Construction Report

Group: Asian Unlimited

Members: Max Muthalathu

Hsin-Yen Liu (Tommy)

Yu Ning (Boris)

Project: NewsOnAGo news aggregator

Project Status:

Currently, we have completed iteration 5 – the final iteration that we had planned for to include a commenting system. This came as a surprise to us since we can now go back to use case 3 (saving articles into PDFs) that we did not complete in iteration 3.

NewsOnAGo news aggregator currently has more than 80% (5/6) of its use cases completed. We will be preparing for the final transition presentation, as well as all the deliverables for it over the next two weeks.

Contributions:

Yu Ning (Boris): 1) Took part in creating diagram documents,

- 2) Completed majority of the testing documents
- 3) Coding:
 - Error checking
 - Search article function
 - Sorting column functions

Max Muthalathu: 1) Took part in creating diagram documents,

- 2) Took part in creating the testing documents
- 3) Coding:
- Error checking
- Created Mozilla browser for article view
- Major graphical user interface building

Hsin-Yen Liu (Tommy): 1) Completed majority of all diagram documents,

- 2) Took part in reviewing the testing documents
- 3) Coding:
- News source saving / deleting functions
- Album creating and storing article into album functions
- Storing comments in an article functions

All documents are reviewed by every member.

Testing Document includes: Test Plan, Test Cases, and Test Results

Test Plan:

Goal requirement:

Each test case will undergo whether it works under normal conditions (if the test is testable within the system) and whether it meets user requirement (for interface design).

Schedule:

Dates	System testing schedule
11/19/08	- Organize time to talk to different testers (explanation of system) - Deal with test case 1-6
	Dear with test case 1 0
11/20/08	- Deal with test case 7-12
11/21/08	- Extra testing: Allow testers to test the system and try to break the system

Guidelines for testers

- Included along with a tester's manual

Basic testing strategy used

White box – Testing conducted near the end of each iteration by putting "tracers (output statements)", everywhere in the code to see whether the news aggregator would output what it's supposed to output at where it's supposed to output.

Example: 1) Checking whether the table was updated with correct news articles

- 2) Checking whether the table would give out correct times and descriptions of headlines
- 3) Checking whether an album was made

Black box – testing functional requirements for completed used cases near the end of every iteration. These tests were conducted by giving the news aggregator input

and viewing if the output was correct.

Example: 1) Getting all headlines in less than 10 seconds

2) Getting each article in less than 3 seconds

Positive Testing – Example: clicking on each button and making sure it does what it's supposed to

Negative Testing – make sure all error cases are prompt the user to do something else.

Example: 1) Clicking on search without entering anything in the textbox

- Error handle: prompt message to enter search keywords turns red
- 2) Clicking on "Get Article" when no headlines are checked
- Error handle: prompt to check a message turns red

Unit Testing – testing each individual class by writing a new program main function and calling each class independently for correct input.

Example: 1) Testing if GUI was creating what it's supposed to

2) Testing whether the AlbumView class is displaying a correct table
[Special note: unit testing is integrated with white box testing and System
Integration testing]

Integration Testing – testing whether components communicate with each other to solve something.

Example: 1) Search function communicate with the table in the headline tab to search for specific articles

2) "Get Headlines" button is able to look into the RSS feed in the table and update the table in the headlines tab with Headlines

Stress and Performance Testing – looking into the capacity of the system

Example: 1) Testing by adding as many sources as possible and getting all the headlines from it.

System Integration Testing – integrated with White Box Testing and Unit Testing **User Acceptance Testing** – testing done by users.

Example: 1) We asked roommates to do this and told them to give us back feedback

currently in progress

Resources:

- Internet Connection: Cable, T1 (RPI)
- Team-members: Yu Ning (Boris), Max Muthalathu, Hsin-Yen Liu (Tommy),
- Testers: Boris Ning, Alex Peach, Devon Ross, Max Muthalathu, Hsin-Yen Liu (Tommy)
- Equipment (computer, processor, internet, OS):

Boris: T60, Intel Core Duo T2500, T1, Windows Vista Alex: T60, Intel Core Duo T2500, T1, Windows XP Devon: T60, Intel Core Duo T2500, T1, Windows XP

Max: T43P, Intel Pentium M Processor 760, Cable/T1, Windows XP

Tommy: Sony Vaio, VGN-CR, T1, Windows Vista (Chinese)

- Time: 3 days

o Any other information about the testing effort:

- Must have the Mozilla browser
- Must have Windows XP or better
- Must have XUL runner to run Mozilla in browser (otherwise it crashes)

Test Case Specification:

TC1: Add News Source [Successful: News Source is added to Source tab]	
Precondition	Application is running
Sequence of Actions	 Type in a name and link for a valid RSS feed into the corresponding boxes Select the Add button System should display the news source in the source tab Close application Open application and verify news source is still available
Post condition	The selected number of articles will appear in Article tab.

