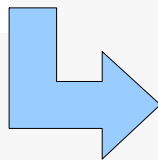




Spatial filters implementation for Geo2Tag LBS platform



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Three-dimensional mapping services



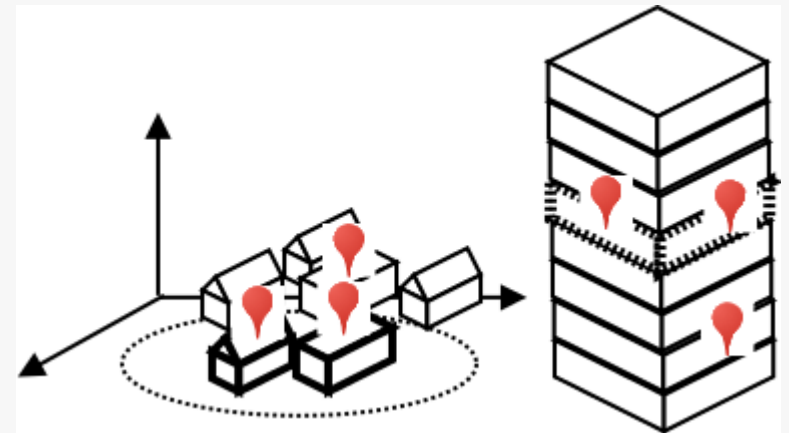
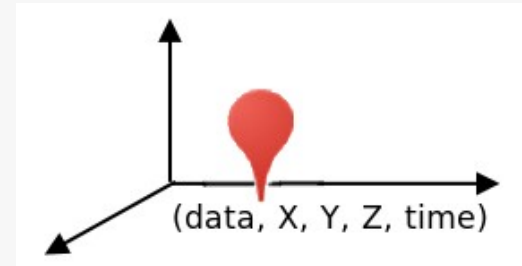
- **Google maps**
 - Google maps for mobile in 3D
- **Open Street Map**
 - OSM-3D
- **Nokia maps**
 - Nokia maps 3D





