STAR

An application to manage your Articles
Paper Prototyping
I564
Hsaiowen Wu and Reecha Bharali
For
Stuart Ough

Introduction

Product definition and scope

Arranging and retrieving online articles is often very ambiguous. People often get confused with storing and retrieving cues.

Star is an application to help users store, retrieve and manage web articles with the help of time, keyword, filters and location. They can save, retrieve, share or read those articles later. The main focus of the application would be to focus and identify different cues that help users to go through these activities.

Users find many articles on the internet. Many times, users don't have enough time to read it. Users can take help of Star. They can save it and retrieve it for reading or referring to it later; if they are interested in a particular article and want to share with their friends. The users can do it by retrieving the articles by time, keywords, filter and location.

An interesting feature was tried to be introduced. We propose a strategy that can relate articles to places and help people remember pieces of information they have with the help of location.

Functional Design Concepts

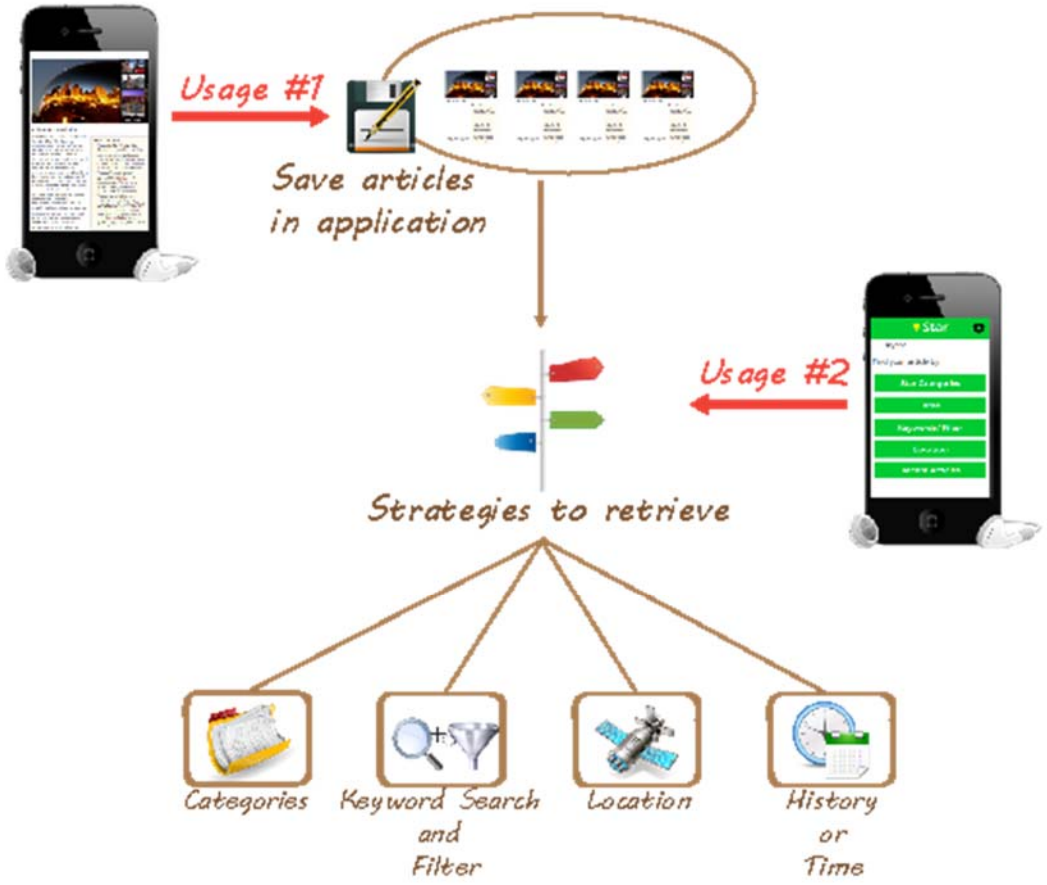
The functions and the key elements

From interviews we found that users usually manage those articles after they save them, our focus is on how users can retrieve those articles.

Thus, we propose the following strategies for retrieving saved articles.

1. Classified categories- After users starred articles that they are interested in, they can put those articles into categories. Name of these categories are user-defined.
2. Keywords search and filter- When user cannot remember exact name of article, they can use part of title to search for a specific article.
3. History- The browsing history provides users another way to retrieve articles by history. They can search by a specific time period or date.
4. Map (user's location) - People often have to recall of an interesting article that they read in a specific location. This function relates articles with location. We propose a strategy that can relate articles to places and help people remember pieces of information they have with the help of location. It is easy to remember things when you relate it to the real world but it is often confusing when you relate things to a perfect time.

