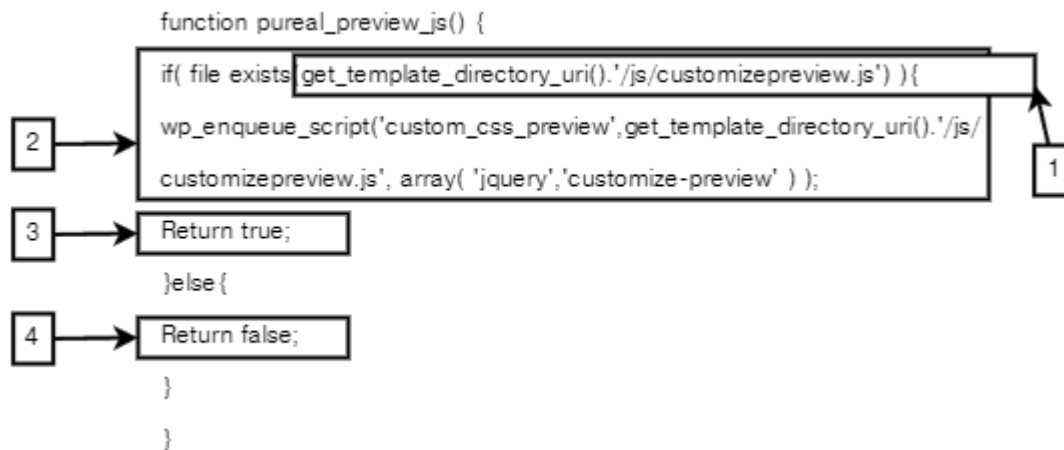
Test case 1 => wrong function call

Test case 2 => include the right javascript file

Tester Name	Marvin Mitchell	
Test Date	April, 25th 2016	
Test Case	1	2
Expected Results	The server will throw an error	The web styling will change dynamically according to the user needs.
Actual Results	The server throw an error	The web styling change dynamically according to the user needs.
Bug Found?	No	No

1.8.2 White Box Testing

Basis Path Testing

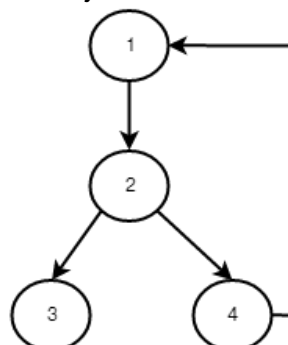


Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-2-4

Path 1	1-2-3
Variables	Template directory correct and include javascript file
Results	Function return correct

Path 2	1-2-4
Variables	Template directory wrong and exclude javascript file
Results	Function return false

Path diagram for function *pureal_preview_js*



1.9 Function yScrollHandler

The javascript function to trigger css3 animation when scrolling occur.

1.9.1 Black Box Testing

Test case 1 => animations array is empty

Test case 2 => animations array length is greater than 0

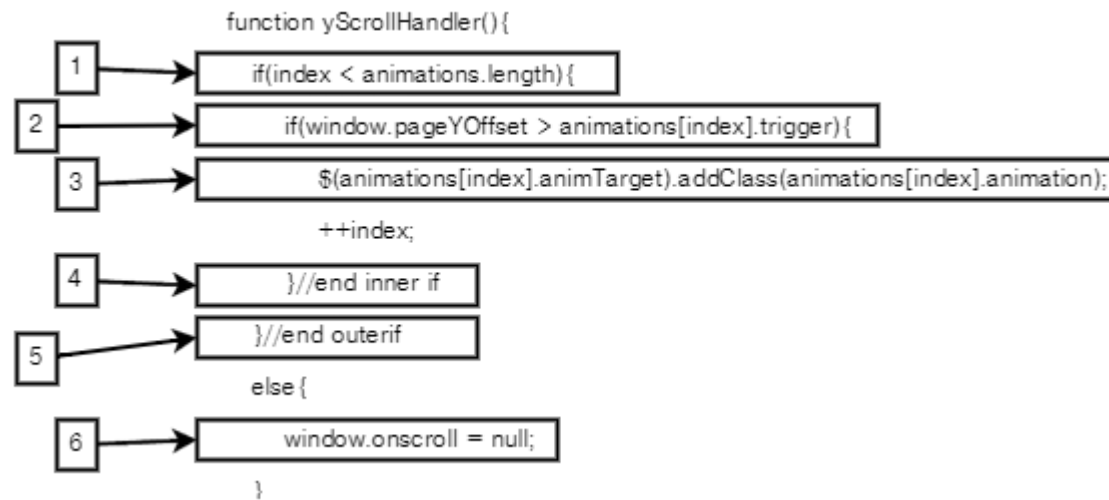
Test case 2.1 => window scroll offset is bigger than the animation height trigger