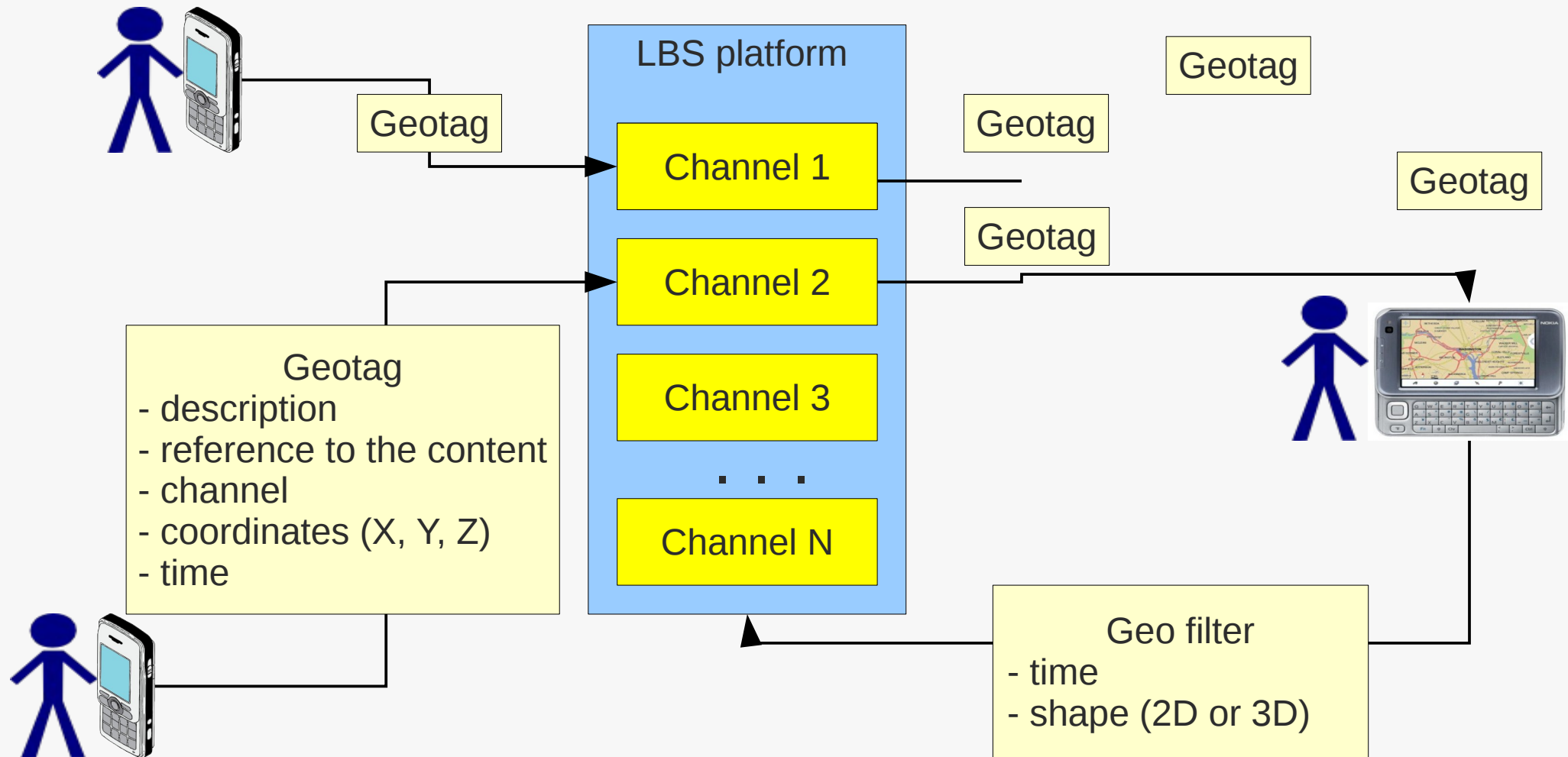
Requirements

- Support in the platform of the three geographic coordinates
- Three-dimensional marking of content
- Two-dimensional spatial filters
- Three-dimensional spatial filters



