# Software Engineering with Group Project Testing Report

Project: Web Browser

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# Testing Approach:

Throughout the testing for this document, we did Black Box testing. Black Box Testing is the technique in which we focus only on the output generated against the given input and ignore the internal structure of the system including design, implementation. It only examines the functionality of the application. It is also usually known as functional testing.

# 1. Test Cases for User Sign In

First test case is to login on the application. Only authorized users can login by putting their username and password.

Step	Description	<b>Expected Results</b>	Status
Made an account	Tried a login through this account	Successful login expected	Pass
Empty fields	Tried a login through at least one empty field	Should not sign-in and notify that fields are empty	Pass
Wrong try	Tried a valid user name but wrong password	Login will not be successful	Pass
Wrong try	Tried a wrong user name but valid password	Login will not be successful	Pass

## Sign-in Image:

In the below given picture, if user try to login and the required fields are empty then application is showing the error dialogue of empty fields.

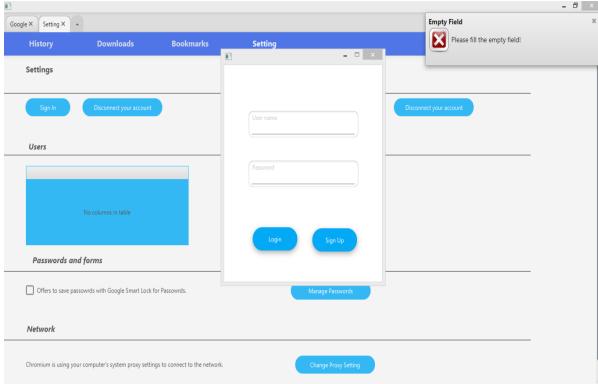


Figure 1: Sign in Empty Fields

# 2. Test Cases for Signup:

Step	Description	<b>Expected Results</b>	Status
Empty fields	User tries to sign-up with empty fields	Application should notify that fields are empty	Pass
Invalid inputs	User tries to sign-up with invalid inputs	Application should notify that fields have invalid inputs	Pass
Cancel button	User clicks on cancel button after typing in fields	There should be no sign-up and sign-up window should be closed	Pass
Sign-up button	User clicks sign-up button after typing in the fields	There should be sign- up if the inputs are valid	Pass

Sign-Up Image:

In the below given picture, if user try to sing-up and the required fields are empty then application is showing the error dialogue of empty fields.

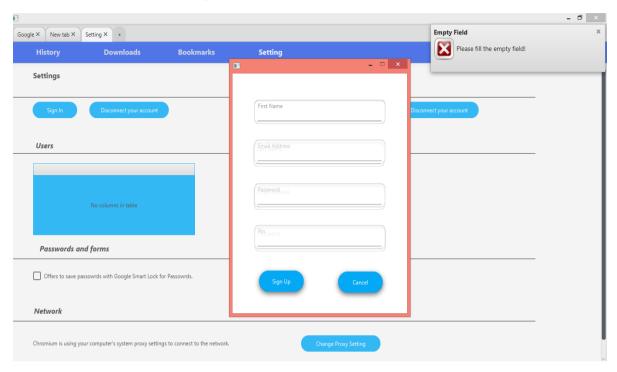


Figure 2: Signup Empty Fields

In the below given picture, if user try to enter wrong inputs, the application notifies for the wrong inputs.

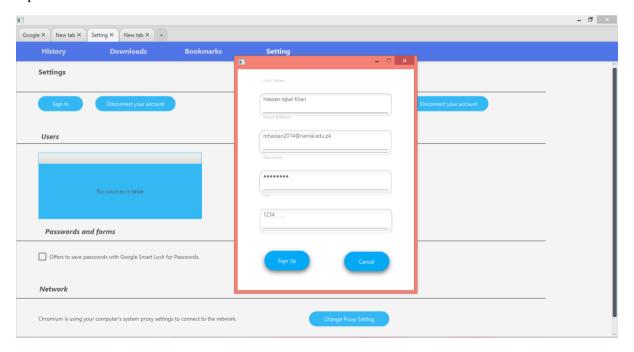


Figure 3: Signup valid Inputs

## 3. Test cases for History:

Step	Description	<b>Expected Results</b>	Status
Searched new link	When user opened new link	Link, date and time added to the History table	Pass
Select Delete Button	When user select delete button	Application should show confirmation message for deleting the history.	Pass
Select Cancel Button	When user select cancel button	Application should not delete the history	Pass
Order History in Ascending/ Descending	When user try to see recently opened links at the start.	History table should show recently opened links at the top of the table.	Pass

#### History Image:

In the below given picture history is shown, whenever user opens any link, that link is added to the history table with its time, date and title.