Test case 2.2 => window scroll offset is smaller than the animation height trigger

Tester Name	Marvin Mitchell			
Test Date	April, 25th 2016			
Test Case	1	2	2.1	2.2
Expected Results	The window scroll event will disabled	The scroll offset will be checked against all animation height trigger	Animation will occur	Animation will not occur
Actual Results	The window scroll event disabled	The scroll offset checked against all animation height trigger	Animation occurred	Animation not occurred
Bug Found?	No	No	No	No

1.9.2 White Box Testing

Basis Path Testing



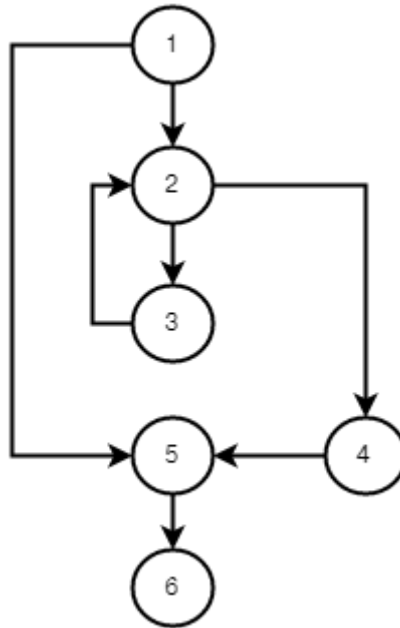
Tester Name	Anissa Lintang
Path 1	1-2-3
Path 2	1-5-6
Path 3	1-2-4-5-6

Path 1	1-2-3
Variables	Animations array length is greater than 0 and window scroll offset is bigger than the animation height trigger
Results	Window scroll enabled and animation occurred

Path 2	1-5-6
Variables	Animations array is empty
Results	The window scroll event disabled and animation not occurred

Path 3	1-2-4-5-6
Variables	Animations array length is greater than 0 but window scroll offset is lesser than the animation height trigger
Results	The window scroll event disabled and animation not occurred

Path diagram for function *yScrollHandler*



2. Function Testing

This section is concerned with testing the functions (or requirements) of the software. This is a critical aspect of the testing effort, as it ensures that the software meets the requirements, and thus ensures acceptance by the users. Despite time restrictions, we have included all the major product functions as well as test cases for each one. The following sections are devoted to the major functions that were selected as testing targets.

Test Case 1	Request profile
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) profile from the website
Input (Steps)	1. Open the website

	2. Select and Open the profile page
Expected Results	The website will shows the profile that the user access
Actual Results	The website shows the profile that the user access

Test Case 2	Request information
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) information from the website
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Select and Open the page contained information the user want to know
Expected Results	The website will shows the information that the user access
Actual Results	The website shows the information that the user access

Test Case 3	Request multimedia
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) multimedia from the website
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Select and Open the page contained multimedia
Expected Results	The website will shows and play (if video) the multimedia that the user access
Actual Results	The website shows and play the slideshow multimedia that the user access

Test Case 4	Insert content
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	Admin can insert new content to the website
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Admin login to dashboard 3. Admin select new content type 4. Insert the content
Expected Results	The website will have a new content that corresponding to the admin content inserted
Actual Results	The website have a new content that corresponding to the admin content inserted

Test Case 5	Edit and Update content
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	Admin can edit and update existing content to the website
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Admin login to dashboard 3. Admin select existing content that want to edit and update 4. Edit and update the content
Expected Results	The website will have a content that edited and updated corresponding to the admin content
Actual Results	The website have a content that edited and updated corresponding to the admin content

3. User Interface Testing

To test the User Interface, each functionality described in the design document will be verified to see if it has been implemented correctly. A schema will be used to test (unit), what is the purpose of the test (what is tested), what are the inputs (from the user for instance), what is the expected result and also what is the effective (real result).