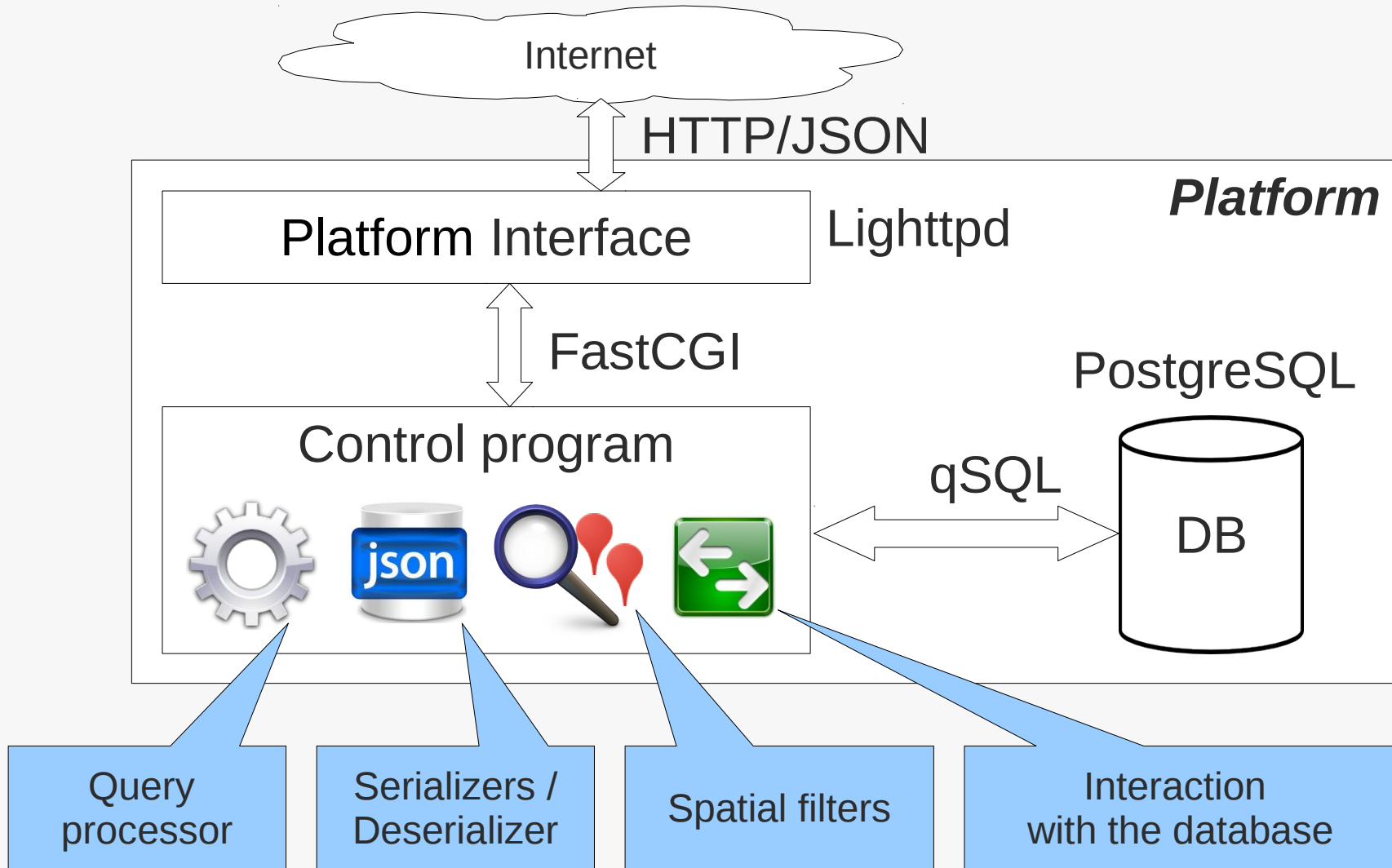


Description of the Geo2Tag LBS platform



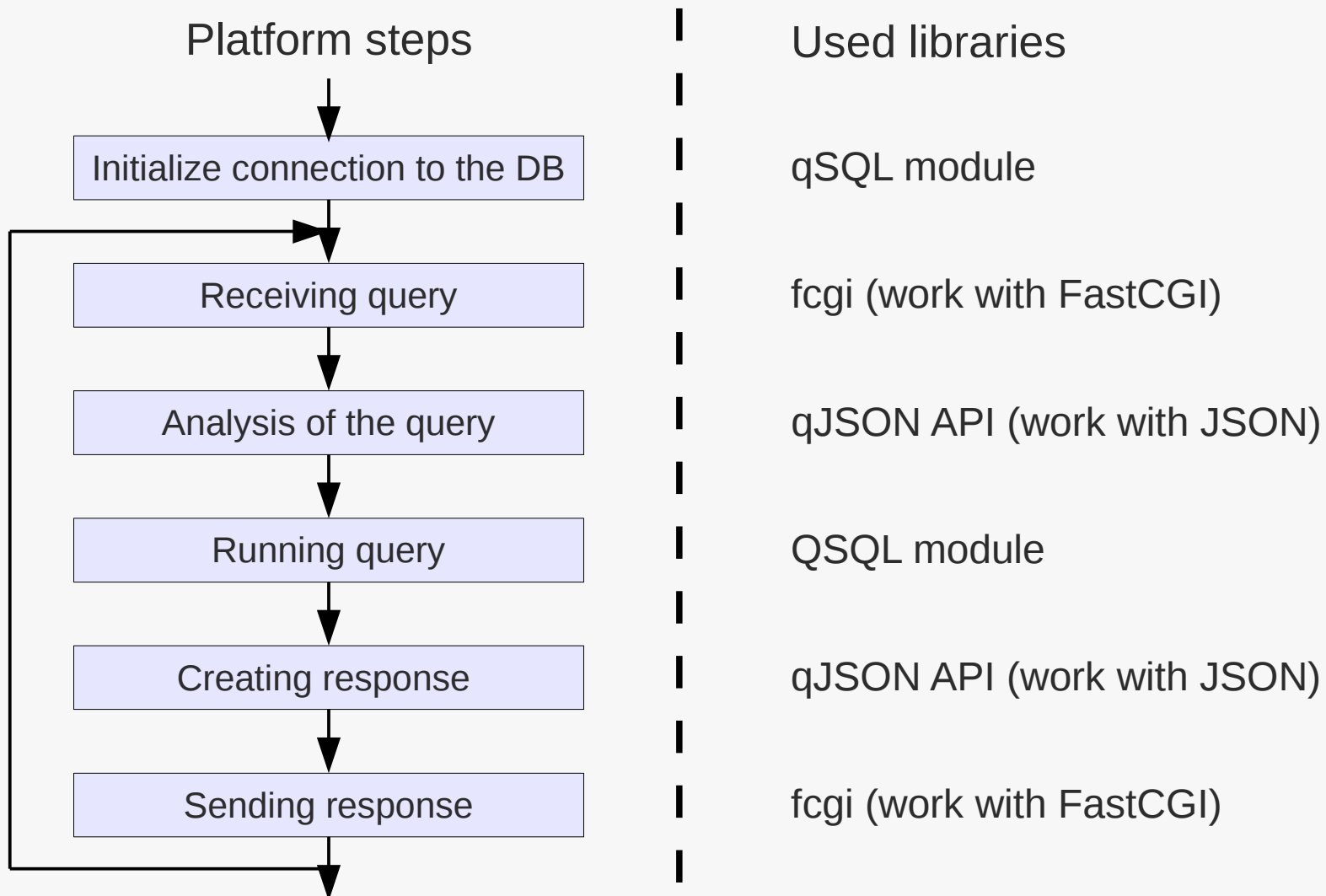


Geo2Tag platform architecture





Sequence of request processing