Flow chart to define the overarching UI structure



Early Ideation for the Project

Early exploration of Varied Ideas

Idea 1: Shopper's list management

This idea was to make a shopping list management application that can help users manage their shopping easier.

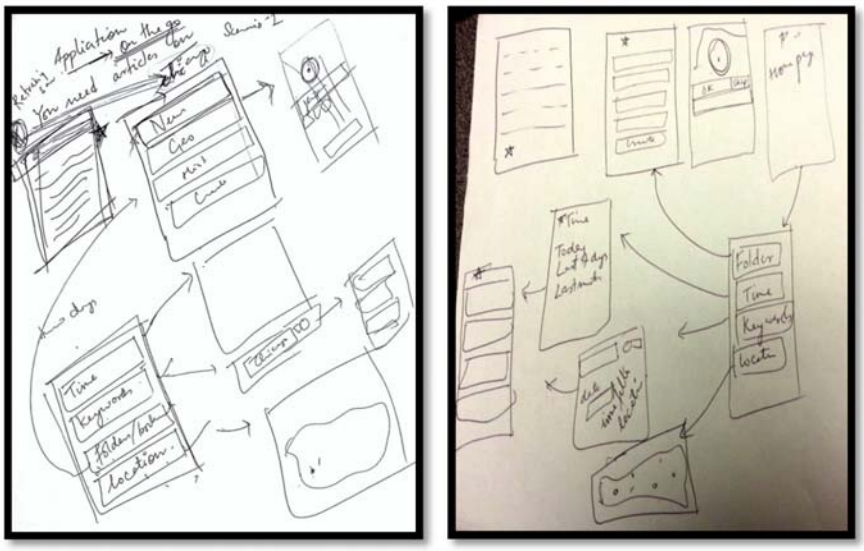
Idea 2: e-flower

This was an idea to deliver e-flowers to people. It was a fun application to send e-flowers and the receivers take care of the flowers by adding e-water and e-fertilizers.

Idea 3: Activities Map

The map application helps pulling out things locally with the view if the map. The activities in a map are being live updated. The user could tap on a particular location and find whats going on around the campus.

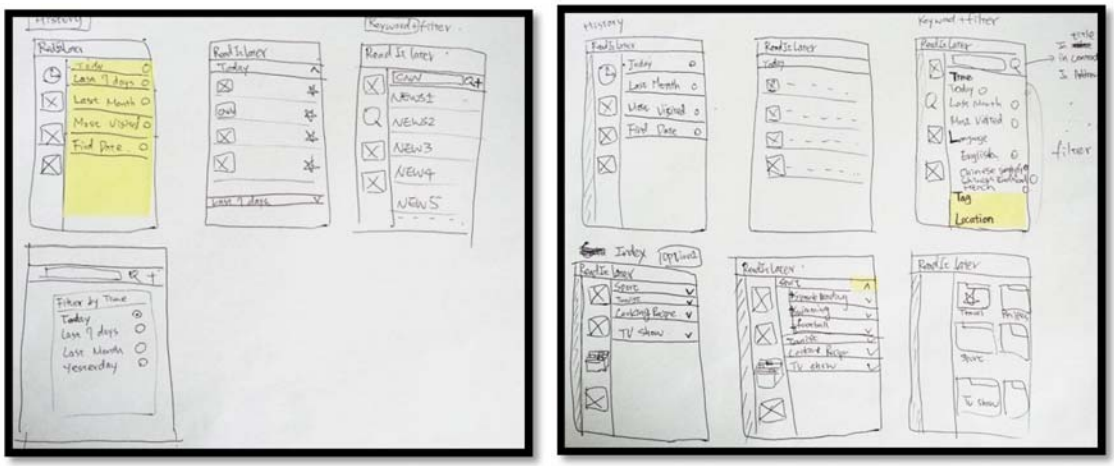
Idea 4: Articles (or/ and Photos) Map
In this application, the news is being arranged by location. All the articles are put up in a map. The figure below shows interactions among various screens that were being ideated.



Finalizing the solution
With all the ideas that we listed from the above four ideas. We decided for clubbing the last two ideas. We talked to people and found that people often faced difficulties in arranging articles. Detailed results are included in Appendix I. Then we decided to club features from the above two ideas and integrate into some application that can help people to manage articles then build luxury application. But talking to our users helped in orienting our application.

