Wikipilot

Prototype

1 Executive summary

The company Datema wishes to develop a crowdsourcing application "Wikipilot" for mariners at sea for sharing nautical information. In collaboration with Hanze university, School of computer science, five prototypes were developed on three different platforms (web, iPad, Android). Results were demonstratable prototypes, more insight into possible requirements and lessons learned about the possibilities and limitations of the different platforms.

2 Problem statement

The Wikipilot project (initiated by the company Datema[1]) aims to engage mariners in the collection and sharing of vital nautical information. The increasing penetration of internet onboard vessels brings with it new opportunities to rapidly exchange nautical information and updates among mariners. This can increase the safety of navigation.

The Wikipilot will utilize a client application onboard the vessels to facilitate the sharing of nautical information. The problem statement is as follows:

How do different technologies and platforms (web, Android and iPad) for a wikipilot application compare? What functionality is worth having in the wikipilot application?

3 Alternatives

Five projectgroups of six students per group were given the task to develop a Wikipilot prototype on an allocated platform. Two groups were assigned to build an iPad application, two groups were assigned to the Android platform and one group was assigned to build a web application.

Development was done in a period of four weeks. Scrum[2] was used as project management methodology with the length of a sprint set to one week. So in total four sprintdemo's were given for the representatives of Datema.

The following screenshots give an impression of the end results.

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[1] http://www.datema.nl/
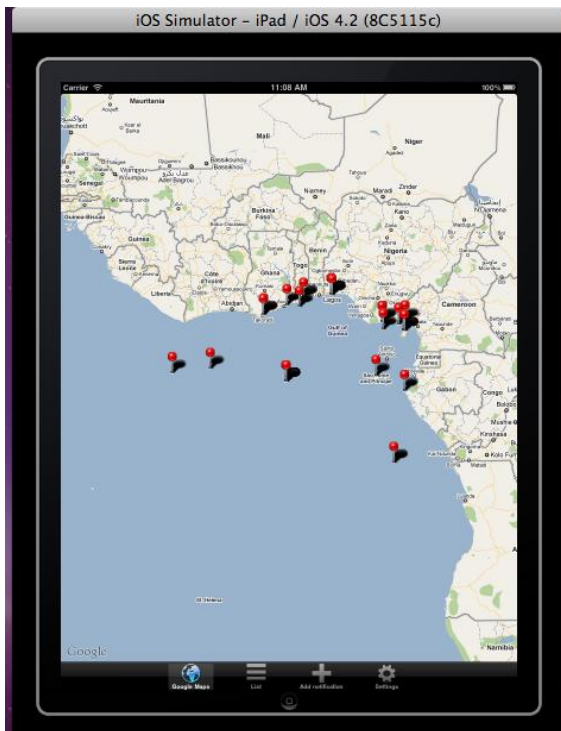[2] http://en.wikipedia.org/wiki/Scrum_(development)

Figure 1:Main screen of Wikipilot on iPad showing Points of Interest (POI) on a map. Icons below navigate to other screens with additional information.
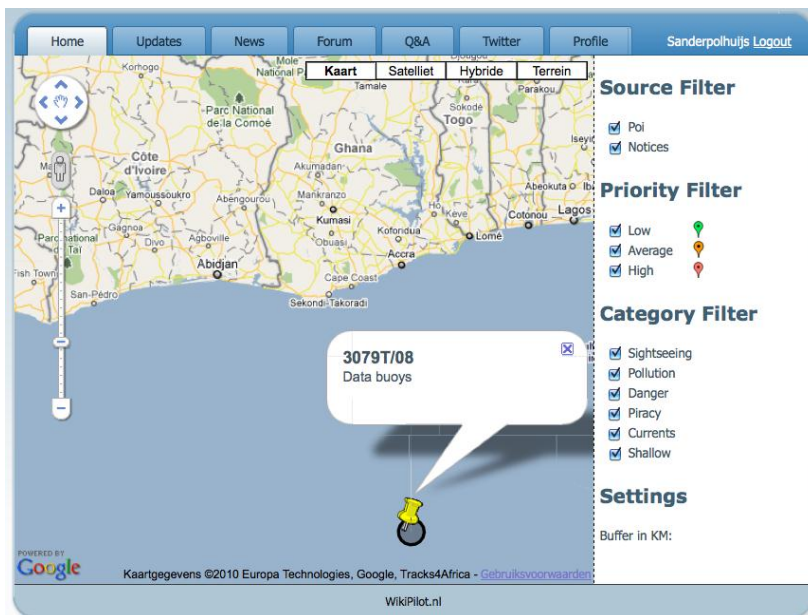