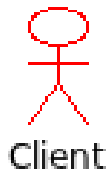




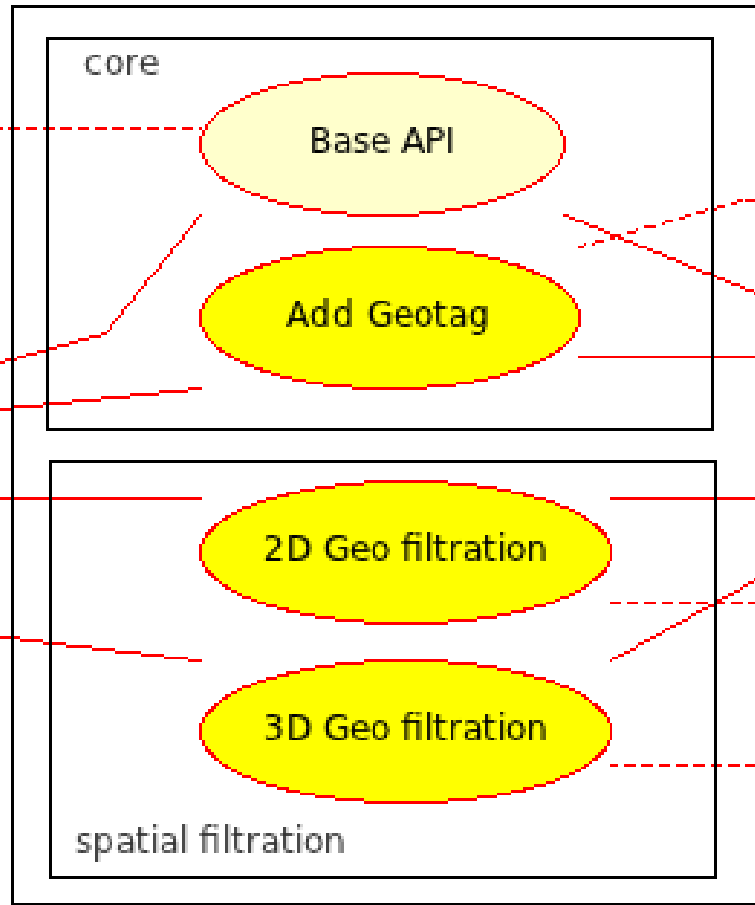
Platform API

- Registration
- Login
- Add channel
- Subscribe
- Unsubscribe
- Available channels
- Subscribed channels