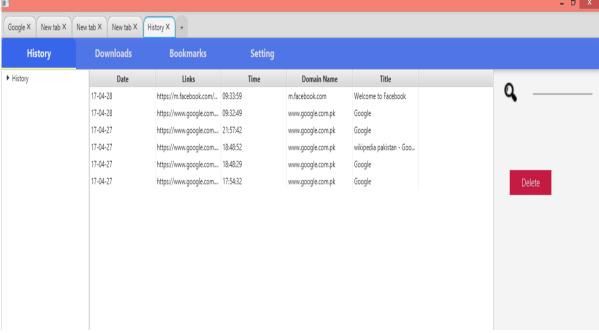


Figure 4: History

In the below given picture history is shown, whenever user try to delete history a confirmation message is displayed which ask user to delete history or not.

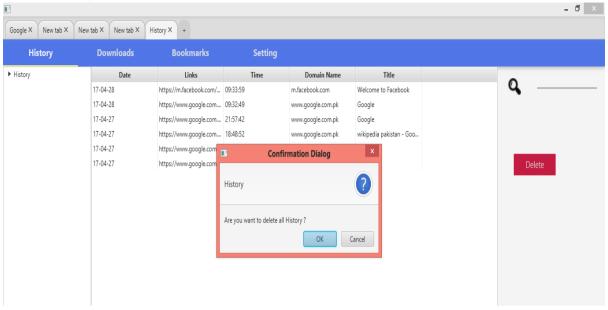


Figure 5: History Delete Button Clicked

In the below given picture history is shown, whenever user try to delete history a confirmation message is displayed which ask user to delete history or not. If user clicked ok button the history is deleted and "history has been deleted" message is displayed.

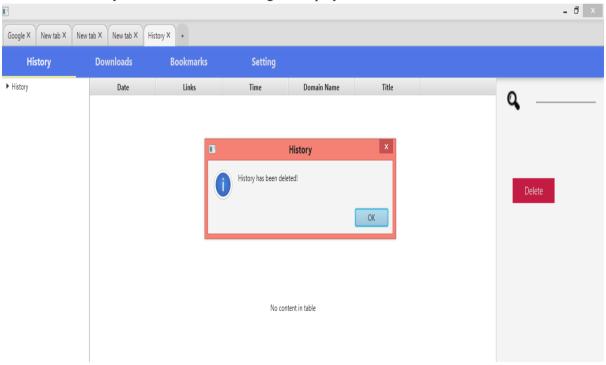


Figure 6: History Deleted

# 4. Test case for Bookmarks:

Step	Description	<b>Expected Results</b>	Status
New link opened and Bookmarked button clicked	When user open new link and clicked bookmarks button.	Notification window should open and ask user to enter the title of the bookmarked link	Pass
New folder creation in bookmarks	When user open new link and clicked bookmarks button there is option to create new folder and store the link in that folder	New folder should be created and link should be stored in it	Pass
Save button clicked	When user click bookmark button and entered the title of the of the link and then clicked save button	Link should be added to the bookmarks table.	Pass
Cancel button clicked	When user open new link and clicked bookmarks button there is option to cancel this process	When cancel button is clicked there should be no change in bookmarks, it should remain as it was previously.	Pass

#### Bookmarks Image:

In the below given picture, whenever user open any link and want to bookmark that page for future use, user will press bookmarks button and a popup will appear which will ask user for the folder to which this link will be saved along with its title.

