

Aloqa and layar augmented reality feeds

Citation for published version (APA):

Ternier, S. (Author). (2010). Aloqa and layar augmented reality feeds. Software

Document status and date:

Published: 03/09/2010

Document Version:

Peer reviewed version

Document license:

CC BY-SA

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

<https://www.ou.nl/taverne-agreement>

Take down policy

If you believe that this document breaches copyright please contact us at:

pure-support@ou.nl

providing details and we will investigate your claim.

Downloaded from <https://research.ou.nl/> on date: 16 Jul. 2023

Open Universiteit
www.ou.nl



Aloqa and layar augmented reality feeds

Development: Stefaan Ternier

Abstract:

Aloqa is a service that proactively notifies the user of interesting Point Of Interests (POIs). It runs on iPhone, blackberry and android. With this tool you can easily get directions to events, places, buildings or other places of interests.

Layar builds on the same principle, but has a browsers that augments the camera feed of your mobile device with these POIs so that you can see these POIs hovering over the actual building.

This package contains code to setup a database with POIs. Furthermore, it exposes two APIs: an aloqa API and a layar API. Currently, this application is hosted as a service on the google app engine, where all content from the MACE () project is made accessible for both Aloqa and Layar users.

Development

The code that is attached enables publishing metadata in a google app engine database and contains java source files that enable setting up the google app engine database. For local experimentation, create a google app engine project (for instance using the google apps eclipse plugin) and copy the contents of this package to the src folder.

Because google apps only allows searching using one filter at the same time, bounding box queries with longitude/latitude are currently not executed efficiently. These queries are executed in two phases:

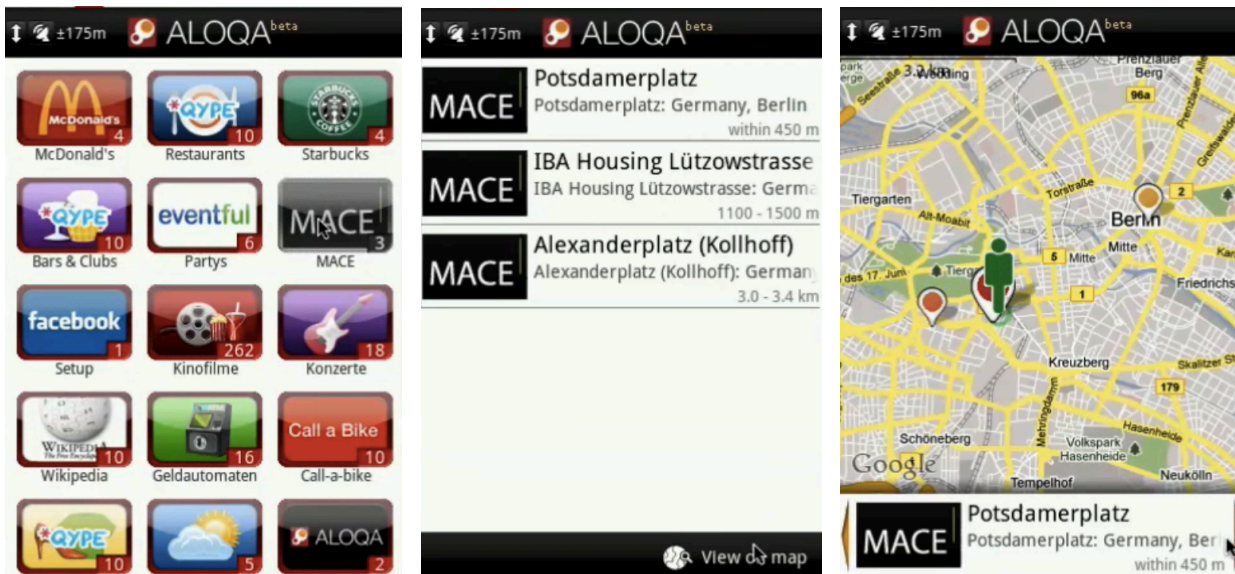
- Execute the query with longitude filter on the database and retrieve a list with all hotspots.
- Filter the results (in java) using a latitude filter.

This inefficiency can be resolved using geo hashing techniques [].

Currently two feeds are being hosted online at the following URLs:

- Aloqa: <http://repositorytools.appspot.com/mace/layar>
- Layar: <http://repositorytools.appspot.com/mace/aloqa>

Screenshots



Aloqa: (1) Select a channel (2) select a POI (3) view POIs on map

References:

1. Aloqa. <http://www.aloqa.com/>
2. Geo Hashing. <http://en.wikipedia.org/wiki/Geohash>
3. Google app engine. <http://code.google.com/appengine/>
4. Layar reality Browser. <http://layar.com/>
5. MACE (metdata for Architectural Contents in Europe). <http://portal.mace-project.eu/>