Marking of content is produced in three geographic coordinates and time



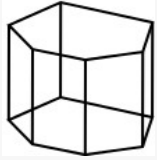
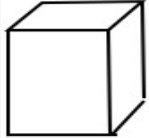
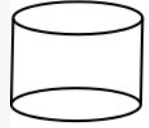
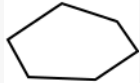
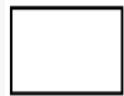
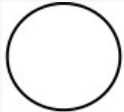
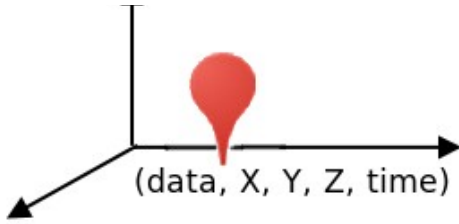
Client



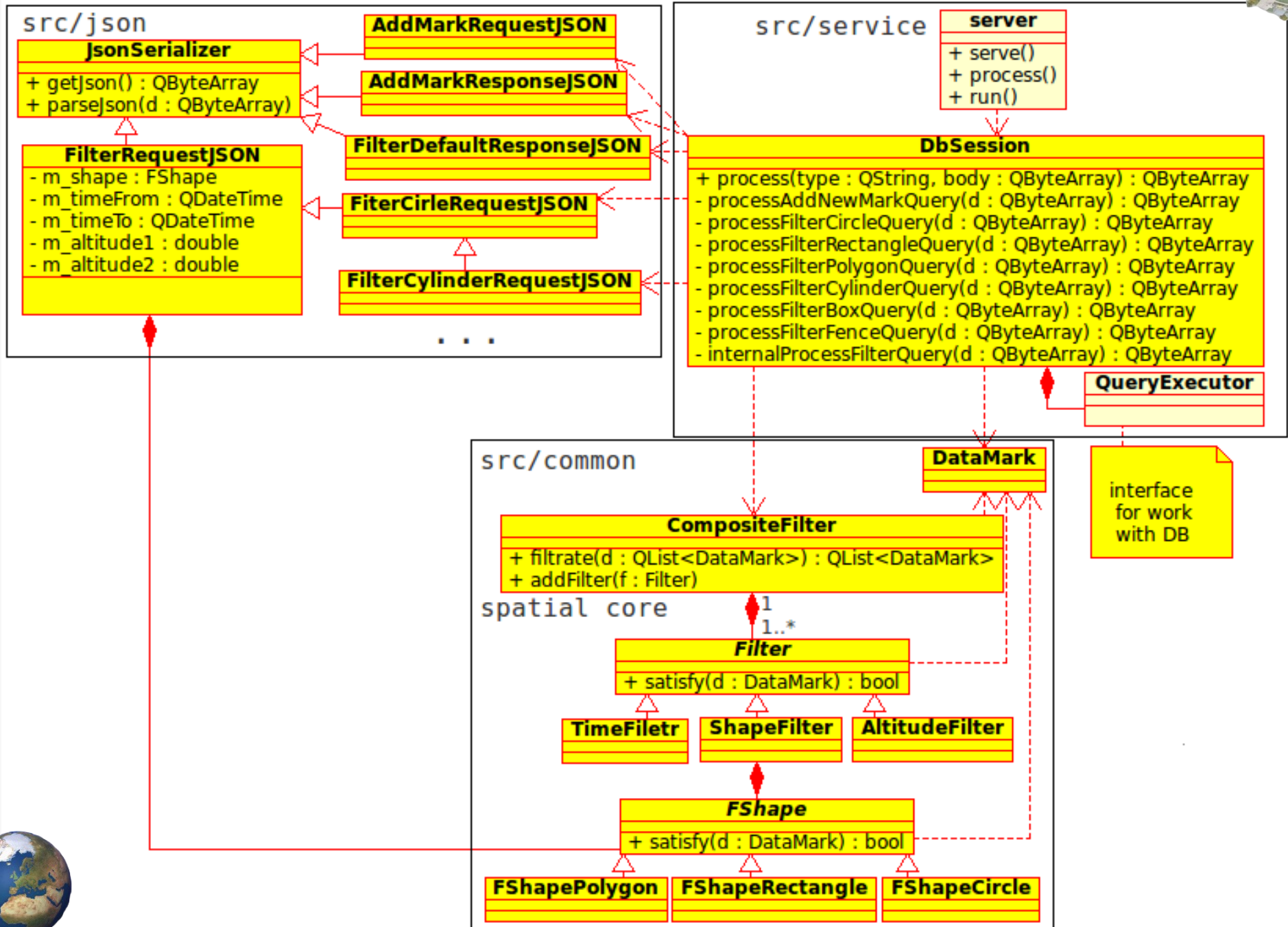
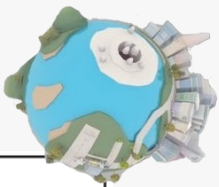
Service provider