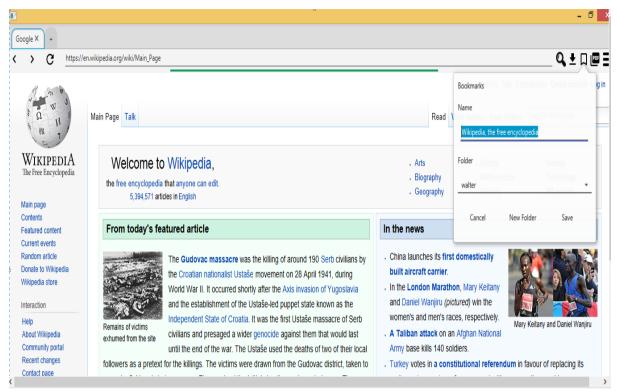


Figure 7: Bookmarks Icon Clicked

In the below given picture, if user want to create new folder for saving links, user will click new folder button and dialogue will appear which will ask user to enter the name of the folder to be created.

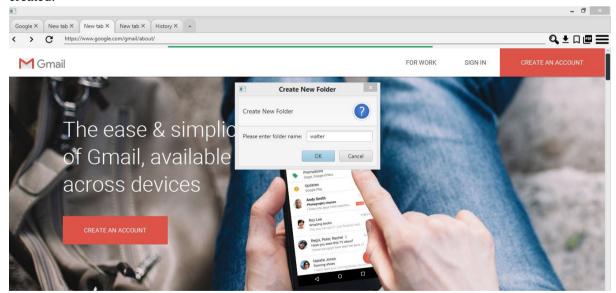


Figure 8: Create Folder in Bookmarks

When user clicked bookmark button from the hamburger, a new tab will appear which contains all the links along with the time and date in their respective folders. The below given picture shows the links along with their folder names.

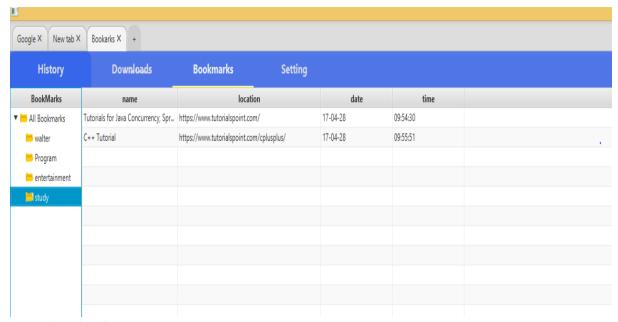


Figure 9: Bookmarks

## 5. Test cases for Downloads:

Step	Description	<b>Expected Results</b>	Status
Video, audio or any other document opened and clicked download button	When user tried to open any downloadable file	Application should start downloading the file and	Pass
Downloaded file saved	When user opened downloadable file and clicked download button.	Window should appear to ask for specific place where downloaded file will be saved.	Pass

### Downloads Image:

In the below given picture, whenever user open any PDF document link and want to download that document, user clicked download icon and application will start downloading PDF document and a confirmation message will be displayed to show that downloading has started.

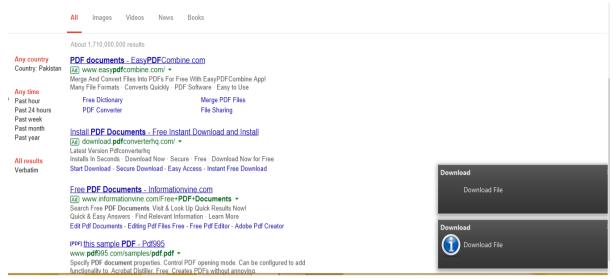


Figure 10: Downloading PDF file

In the below given picture, whenever user open any video link and want to download that video, user clicked download icon and application will start downloading video file and a confirmation message will be displayed to show that downloading has started.