Early Prototypes

Low fidelity prototypes



Steps of the operations of Star

- While reading on a phone, the people are provided with a small logo of Star.
- When clicking on the star; the user is taken to the home application; where he is given an option of putting up with any particular category listed or one can create something new.
- After that option the users are given an option of locating the article with a particular location or skipping it.
- This completes the step of tagging the article.
- There is a visual feedback with a grey feedback.
- However if the user wants to retrieve the articles later they visit the application.
- The users find options as: keyword, category, time, location
- Once the user choses the desired option by the one cue, which he thinks he is most close to.
- Choosing the perfect cue brings out the list of articles.

Informal Walkthroughs

We conducted two informal walkthroughs with two of classmates. From these walkthroughs, we were able to see structural issues and confusions of our product. The following are issues that we need to modify for next version.

Findings

1. Logo recognition- The logo of this product is not obvious when user is reading the article. After they added it to the application, the system should give them cues about the status.

2. Lack of feedback- When users saved the article to a specific category, they should get feedback from the system that the article is saved.

3. Confusion flow (Tagging article location)- The first version of flow is saving file and then tagging a location. After doing informal testing's, they told us this location tagging step was very confusing. It forced them to tag location. However, sometimes the article is irrelevant to any location. Or, they read an article at a location different to the content. For example, they might reading a Chicago trip suggestion article at Time Square in New York City. Integrated the tagging location in the process was very cumbersome for users, they are forced to add a location when add the article to this application.

4. Two home page- Though the application has a single home page , two different scenarios of storing and retrieving take them to different home pages . Thus the users suggested of a single home page.

5. Map view is unclear- The map view is not intuitive if the map is showing how many articles are related to the place or their live presence in the area.

High Fidelity Prototypes

High fidelity prototypes

http://share.axure.com/52R5L9/Main_Article_Page.html

Significant changes to early prototypes based on early testing

Based on the early testing through internal walkthroughs:

- Users find they didn't find the appropriate feedback through the logo. The logo was changed and given a colour code. If the article was to be stared then the logo was bright and colourful. However when the article has been tagged the logo has changed his colour and made inactive/ unlinked.
- Users didn't find the map function apt. Though the map function was not found apt it was kept in the application as an important visual cue for the users which can be used some time as a map diary and also for retrieving the article.
- The texts commands in the application were made more communicative and interrogatory so that the user seems to interact better with the users.

Feedback of Saving an Article

1. Having the feedback in Star application so that users can know they are saving articles to Star.
2. Changing the article with figures and text instead of journal paper gives real feeling of using an application from users' point of views.
3. Text in the dialogue box and labelings of button were changed due to unclear process for users. In this way they can have an clearer notion that the article can be tagged to an location. If they click on 'No, thanks' button, that means they don't want to link the article with any location. Locations of social media icons were changed as well since they have different characteristic to the location icon.

Adding an Article to a category

Adding an Article to a category

1. Having background color in the banner in order to distinguish the name of application and main menu.
2. Giving background color to options so that it is easier for users to choose among those options.
3. Giving background colors to page title. This is an indication for user knowing their location of application.
4. Add the number of articles in each category. It provides the status of the application.

Tagging an article to a location

Tagging an article to a location

1. We add a background color to section title so that users can know where their current locations are in Star.
2. In the first version, we have the layout similar to Facebook location tagging. However, users think that confused them. In order to provide consistency, we changed color layout similar to home screen. We had those buttons with different colors so that users can distinguish of buttons from location options.

Star logo - before adding an article

Star logo – before adding an article

The logo in an article was not clear for users to recognize especially when the article looks like a journal paper. From the v2.0 to v3.0, we change the design of logo so that give a better recognition for users to star this article.

Star logo - after adding an article

Star logo – after adding an article

In the first version, we wanted to inform user with different color so that they could know they had added the article to this application. However, it is more important for them to recognize the article before adding. They can retrieve this article directly from application home screen. Thus, we decided to have the logo lighter before they add the article.

Retrieving an Article by Time

In the v1.0, titles for different time span weren't have colored background. Users needed more time to read labeling so that they can select an article from the time they want. We changed the menu to scrollable menu into v3.0 so that it is easier for user to navigate in this page.

Feedback of Retrieving an Article by Categories

Star application provides a strategy for user to retrieve articles by user-defined categories. In prototype, we assume users have six categories which include art, technology, cooking, fashion, design and travel. When users clicked on any category in the prototype, they could obtain their article. However, in the first version, they had same page for this feedback which confused them. Moreover, they might though it was some error. In order to give them more realistic feeling of feedback, we create different feedback for those figures for each category.

Prototype Usability Test

A formal user testing was followed. The user is let known by an email and a time is set up for usability testing. Please find the script attached in Appendix II. Some of the ley comments noted from the user testing session has been noted below.

