# Aloqa and layar augmented reality feeds

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**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:

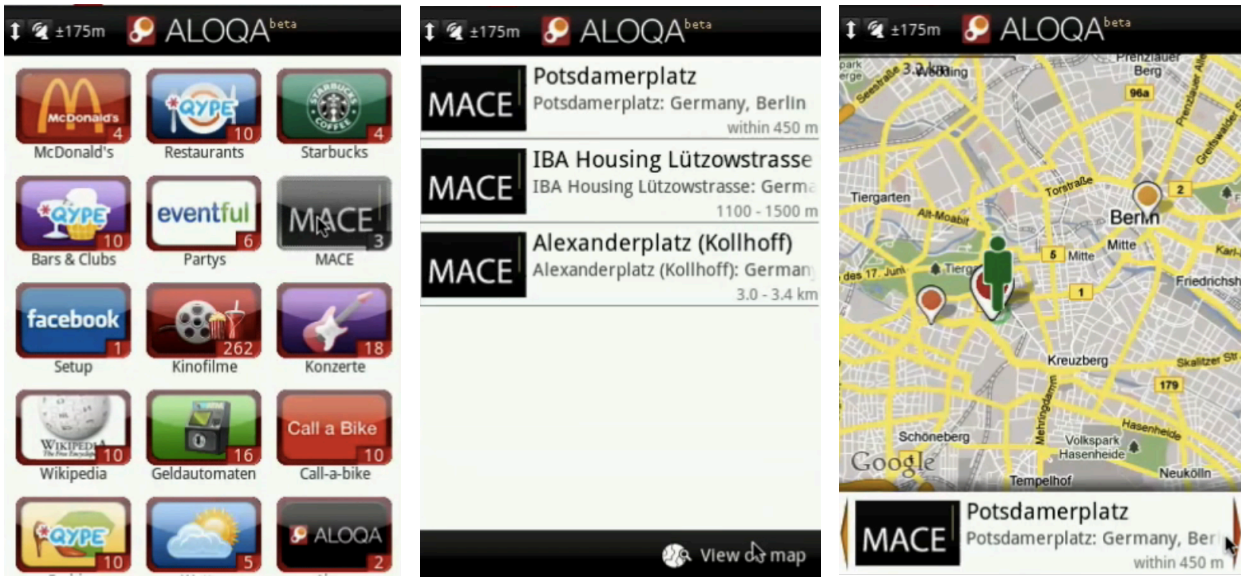
- Execute the query with longitude filter on the database and retrieve a list with all hotspots.
- Filter the results (in java) using a latitude filter.

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/