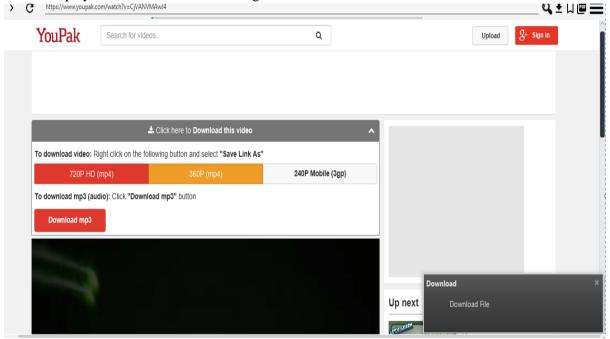


Figure 11: Downloading video file

#### 6. Test Case for New Tab:

Step	Description	<b>Expected Results</b>	Status
New tab icon clicked	User opened browser and clicked new tab	Browser should open a new tab and set that	Pass

	icon.	tab as the home page of Google Chrome	
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#### New tab Image:

In the below given picture user has opened any tab and wants to open another tab, user will just click "+" button and a new tab will be opened successfully.

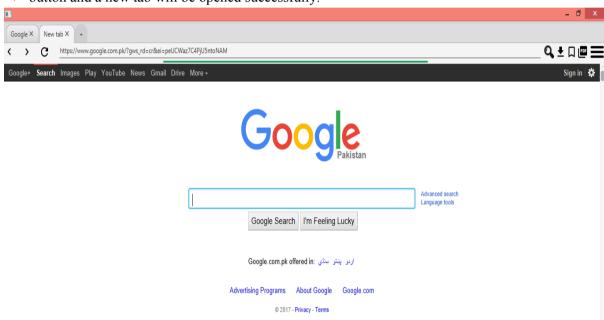


Figure 12: New Tab

#### 7. Test cases for Multi tab:

Step	Description	Expected Results	Status
New tab icon clicked	User when clicked the new tab icon that is plus sign	New tab should be opened	Pass
Cross button clicked	User when clicked the cross button of the opened tab	Tab should be closed	Pass
Switching between different tabs	When different tabs are open, switching between tabs by	Each tab should be opened when clicked	Pass

clicking on them		
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#### Multi-tab Image:

In the below given picture user has opened many tab and wants to open another tab, user will just click "+" button and a new tab will be opened successfully. Thus the multi tabbing is working successfully.

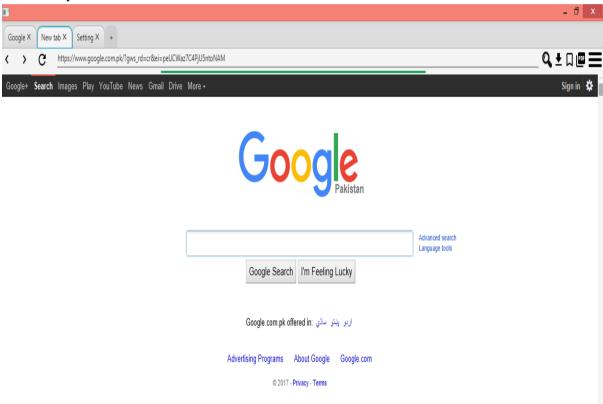


Figure 13: MultiTab

# 8. Test Cases for Proxy Setting:

Step	Description	<b>Expected Results</b>	Status
No proxy	User open browser and start browsing without setting proxy.	Browser should be enabled to show the result if proxy is not needed.	Pass
System proxy setting	User opened proxy setting	Browser should set its proxy to the proxy same as system proxy	Pass

Manually added Proxy	User add proxy manually by typing	Proxy should be configured	Pass
Ok button Clicked	After selecting from above three options there is ok button to confirm your selection	Selection option should be performed	Pass
Cancel Button Clicked	After selecting from above three options there is cancel button to confirm your selection	Nothing should happen and proxy status will remain as it was before	Pass

#### Proxy Setting Image:

In the below given picture, when user open setting tab and clicked change proxy setting button, a dialogue will be appeared. This dialogue will ask user to set the proxy of this application. If user will click the "No proxy" then the application will set no proxy.

