NEWS TRACKER APPLICATION

Abstract

As news is increasingly accessed on smartphones and tablets, the need for personalising news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviours; analysis revealed three primary types of reader. We then implemented and deployed an Android news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognise a user according to their reader type. Finally we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps.

Introduction

Mobile app ecosystems are transforming patterns of news consumption. Until quite recently, reading the news was a niche use for smartphones mostly for when users were ‘on the go’; now however, two in every three users of mobile devices in the US regularly access news and as many as one in five read in-depth news articles daily a similar picture is found in the UK. This growth in mobile news access continues the migration of news consumers to the Internet.

Project Modules:

We have developed a new innovative solution through which you can directly know the updated news in category wise.It can be in interactive and intresting manner.In this project you will be working with three modules.

- Registration
- Login
- Dashboard

The News Tracker Application will recommend the following inputs.

- Language
- Category
- Date
- Weekly Magazines
- Articles
- Important News

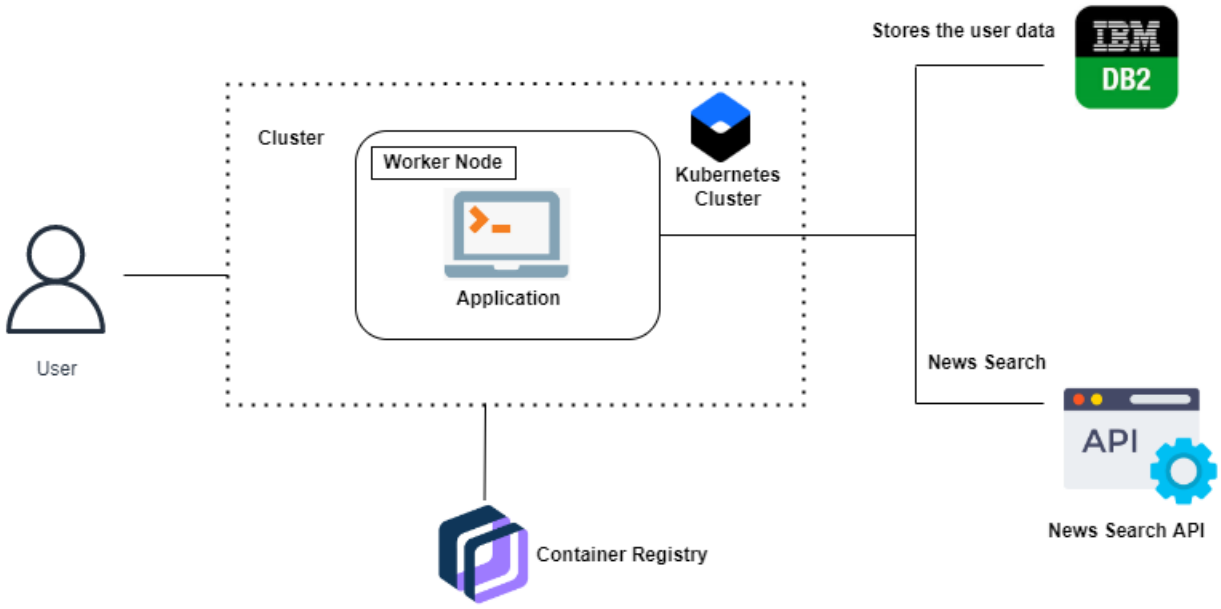
News Readers types for mobile news reading

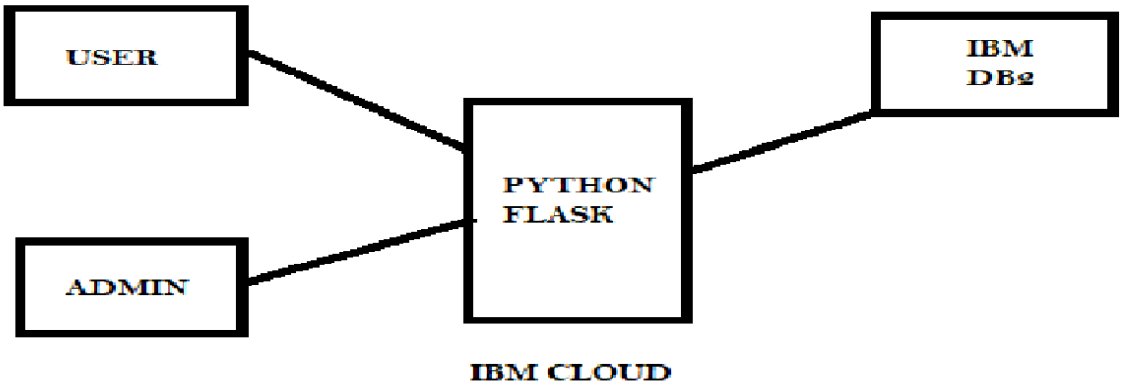
Clustering Factors **Reading types**	**'Trackers'**	**'Reviewers'**	**'Dippers'**
Frequency	Many times a day	Once a day	Less than once a day
Total daily reading	5 - 10 mins	10 + mins	0 - 5 mins
Browsing straergy	Both	Through all selection	Particular selection
Reading Style	Skimming	Detailed Reading	Scanning
Location	Public transport	Home	Home