Geo filters:
 - "circle"
 - "rectangle"
 - "polygon"

Geo filters:
 - "cylinder"
 - "box"
 - "geofence"

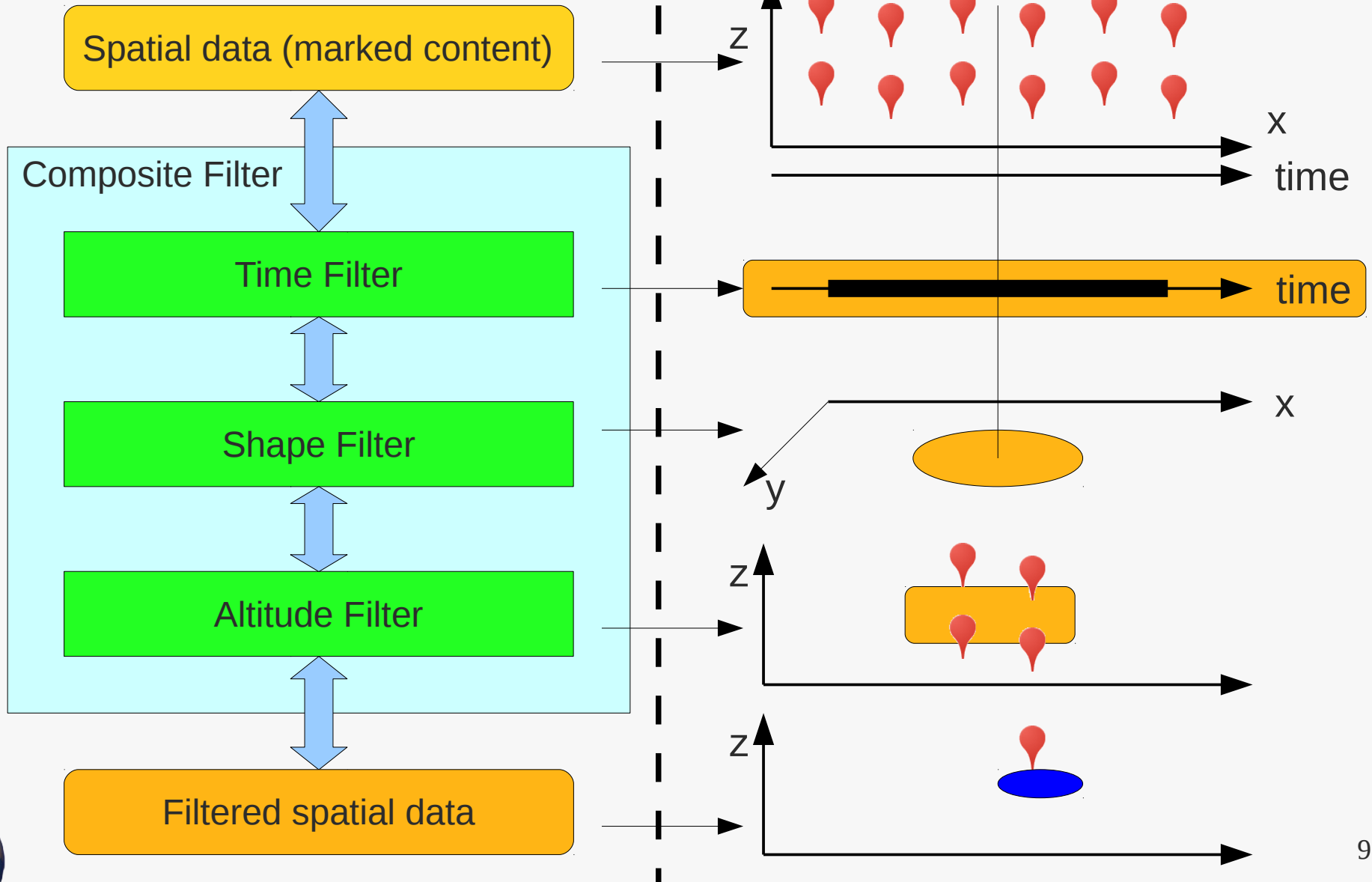