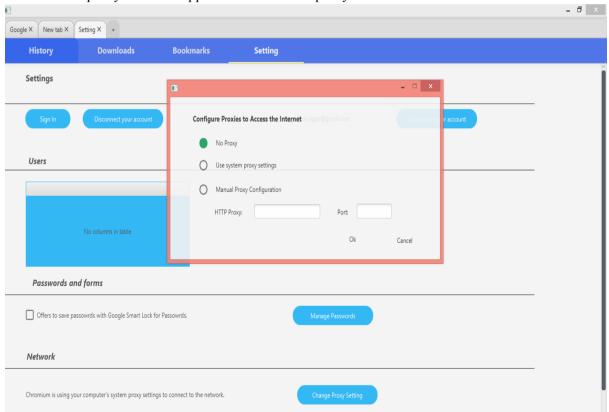


Figure 14: No Proxy

In the below given picture, when user open setting tab and clicked change proxy setting button, a dialogue will be appeared. This dialogue will ask user to set the proxy of this application. If user will

click the "use system proxy setting" then the application will set application proxy to the system proxy.

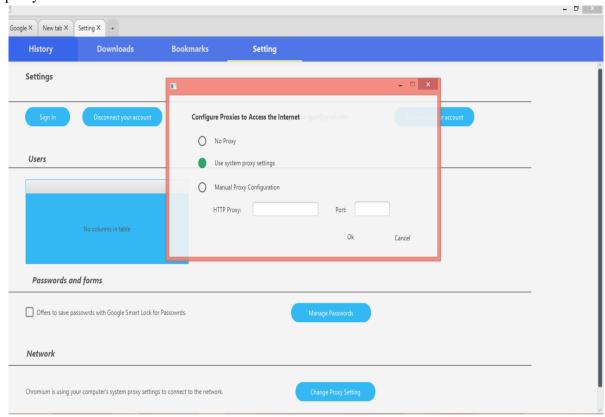


Figure 15: System Proxy

In the below given picture, when user open setting tab and clicked change proxy setting button, a dialogue will be appeared. This dialogue will ask user to set the proxy of this application. If user will click the "Manually proxy setting" then the application will ask user to enter the http proxy and port number and will click "Ok" button then application will set proxy manually.

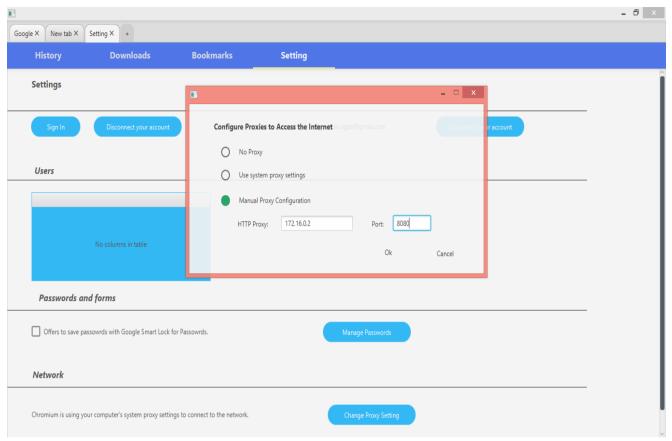


Figure 16: Manually Entered proxy

# 9. Test case for Save HTML page as PDF:

Step	Description	<b>Expected Results</b>	Status
Any HTML page opened and PDF button clicked	When any html page is opened and user clicked pdf button	HTML page should be converted to PDF document	Pass
PDF button clicked	When pdf button is clicked, application should ask user for the path to which user want to save pdf document.	A popup should appear which will ask user for the path to which document should be saved.	Pass
Path selected	When user select the path	Document should be created with the same contents as HTML page.	Pass

In the below given picture, when user opened any html page and clicked pdf icon then application should ask user to specify the path where user want to save the PDF document.

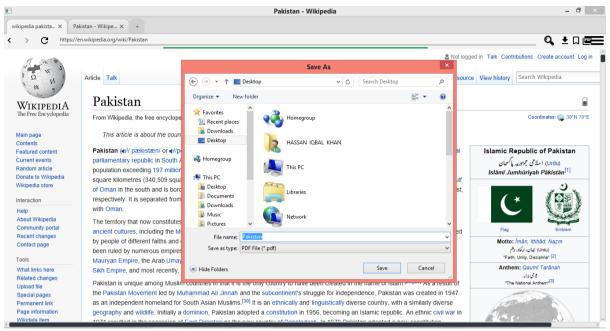


Figure 17: Path for PDF document

In the below given picture, when user provide the path to the user and user clicked ok button the pdf document is generated and a confirmation message is displayed showing the path where user has saved the PDF document.