TC2: Add News Source [Unsuccessful: News Source is not a valid News Source]	
Precondition	Application is running
Sequence of Actions	Type in a name and link for an invalid RSS feed into the corresponding boxes Select the Add button
Post condition	System will display an error message explaining that the link is invalid

TC3: Remove News Source [Successful: News Source is removed from Source tab]	
Precondition	There is a news source in Source tab
Sequence of	1) Check one or more news sources to remove
Actions	2) Select Remove
	3) System should remove news source
	4) Close application
	5) Open application and verify that the news source is no longer in Source tab
Post condition	System will remove the news source

TC4: Get latest article [Successful: articles displayed in Article tab]	
Precondition	A list of news sources in Source tab must be checked.
Sequence of Actions	Check any number of news sources in Source tab Select the get headline button
	3) System should display a list of headlines from the news sources in Headline Tab
	4) Check any number of headlines
	5) Select the get article button
Post condition	The selected number of articles will appear in Article tab.

TC5: Get latest article [Unsuccessful: 0 news source were checked]	
Precondition	No news source in Source tab has been checked.
Sequence of Actions	Note: Do not check any news source 1) Select the get headlines button in Source tab 2) System should prompt user to select news sources
Post condition	No headlines will appear

TC6: Get latest article [Unsuccessful: 0 headlines were checked]	
Precondition	No headline in Headline tab has been checked.
Sequence of Actions	1) Check any number of news sources in Source tab
	Note: Do not check any headline
	2) Select the get headline button
	3) System should display no headlines in Headline tab
	4) System should prompt user that no headline has been checked.
Post condition	No article will appear

TC7: Search for articles [Successful: headlines related to search text is displayed]	
Precondition	Keywords must be entered in search box
Sequence of	1) Check any number of news sources in Source tab
Actions	2) Select the get headline button
	3) System should display a list of headlines from the news sources in Headline Tab
	4) Type in keywords in search box
	5) Click on search button
Post condition	Relevant headlines to the keywords will appear in Headline Tab

TC8: Search for articles [Unsuccessful: No keywords were entered in search box]	
Precondition	No keywords were entered
Sequence of Actions	 Check any number of news sources in Source tab Select the get headline button System should display a list of headlines from the news sources in Headline Tab Note: Do not type in any search keywords Click on search button System should prompt the user to enter in a keyword
Post condition	No change will appear to headlines in Headline tab

TC9: Search for articles [Unsuccessful: No headlines are in the table]	
Precondition	No headlines are displayed in Headline tab
Sequence of Actions	Note: Do not get any headlines from any news sources 1) Type in keywords in search box in Headline tab 2) Click on search button
Post condition	No headlines will appear in Headline tab

TC10: Saving an article into (pdf) [Successful: Pdf is generated]	
Precondition	At least 1 article must be selected in Article tab
Sequence of Actions	 Check any number of news sources Select the get headline button System should display a list of headlines from the news sources in Headline Tab Check any number of headlines Select the get article button Check any number of articles in Article tab Select the make pdf button
Post condition	A pdf consists of all the article will be made in a directory the user wants to save it to.

TC11: Creating an album [Successful: An album is created]	
Precondition	An album name has been typed in
Sequence of Actions	1) Click on create album button in Album tab
Post condition	An album with the user defined name will be created and appear as a selectable place to store articles in the Album tab.