Logical structure of the control program



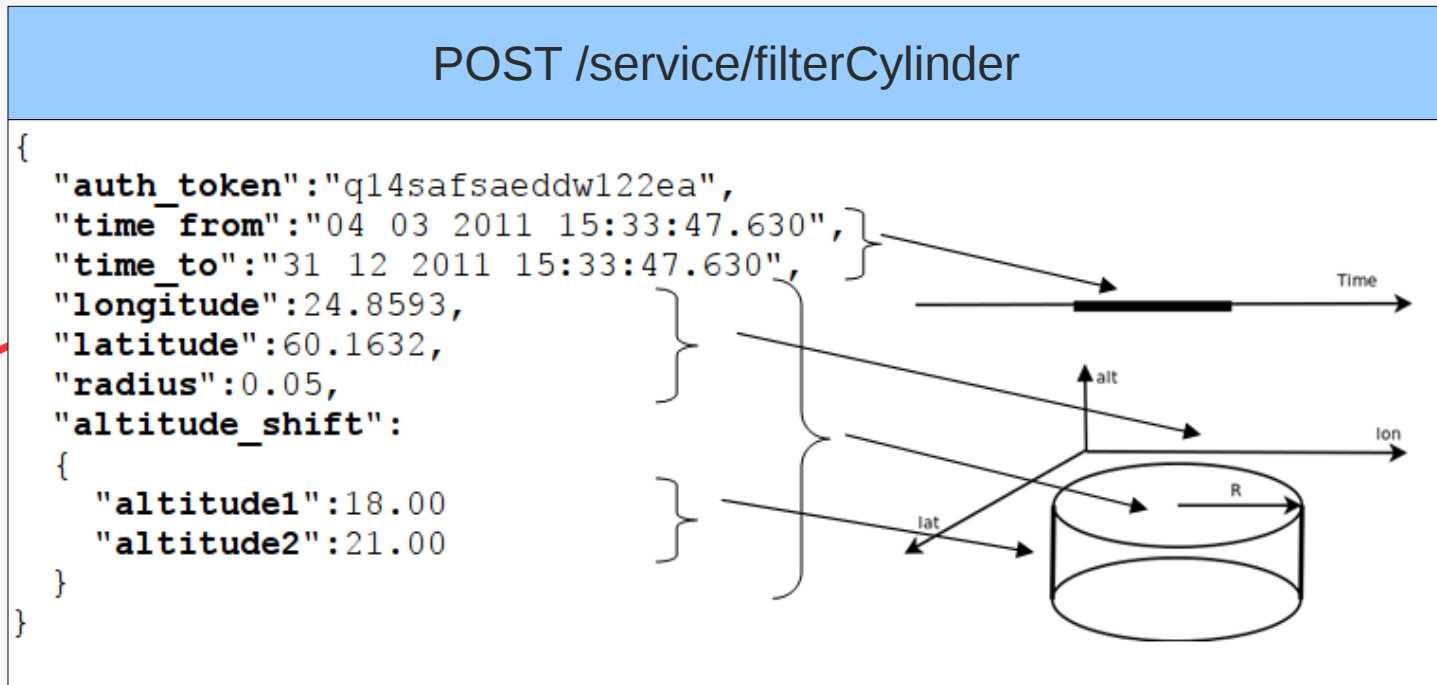


Spatial filtration. Stack of the filters





Example of filter query "Cylinder"