User 1:

- The application has issues with the logos. They seem a part of the article. The log should have a box outside to differentiate.
- The interface is apt and is intuitive.
- The naming of icons are good
- The setting button looks more like a list of articles as it is an application that takes care of managing articles. So not intuitive.
- The article finding keywords by article is apt. However the user should also have the option of attaching with keywords like give the user chance of associating articles with main keywords. This would help in a large database.
- The user would associate the article with the place it is related to not to the place where one is reading it.
- However this can act as a luxury feature where the users are given a option of making a map diary.

User 2:

- I cannot get good feedback from the logo.
- The location page needs to give a feedback of the current location.
- May be there can be login page and there is logout option in the settings page.
- The managing of articles by time-Today and recent articles looked same.
- I would want the map feature to be associated with the wor

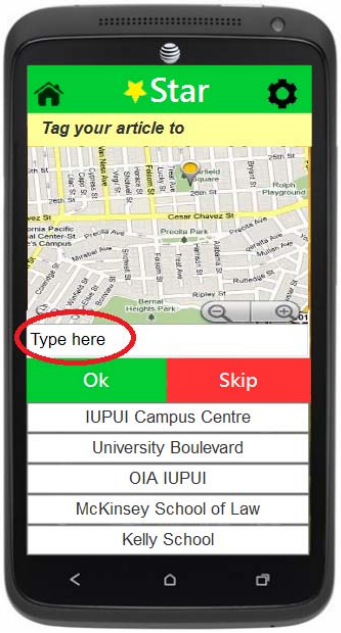
User 3:

- The feedback of starred article is not obvious.
- The keyword retrieve method is not so helpful while I get results more than 100 articles.

- I think the location is related to my current location but it is ambiguous when related to an article. I would connect the article to a location when it was mentioned in the article.
- I would use feedback sharing depends on article contents. When the content is interesting such as cooking, sports or movie, I would share it. But when it comes to mood or relations, I wouldn't share it.
- The layout and structure are very clear to navigate.
- An improvement of this application would be cloud synchronize so that I can use it among all my mobile device and laptop. I am not used to read articles on my mobile phone since the screen size is too small for reading.

User 4:

- Location information is unclear for me. I am confused between content location or my current location.
- After stared the article, I didn't know how to get to home page of app. Click the star logo doesn't make sense to me. Like in Chrome, I couldn't go to home page by click on a star logo.
- The Number represents how much articles were in this application which is very clear for me.
- Keyword and filter help me to retrieve my articles based on my requirements.
- Recent articles helps more than others. I think this section is for articles I read but not starred. It would be better to have a filter in this section.
- Type here in map section is not clear. I thought it was the title of the location currently shows in the application



Summary of key findings and patterns that emerged

Based on the test with the four users as stated above some common key findings that we found were apt and could be included in our prototype are as follows. Other details that were being listed out by

the users we believe could be the issues of learnability, memorability and issues with efficiency and effectiveness of the prototype.

- All the users found the problem apt of dealing with articles
- All the users wanted a keyword to relate to an article
- All the users wanted an option to share an article
- All the users had the mental model of Bookmarking in the mind while using the application
- All the users did not find the map feature intuitive.
- All the users the map feature to be apt to link to the application

Changes made to the product based on User discoveries

Based on the key findings and patterns following changes were included:

- The logo was changed
- The map feature directly asked the user if they want to attach it to a location making it understandable to the user of the possible changes.
- Common features of sorting like tagging and categorizing were being provided.