TC12: Creating an album [Unsuccessful: No album name given]			
Precondition	No album name has been typed in		
Sequence of Actions	1) Click on create album button in Album tab 2) Prompt the user to enter in an album name		
Post condition	No album is created and will not appear as a selectable place to store articles in Album tab		

TC13: Creating an album [Unsuccessful: Album name already exists]			
Precondition	An album name has have been typed in		
Sequence of Actions	1) Click on create album button in Album tab 2) Prompt the user that an album name already exists		
Post condition	No album is created and will not appear as a selectable place to store articles in Album tab		

TC14: Saving an article [Successful: Article is saved within an album]						
Precondition	An article has been selected in Articles Tab An album has been selected in Articles Tab					
Sequence of Actions	 Check any number of news sources Select the get headline button System should display a list of headlines from the news sources in Headline Tab Check any number of headlines Select the get article button System should display a list of articles from the headlines in Article Tab Select an article to save and an album to save into Click on "add to album" button in Article tab 					
Post condition	The article will appear within the album requested by user in Album tab.					

TC15: Saving an article into an album [Unsuccessful: No article selected]					
Precondition	An article has been selected in Articles Tab				
Sequence of Actions	 Check any number of news sources Select the get headline button System should display a list of headlines from the news sources in Headline Tab Check any number of headlines Select the get article button System should display a list of articles from the headlines in Article Tab Note: do not select any article to save Select an album to save into Click on "add to album" button Prompt the user to add an article 				
Post condition	No articles will not appear in the selected album in Album tab.				

TC16: Deleting an article into an album [Successful: Article is deleted from the album]					
Precondition	An article has been selected in Articles Tab				
Sequence of Actions	 Check any number of news sources Select the get headline button System should display a list of headlines from the news sources in Headline Tab Check any number of headlines Select the get article button System should display a list of articles from the headlines in Article Tab Select an article to save Click on "add to album" button Select the same article in the Albums tab and click on the "Delete" button 				
Post condition	The article will be removed from the album				

TC17: Deleting an article into an album [Unsuccessful: No articles selected]					
Precondition	An article has been selected in Articles Tab				
Sequence of Actions	1) Check any number of news sources 2) Select the get headline button 3) System should display a list of headlines from the news sources in Headline Tab 4) Check any number of headlines 5) Select the get article button 6) System should display a list of articles from the headlines in Article Tab Note: do not select any article to save 7) Click on "Delete" button 8) Prompt the user to add an article				
Post condition	No article will be removed from any album.				

TC18: Comment an article [Successful: The comment is stored with an article]					
Precondition	An article has been added into an album				
Sequence of	1) Check any number of news sources				
Actions	2) Select the get headline button				
	3) System should display a list of headlines from the news sources in Headline Tab				
	4) Check any number of headlines				
	5) Select the get article button				
	6) System should display a list of articles from the headlines in Article Tab				
	7) Select an article to save an album to save into				
	8) Click on "add to album" button				
	9) Select the album in Album tab				
	10) Find and select the article in the album				
	11) Write some comments in the textbox				
	10) Click on the "Save" button				
Post condition	A comment is stored with its article.				
Complete	1) Close the program and open it up again.				
Test	2) Select the same article in the same Album in Album tab.				
	3) The comment from last time should appear this time for further editing.				

Test Results

Test Case	Tester 1 Yu Ning (Boris)	Tester 2 Alex Peach	Tester 3 Devon Ross	Tester 4 Max Muthalathu	Tester 5 Hsin-Yen Liu (Tommy)
	Normal conditions	User Requirement	User Requirement	Normal conditions	Normal conditions
TC1	Passed	Passed	Passed	Passed	Passed
TC2 (invalid URL)	Failed	Failed	Failed	Failed	Failed
тсз	Passed	Passed	Passed	Passed	Passed
TC4	Passed	Passed	Passed	Passed	Passed
TC5	Passed	Passed	Passed	Passed	Passed
TC6	Passed	Passed	Passed	Passed	Passed
TC7	Passed	Passed	Passed	Passed	Passed
TC8	Passed	Passed*	Passed	Passed	Passed
TC9	Passed	Passed	Passed	Passed	Passed
TC10 (Pdf feature)	Failed	Failed	Failed	Failed	Failed

TC11	Passed	Passed	Passed	Passed	Passed
TC12	Passed	Passed	Passed	Passed	Passed
TC13	Passed	Passed	Passed	Passed	Passed
TC14	Passed	Passed	Passed	Passed	Passed
TC15	Passed	Passed	Passed	Passed	Passed
TC16	Passed	Passed	Passed	Passed	Passed
TC17	Passed	Passed	Passed	Passed	Passed
TC18	Passed	Passed	Passed	Passed	Passed

Comments:

Alex Peach – "For test case 8, I would expect it to take off the filter and show everything" (No search string should show everything)