HTTP/1.1 200 OK

```

{
  "errno" : 0,
  "channels" :
  [
    "channel": { ... list of tags ... }
  ]
}

```



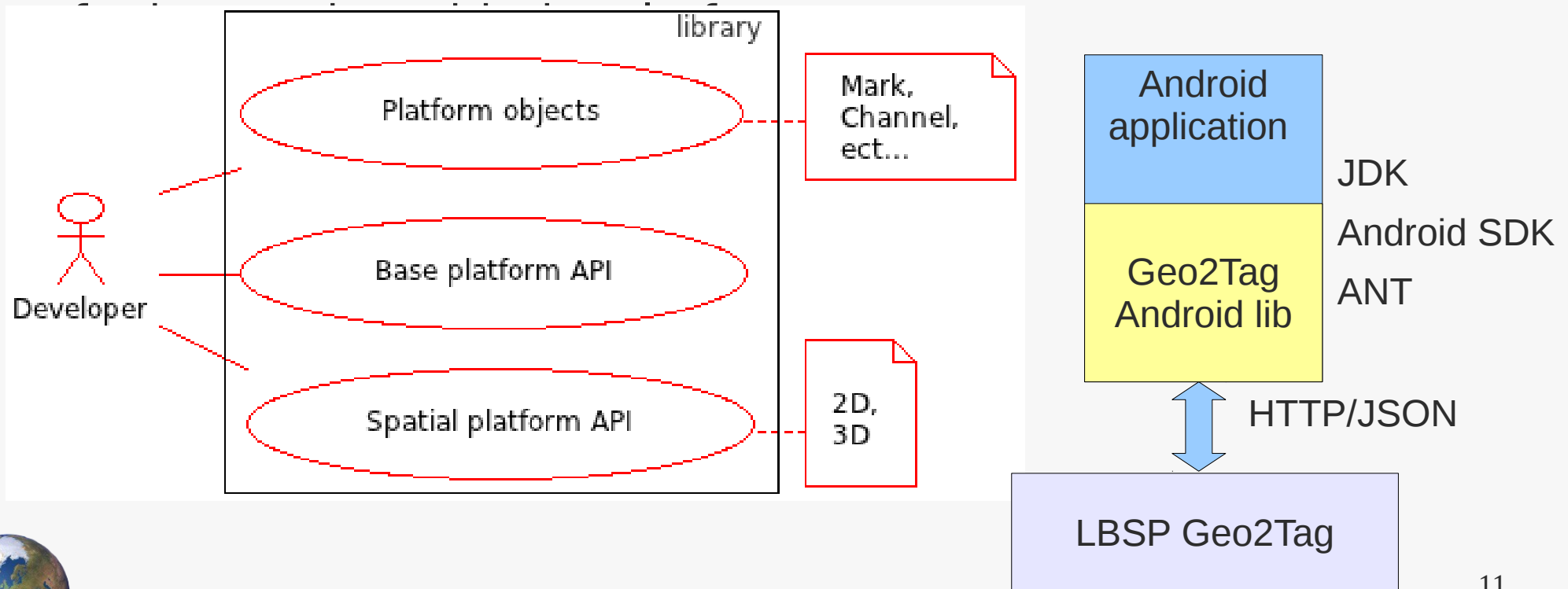


Client library for Android OS

- Abstraction from the platform interface
- Provides developers with a convenient programming interface

Android

- 53% - part in the world
- Android Market





Future plans

- Implement client library for Symbian/MeeGo
- Implement client library for iOS
- Complex spatial objects support and events support
- Platform performance

Project Links

- Project page: <http://geo2tag.org>
- Project wiki: <http://osll.spb.ru/projects/geo2tag/wiki>
- Main project repo: <https://github.com/OSLL/geo2tag>





Questions & Answers

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