Test Case 1	Test Slideshow Image Profile
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can click three bullets in order to change the big profile picture
Input (Steps)	<ol style="list-style-type: none">1. Open the website2. Click Bullets Button in slideshow
Expected Results	The website will shows the picture multimedia that the user clicked
Actual Results	Picture slide to the left change to another picture without clicking the bullet button or not.

Test Case 2	Check Achievement Page
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) the whole Achievement description in Achievement Page
Input (Steps)	<ol style="list-style-type: none">1. Open the website2. Click menu page Achievement Page
Expected Results	The website will change directly into Achievement Page
Actual Results	The website go to Achievement page directly

Test Case 3	Check Project Page
Tester Name	Dion Edo

Test Date	April, 25th 2016
Test Case Description	User can request and access (see) the whole Project info and description in Project Page
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Click menu page Project Page
Expected Results	The website will change directly into Project Page
Actual Results	The website go to Project page directly

Test Case 4	Check Gallery Page
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) the whole Gallery info and description in Gallery Page
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Click menu page Gallery Page
Expected Results	The website will change directly into Gallery Page
Actual Results	The website go to Gallery page directly

Test Case 5	Check Contact Page
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) the whole Contact info and description in Contact Page
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Click menu page Contact Page
Expected Results	The website will change directly into Contact Page
Actual Results	The website go to Contact page directly

Test Case 6	Check Social Media Access Link
Tester Name	Dion Edo
Test Date	April, 25th 2016
Test Case Description	User can request and access (see) Social Media of KTF UI
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Click each social media button link (Youtube, Instagram, Facebook and Twitter)
Expected Results	The user bring into social media which button clicked (Twitter, FB, Youtube and Instagram)
Actual Results	The website brings user to the social media which clicked

Test Case 7	Check Integrity Data each Page
Tester Name	Dion Edo F
Test Date	April, 25th 2016
Test Case Description	Test conducted in order to see the data matching with the data given.
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. See every page and matching the data(title, description, information, icon) with the data given by client.
Expected Results	Data matching.
Actual Results	Because of client don't give data about all of description yet. So actual results is there is no data yet.

Test Case 8	Check Font each page
Tester Name	Dion Edo F
Test Date	April, 25th 2016
Test Case Description	Client want the website font using Din regular, century schoolbook, stackyard personal, din light alternate, din medium
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Checking matching, consistency every font in website with client expected

Expected Results	Font has consistency and using font style suitable with client expectancy
Actual Results	Font has consistency and using font style suitable with client expectancy

Test Case 9	Check color in element each page
Tester Name	Dion Edo F
Test Date	April, 25th 2016
Test Case Description	Client want the color of the website is white, orange gold and grey
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Checking consistency color in header, footer, and link
Expected Results	Color has consistency and suitable with client expectancy
Actual Results	Header has white color, footer has grey color and link has orange gold color. All of it has consistency in every page.

Test Case 10	Check Website Responsiveness
Tester Name	Dion Edo F
Test Date	April, 25th 2016
Test Case Description	User can see the website through mobile gadget(Handphone and tablets)
Input (Steps)	<ol style="list-style-type: none"> 1. Open the website 2. Press Ctrl + Shift + M (Toggle Device Mode) 3. Choose device model device mobile S(320px), M(375px), L(425px), Tablet(768px), Laptop(1024px), Laptop L (1440px).
Expected Results	Website has responsiveness and be able to suitable of every model device.
Actual Results	Website has responsiveness and be able to suitable of every model device. The content responsively matching to every model device so that user still can see it clear.

4. Load and Stress Testing

Load testing is normally concerned with testing the system beyond the limits it was designed for. However, due to restrictions we have placed on the number of visitor (unknown number) that can access in one time, we cannot, for instance, test to see if the website works with maximum visitor (undefinitely yet). Therefore, we will be testing the website as close as possible to the limits it was designed for. In this scenario, we will re-evaluate the website's functionalities and response times. The tools used for the test is Jmeter.