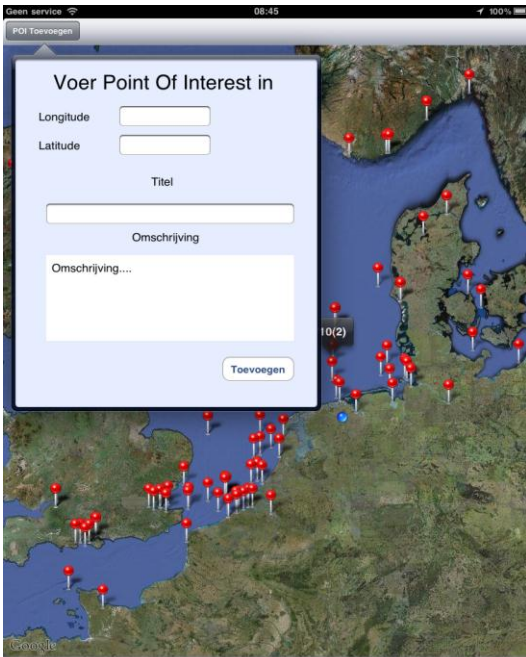**Figure 2: Start screen of the webapplication**

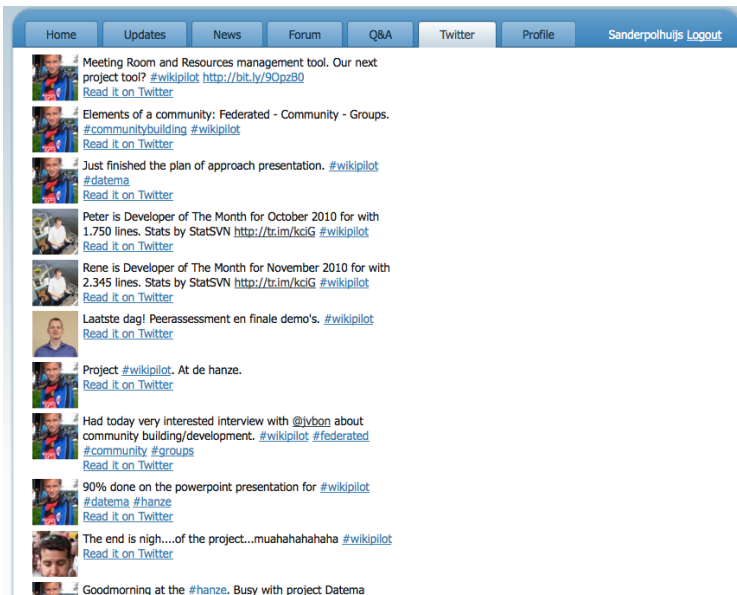**Figure 3: Adding a Point Of Interest by mariner**

Figure 4: Social media integration

Figure 5: Wikipilot in Android emulator

4 Conclusion

The building of the prototypes provided valuable information. Datema gained insight in the possibilities and limitations of the suggested platforms. Both the Android and the iPad platform posed some specific technical challenges which cost some effort but were overcome. Datema judged the web application group to have achieved the best result in the short period of time.

Source code of all applications were transferred to Datema to be used in the follow-up project in which the community side of Wikipilot was explored.

5 Participants

- Datema
- Hanze University Groningen, School of computer science