ADAPTIVE UI AND EVALUATION STUDY

Having shown that we can recognise a user's news reader type from a data log of their interactions, the next question that arises is whether the different types would benefit from different adaptive forms of the news app. To examine this question we devised adaptive user interfaces for each news reader type through a series of semi-structured interviews and contextual inquiries with 10 participants. The interviews probed participants about their news reading and their opinions on a range of customizable features of current mobile news apps and design suggestions of our own. Participants were also asked to experience reading the news with our news app and provide comments on its design. For example, Trackers receive the latest stories or updates in the top static area for quick access and we replace the horizontal organisation of stories to a full-width layout because they like to get a quick snapshot of the news.

SYSTEM ARCHITECTURE





Hardware Requirements:

- 4 GB RAM
- Intel core i3
- Windows/Linux/Android
- Laptop/Desktop

Software Requirements:

- Python
- Flask
- Docker
- Kubernetes
- IBM DB

EXISTING SYSTEM:

Global Support: Different type of newspaper will be available from all around the world in different languages with this user will be able to get news from all around the world. Short News: News will be displayed in short format with title, image and little description in list view. It will help user to access required news faster. Search Option:

User will be able to search from not only one source but many different sources available within API. Favourites / Offline Reading: News can be added as favourites which will automatically will be saved for offline reading. Sharing: User will be able to share news easily on social media. User was allowed to use this application in his smartphone and screenshots were taken as a result for this study. First User need to Sign Up in order to access the application which provides security for this application. Also predicted user error handling with pop-up messaging was done before this experiment like entering invalid data in fields, not selecting a field before clicking on action button.

PROPOSED SYSTEM:

Our great news app requires a variety of features. When you look at the most successful news apps we offer unique and valuable features in a big number. So, to start with, you want to at least ensure that this application can boast the most basic features which all the most popular apps have.Furthermore, to create a competitive advantage you should think about some innovative features which will make this app different from competitors'. In any case, here are the must-have features which you should include by all means.Location feature with automation can be implemented which means as user move from one city to other local news will change as per it. Offline Reading can be improve will more efficient way on full articles. Data quality check needed. If API can't reach to certain article source it gives null value which can cause problem in JSON parsing.

Conclusion:

We explored the feasibility of recognising patterns of news reading interactions and evaluated three adaptive interface designs for different news reader types. We show that from their interaction log, a specific user can be recognised as one of three kinds. The reader types emerging from the online survey are well defined and distinct.

The evaluation of the three variant interfaces suggests that different news reader types need different user interfaces. We have demonstrated a method for monitoring users' news reading behaviour and inferring news reader type from it. In the future we will further explore the design of adaptive interfaces, in order to be in a position to demonstrate a complete adaptive mobile news framework providing automatic personalisation of news apps.

REFERENCES:

1. Ofcom, *News consumption in the UK*, Public report (2014).
2. Pew Research Centre, *The Future of Mobile News*, Public report (2012).
3. Reuters Institute, Tracking the future of news, Public Report (2014)
4. Billsus, D. & Pazzani, M. A hybrid user model for news story classification. Springer Vienna (1999), 99-108.
5. Billsus, D. & Pazzani, M. Adaptive news access. In *The adaptive web*. Springer Berlin Heidelberg (2007).
6. Carreira, R., Crato, J. M., Gonçalves, D., & Jorge, J. A. Evaluating adaptive user profiles for news classification. In *ACM IUI 2004*.
7. Gauch, S., Speretta, M., Chandramouli, A., & Micarelli, A. User profiles for personalized information access. *In The adaptive web*. Springer Berlin Heidelberg (2007).
8. Grzeschik, K., Kruppa, Y., Marti, D., & Donner, P. Reading in 2110-reading behavior and reading devices: a case study. *The Electronic Library* (2011).

9. Jameson, A. Adaptive interfaces and agents. *Human Computer Interaction: Design Issues, Solutions, and Applications*, (2009).
10.Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. Habits make smartphone use more pervasive. *Personal and Ubiquitous Computing* (2012).
11.Tavakolifard, M., Gulla, J., Almeroth, K., Ingvaldesn, J., Nygreen, G. & Berg, E. Tailored news in the palm of your hand: a multi-perspective transparent approach to news recommendation. In *ACM WWW 2013*.
12.Westlund, O. From mobile phone to mobile device: News consumption on the go. *Canadian Journal of Communication* (2008), 33(3).
13.Woerndl, W., Manhardt, A., & Prinz, V. A framework for mobile user activity logging. In *MUSE 2010*.