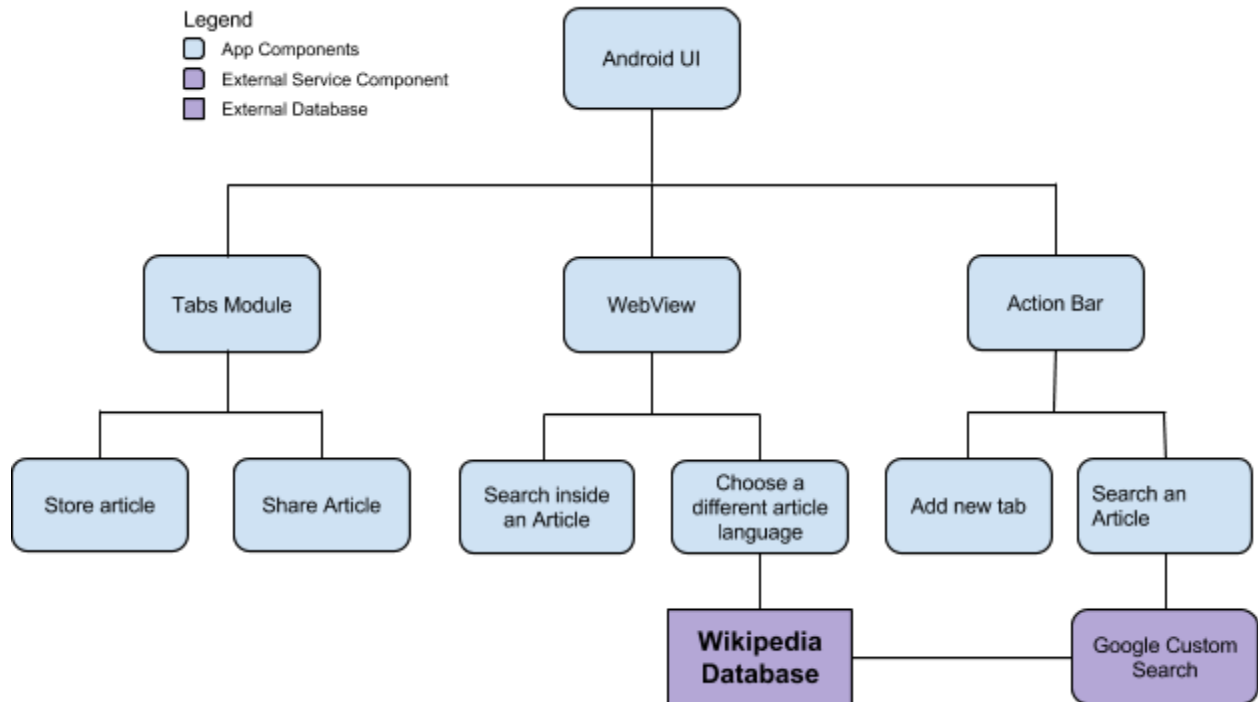


Incremental and Regression Testing

Classification of Components



Component Name	Input	Output	Dependent Component
Choose a different article language	Language list	URL of the specified language	Wikipedia Database, WebView
Store article	HTML of the specific article to be stored	A HTML file stored on memory	Tabs Module
Share Article	URL of the article to be shared	A list of application able to share the link, passing the link to them	Tabs Module
Search inside an Article	Text to be searched on the article	Text Highlighted on the article	WebView
Add new tab	User click to add a new tab	New tab added to the tab list	Tabs Module
Search an Article	Article name	Name, URL of the article searched	Action Bar, Google Custom Search
Google Custom Search	HTTP get request with the article name and other options.	List of wikipedia links with some articles searched	Search an Article
Wikipedia Database	Article title	List of other possibles languages for an article and article links when searched	Search an article, Choose a different article language

Incremental Testing (Bottom-Up)

We have selected bottom-up incremental testing due to the following reasons:

- It is more frequently used in industry and hence it is better to follow what is favored in industry
- It is more convenient to write the driver modules than the stubs
- We started from lower level modules and then proceeded towards upper level modules, hence bottom up approach was more desirable
- The bottom-up approach is easier to test as it prevents the overlapping of the design
- It is more flexible and adaptable

Module:	WebView		
Incremental Testing			
Defect #	Description	Severity	How to Correct
1	When the user do a click(UI) on a link it diretic to the default browser instead of the WebView	1	Implement a method to handle the new link on the WebView
Regression Testing			
Defect #	Description	Severity	How to Correct
1	Does not return highlighted text when text is search in the article	2	implemented after search returns, highlights grey if text matches otherwise highlights the search box pink
Module:	Search an Article		
Incremental Testing			
Defect #	Description	Severity	How to Correct
1	Unexpected text by the user crashes the app	1	Verify the string before doing the search and catching some exceptions
2	HTTP request for google custom search returns null and crashes the app in some cases	1	Put some catch exeptions to handle this case
3	TCP/IP fails to establish comunication and crashes the app in some cases	1	Put some catch exeptions to handle this case
4	When the user search for a term that does not return any result, the app crashes	1	Implement a way to handle NullPointerException
5	When user searches for "Wikipedia", the wikipedia home page shows up	3	It should show the article related with Wikipedia
Regression Testing			
Defect #	Description	Severity	How to Correct
1	When trying to fix unexpected text, some null pointers appears on the google search and when returning method	1	Verify the source of the null pointers to see where they are coming from
Module:	Add a new tab		
Incremental Testing			
Defect #	Description	Severity	How to Correct

	After clicking "add tab" button, only a dummy text is added	1	A new tab object should be added to tab container, and filled with default WebView
	2 User can add infinite number of tabs	3	Should add logic to prevent more than 10 tabs to be added
Regression Testing			
Defect #	Description	Severity	How to Correct
Module:	Language Switching		
Incremental Testing			
Defect #	Description	Severity	How to Correct
1	After switching languages away from English, it is currently impossible to switch back to English	1	API is only searching in English; fix API to be accessed in the current language
2	Language names are not all capitalized properly	3	Manually fix JSON string of languages
Regression Testing			
Defect #	Description	Severity	How to Correct
Module:	Tab Module		
Incremental Testing			
Defect #	Description	Severity	How to Correct
1	Action to share the article not working	1	Implement the share button to call share module
2	Action to store the article not working	1	Implement the store button to call Store article module
Regression Testing			
Defect #	Description	Severity	How to Correct
Module:	Action Bar		
Incremental Testing			
Defect #	Description	Severity	How to Correct

1	Text Field which used for search doesn't appear	1	Implement the text field to do the search
Regression Testing			
Defect #	Description	Severity	How to Correct
1	The button on action bar to show tabs does not work properly	2	don't have a solution yet