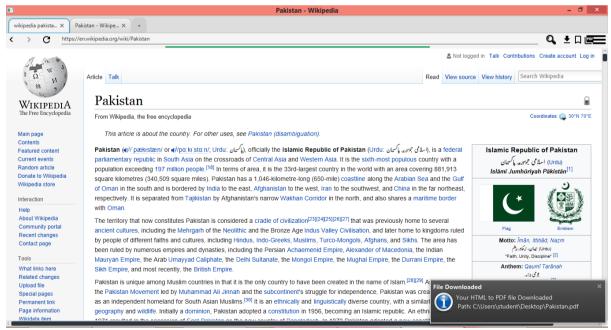


Figure 18: PDF Created Confirmation

In the below given picture, when application has successfully converted html to pdf document then user can open that document and read it in pdf reader.



Figure 19: PDF opened in Adobe Reader

## 10. Test Case for Setting:

Step	Description	<b>Expected Results</b>	Status
Sign-in Clicked	When sign-in button clicked	a pop up for sign-in.	Pass
Change proxy Setting clicked	When change proxy setting button clicked	a pop up for change proxy setting should appear	Pass
Traversing within same tab	When from setting, bookmarks, history or download options anyone is opened other options are also there in form of tabs	User can traverse between these tabs	Pass

#### Setting Image:

In the below given picture, when user open setting window and clicked sign-in button then application should ask user to enter the username and password to login to the application.

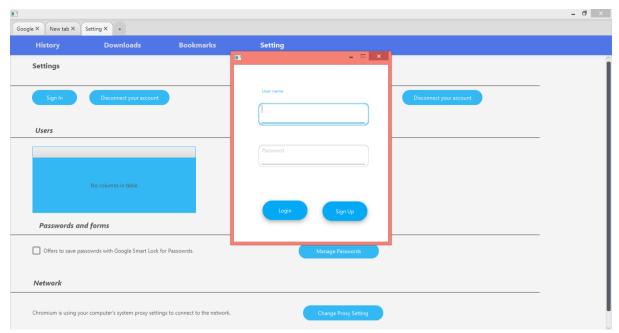


Figure 20: Sign In through Setting

In the below given picture, when user open setting window and clicked change proxy setting button then application should ask user to enter the proxy manually or set system proxy for application to access internet

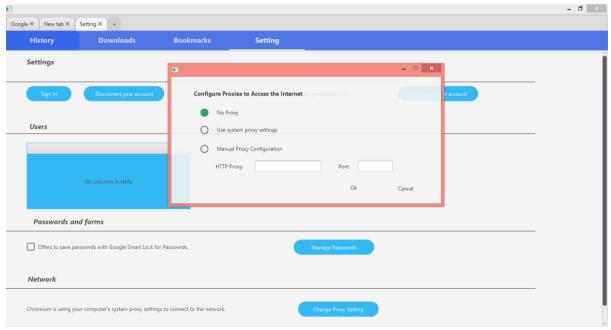


Figure 21: Proxy through setting window

# 11. Test Cases for traversing within same tab:

Step	Description	<b>Expected Results</b>	Status
History Clicked	When user clicked history button	Application should open history page and	Pass

		set tab name as "History".	
Bookmarked Clicked	When user is on same tab and clicked Bookmarks button	Application should open bookmarks page and set tab name as "Bookmarks".	Pass
Setting Clicked	When user is on same window and clicked setting button	Application should open setting page and set tab name as "Setting".	Pass
Downloads Clicked	When user is on same window and clicked downloads button	Application should open downloads page and set tab name as "Downloads".	Pass

#### Traversing Image:

When user clicked "History" button from hamburger, then application should show the history and user can also navigate between different pages i.e. Bookmarks, Downloads and Setting on the same page. Below picture shows the history page and user can navigate between different windows.