Test Case 1	Continues user visit
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Test Description	On this test the website will be tested with the continues visit from multiple user in every 5 second for 30 minutes, the test conducted with jmeter application
Input (Step)	<ol style="list-style-type: none">1. Open Jmeter Application2. Make a "Thread Group"3. In "Thread Group" Input "Number of Thread" set to 4, "Ramp-up Period" set to 2 and set "Loop" to forever4. Add "HTTP request Defaults" to "Thread Group", and fill "Server Name or IP" to ktfui.hol.es5. Add "HTTP Cookie Manager" to "Thread Group"6. Add "HTTP request" to "Thread Group", and fill "Server Name or IP" to ktfui.hol.es7. Add "Summary Report", "View Result Tree", "View Result in Table", and "Graph Results" to "Thread Group" for better view result testing8. Start the test along 30 minute9. After 30 minute stop the test, and view the result
Expected Results	Error result from the website can be minimize. Standard deviation and latency from result test is not too high
Actual Results	From the testing already conduct error result from the test is 24,52% its mean from 100% request already made only 24,52% request with error. And Standard deviation from the test is 403,66 with is quite good because it's still under the number of average time response 529

Test Case 2	Many user visit the website in 1 time
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Test Description	Access the websites with many user (the number of user will be described below) in 1 time
Input (Step)	<ol style="list-style-type: none"> 1. Open Jmeter Application 2. Make a "Thread Group" 3. In "Thread Group" Input "Number of Thread" set to 1000, "Ramp-up Period" set to 1 and set "Loop" to 1 4. Add "HTTP request Defaults" to "Thread Group", and fill "Server Name or IP" to ktfui.hol.es 5. Add "HTTP Cookie Manager" to "Thread Group" 6. Add "HTTP request" to "Thread Group", and fill "Server Name or IP" to ktfui.hol.es 7. Add "Summary Report", "View Result Tree", "View Result in Table", and "Graph Results" to "Thread Group" for better view result testing 8. Start the test 9. View the result
Expected Results	Error result from the website can be maximize and standard deviation is high
Actual Results	From the testing already conduct error result from the test is 100% its mean all request to website is error. And Standard deviation from the test is too 1000 with is really bad because it's still over the number of average time response 10. This problem happen maybe because we are using free hosting website, and free hosting website have very limited bandwidth.

5. Configuration Testing

Configuration testing is concerned with testing the application under different environment configurations the users may have. For the KTF UI Website, we will be focusing on testing the website under different browser. As per the requirements document, this includes Mozilla Firefox, Google Chrome, IE and Safari. In order to simulate these different client environments, we will be using well-known different browser directly. In order to test the KTF UI Website under several different browser.

Test Case 1	Access website via Mozilla Firefox
Tester Name	Anissa Lintang
Test Date	April, 25th 2016
Test Description	Test and see if the website can be accessed and work properly via browser Mozilla Firefox
Expected Results	Website will be successfully accessed and work properly
Actual Results	Website successfully accessed and work properly

Test Case 2	Access website via Google Chrome
Tester Name	Anissa Lintang
Test Date	April, 25th 2016
Test Description	Test and see if the website can be accessed and work properly via browser Google Chrome
Expected Results	Website will be successfully accessed and work properly
Actual Results	Website successfully accessed and work properly

Test Case 3	Access website via Safari
Tester Name	Anissa Lintang
Test Date	April, 25th 2016
Test Description	Test and see if the website can be accessed and work properly via browser Safari
Expected Results	Website will be successfully accessed and work properly
Actual Results	Website successfully accessed and work properly

6. Security and Access Testing

Security and access control testing have to be conducted to ensure security system especially security for the admin system, it is necessary because this testing will be test the website how well can handle and prevent unauthorized user to access the admin system. In this testing we will conduct security system test for admin login, and see how well security system from admin login to prevent unauthorized user to enter the admin system. Because security and access system in this website has been already setup by CMS Wordpress, then we will only do black box testing for this testing.

Test Case 1	Login admin system using wrong username and wrong password
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Expected Results	Login will failed
Actual Results	Login failed

Test Case 2	Login admin system using correct username and wrong password
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Expected Results	Login will failed
Actual Results	Login Failed

Test Case 3	Login admin system using wrong username and correct password
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Expected Results	Login will failed
Actual Results	Login failed

Test Case 4	Login admin system using correct username and correct password
Tester Name	Kega Kurniawan
Test Date	April, 25th 2016
Expected Results	Login will succeed
Actual Results	Login success

-END OF REPORT-