Design Wish List

Future UI Aspects

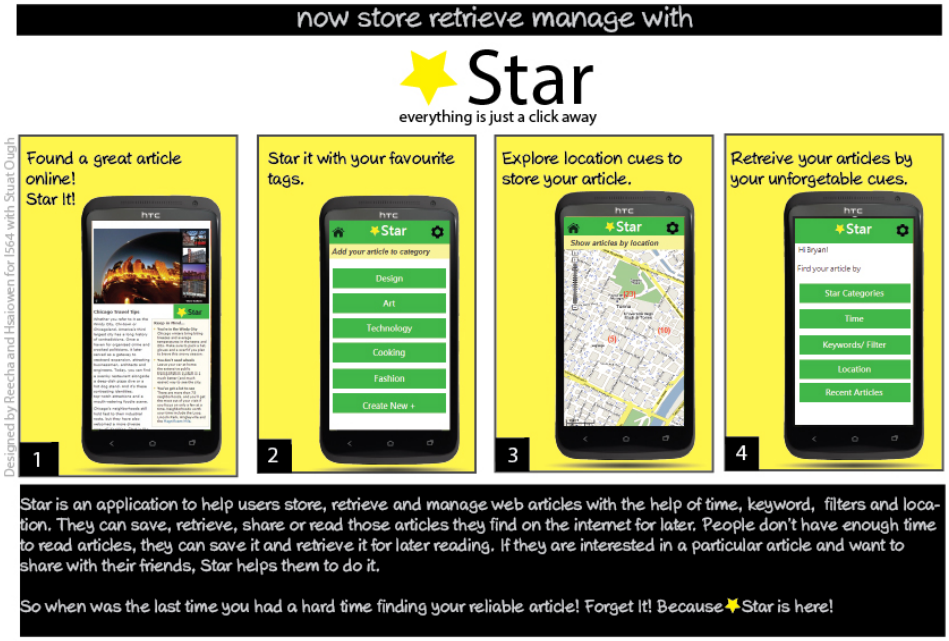
The feature of Map was thought of as the primary feature of the application was new and innovative. However the users seemed to follow normal features of bookmarking and managing articles. Those were being applied to the article through the application. The map feature that is being introduced through the application seems to be used by the feature as a leisure activity and suits some of the scenarios. The users would like to build a map diary of the articles they read in a place.
In the map feature, the feature of attaching any article to a location should be made possible which might not be applicable to the user.

Lessons Learned

The feature of this project started with a vision of associating the application with location seemed futuristic. The application needs to provide provisions for associating the article with places and also building a map diary. Right now the application focusses on tagging articles based on places. However in the future the application should provide a medium to associate articles with places and give option to search according to the article. We believe this application can help serve as a luxury feature along with fulfilling the basic idea of tagging articles to a place.

The interaction with the application is a very important element in any application. Though the visual layout forms a very important part in the application. The way the content is organized in the application form a very important part. From the initial tests where the application was used to guide the user using statements like ‘now chose’. In the later stages the application was made more of a

communicative and integrative as the application provided options and the user was able to learn the interface at a faster pace.



Appendix I

- Include samples of your testing artifacts (personas, test script, etc)
- Problem space interview (3 users, male*2, female *1)

Age 25-30

Students*2, housewife

Mac Users*2, Windows user*1

- I How often do you read articles online?
  1. Everyday
  2. Everyday. 3 to 4 hours perday
  3. Everyday
- Do you store them?

  1.Usually, I don't save it. But, when I want to read later I would save it in bookmark.

  2.Yes, Storing in my blog and categorize in to different topics, such as arts, healthy, design and parents. If I like the website or blog, then I save it in the **browser bookmarks**.

  3. I used to save it in Safari bookmarks. But now I just use goolge engine to search keywords.
- How do you get back to the article if you like them?

  1. Search by **keywords** in the title. If it cannot be find, I would **recall the way I got** it, using search engine to search for keywords in the content.

  2.Since I store in my **blog** for articles, pictures of artworks. **Browser bookmark**-for whole site. The blog supports classifying articles in two layers. Thus, the rationale to name those categorizes are very important. Setting keywords is another strategy. I have a folder name

'others' so that I can put temporary articles and after some amount of time, I can classify those articles in many folders..

3. **Search engine** or Safari **bookmarks**. You can have option to search for the keyword on line or in bookmark and history review.

- If you think your friends might like it too what do you do?
  1. Using **gtalk** to send it. If the person doesn't have gtalk account, I would use **email** to forward it. If I think many people would like it, I would post on facebook.
  2. Two ways, on **facebooks** share link. Notes in fb cannot be categorized. In **blog**, edit and information I found related.
- What do you do if you have opinions about the article you read?
  1. I keep it in my mind.
  2. Add into my blog use like. Positive comments in my blog, criticize on the my own fb wall. I wouldn't leave message in the article.
- What is the cumbersome situation when you want to retrieve it?
  1. It is very cumbersome to retrieve it when I cannot find it with any strategy (keywords of title and content and search engine, bookmarks, ways I got this article like which website).
  2. Usually it is due to unclear classify, so that cause the difficulties to find articles.
  3. I just use search engine with keywords like google. It is a very powerful tool. Or check the safari browser bookmarks which can sort history by time. I think sorting by time is very useful as well.

Appendix II

'Hi Welcome to our application called Star. This is a new application that helps you organize articles that you read online. Please explore the interface and let us know your comments.
Please try to think out aloud so that we can analyse the application'

The users walked through with the designers:

- *Overall interface design*
- *Any usability issues with the application*
- *Overall applicability of the application*
- *Liking of any special feature*
- *Special feedback for map feature of the application*
- *Future directions of improvement or integration*