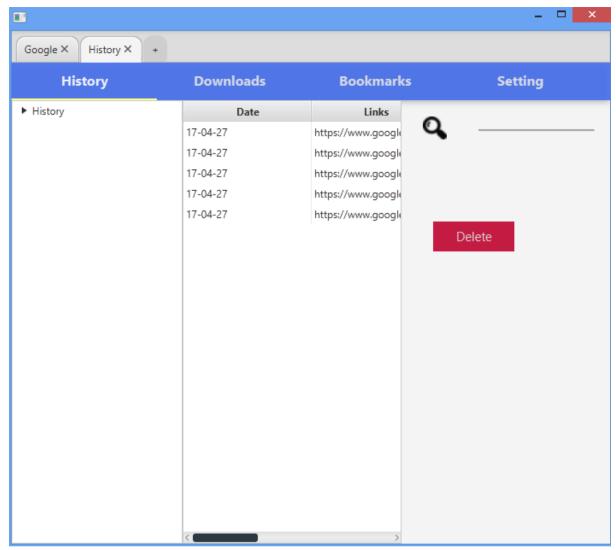


Figure 22: History tab in same window

Now if user will click Downloads button on the same window, then application should take user to the download window and set tab name to "Downloads".

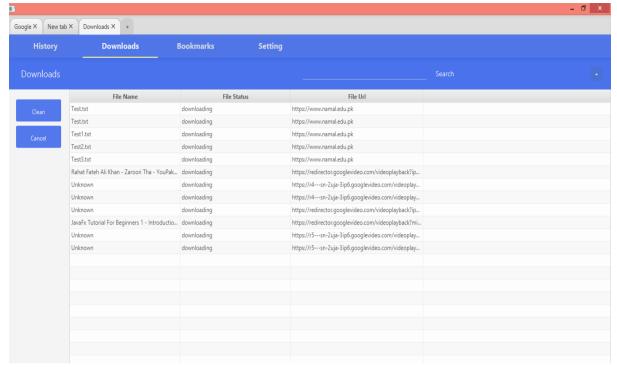


Figure 23: Downloads tab in same window

#### 12. Test Cases for Refresh:

Step	Description	<b>Expected Results</b>	Status
Refresh button clicked	When user has opened any page and clicked refresh button	Application should reload the same page	Pass

#### Refresh Image:

In the picture given below, when user has opened any page and clicked reload or refresh icon then application should reload the same page.

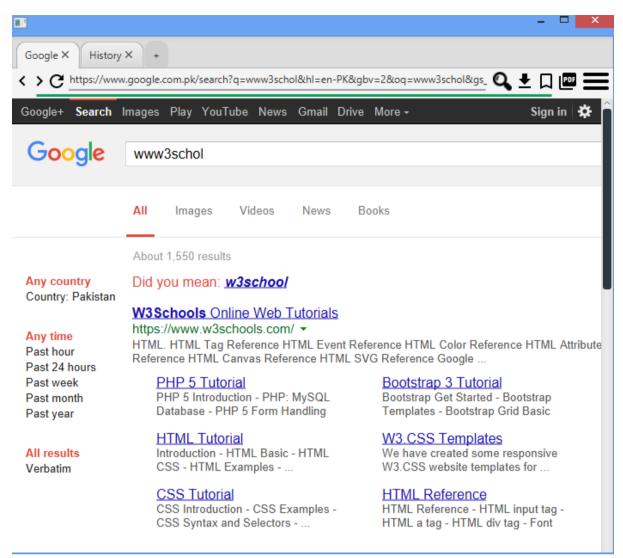


Figure 24: Refresh icon clicked

#### 13. Test case for Forward:

Step	Description	<b>Expected Results</b>	Status
Forward Button Clicked	When user has opened any page and clicked forward button	If any page is opened on the next page then Application should load the next page	Pass

Forward Image:

In the picture given below, when user has opened any page and clicked forward icon and user has opened new link on same window then application should take user to next link on same window otherwise remain on same window.

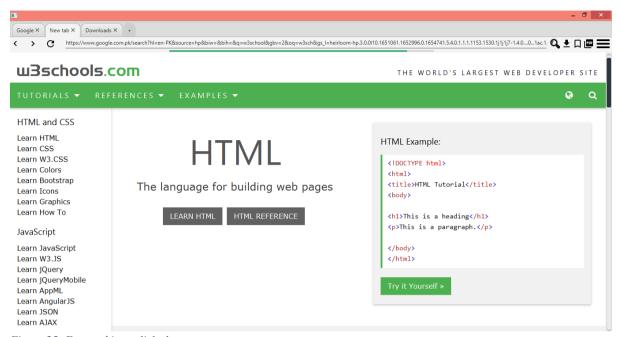


Figure 25: Forward icon clicked

#### 14. Test Case for Backward:

Step	Description	<b>Expected Results</b>	Status
Backward button clicked	When user has opened any page and clicked backward button	If any page is opened on the previous page then Application should load the previous page	Pass

#### Backward Image:

In the picture given below, when user has opened any page and clicked backward icon and user has now moved to new link on same tab then application should take user to previous link on same tab.

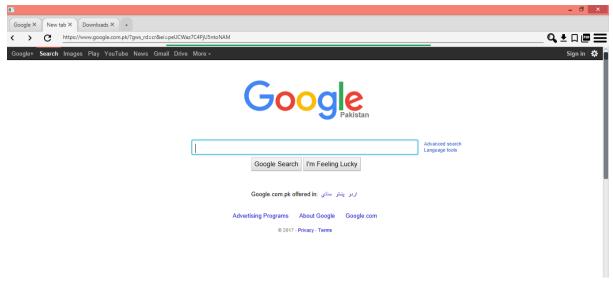


Figure 26: Backward icon clicked

## 15. Test Case for Search Bar:

Step	Description	Expected Results	Status
Valid url entered and searched	When valid url is entered in a search bar and searched button clicked	Application should show the result of the valid URL	Pass
Invalid url entered and searched	When invalid url is entered and searched button clicked	Application should not show any result of the invalid URL	Pass

#### Search Bar image:

The below given picture shows that if user entered valid URL and clicked searched icon then application should show the result of the entered URL.

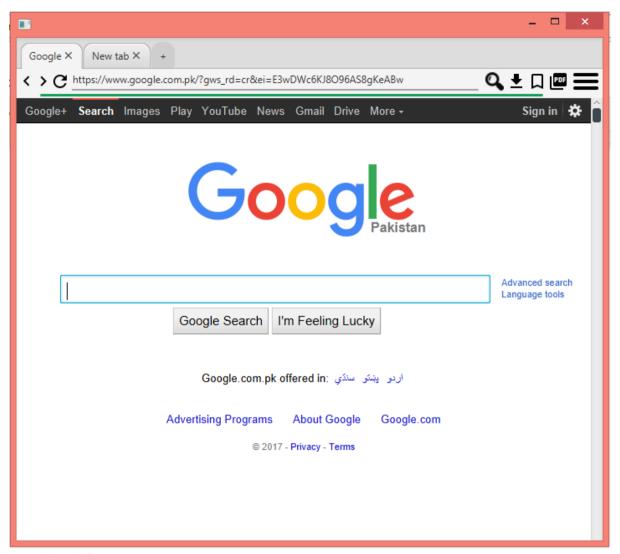


Figure 27: Valid URL

The below given picture shows that if invalid URL is entered and searched icon clicked then application should not show any result of the invalid URL.

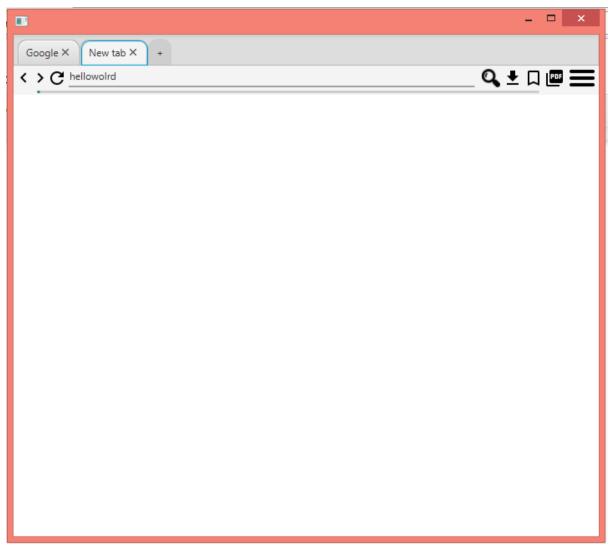


Figure 28: Invalid URL