Petrozavodsk State University
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Firepoint: Porting Application to Mobile Platforms

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13th FRUCT Conference,
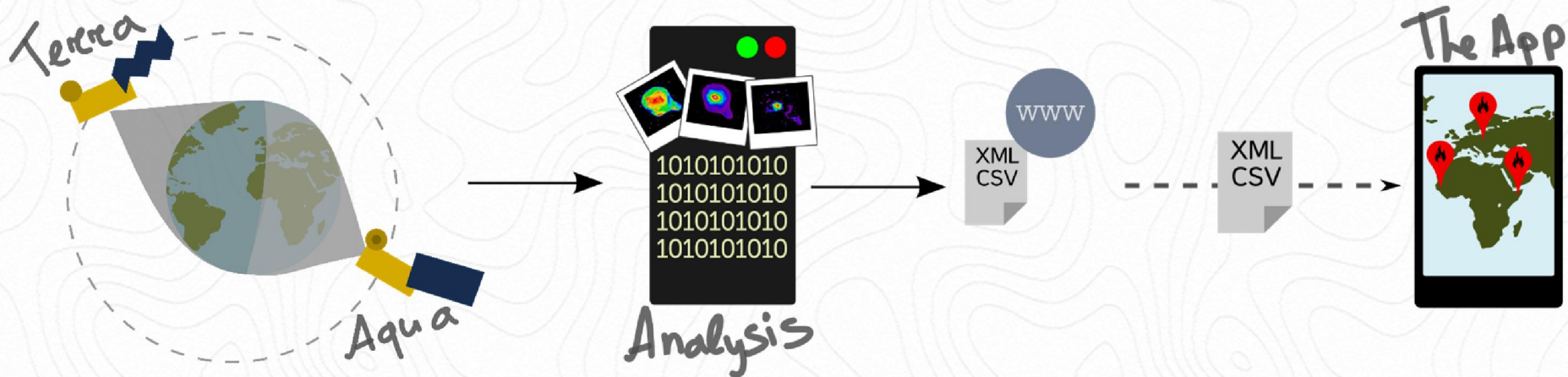April 22-26, Petrozavodsk, Russia

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What is Firepoint?

The Firepoint application provides to the user information on fire detection, obtained from the FIRMS service.
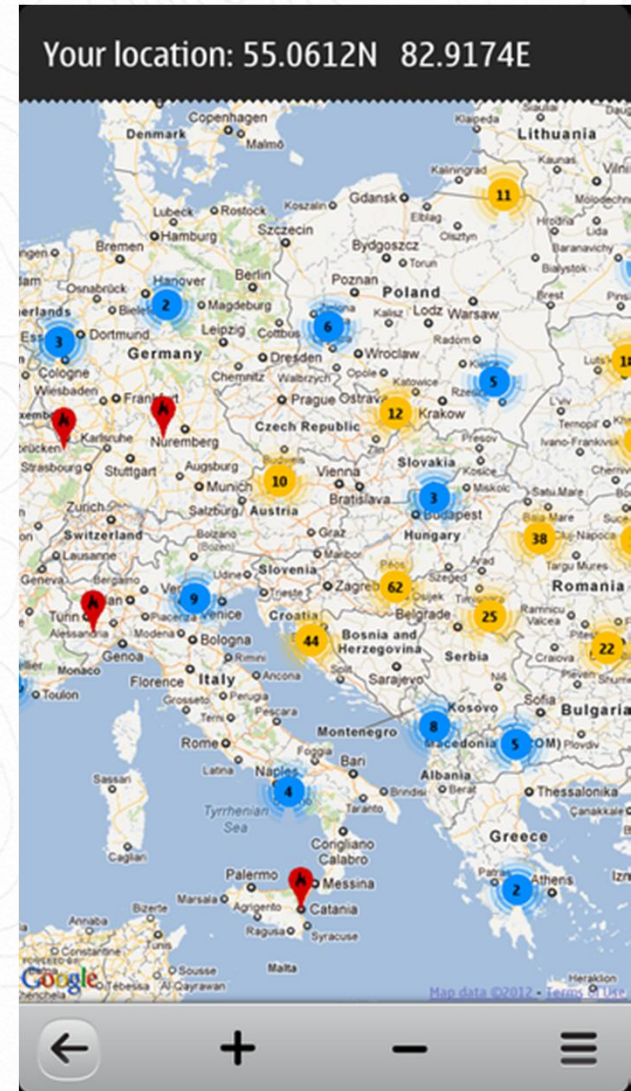
Functions

- Map with fire points
- Points clustering
- Warning about nearby fires
- Connection with the emergency services
- Teaching:
  - How not to cause a fire
  - What to do in case of fire

Dealing with Harmattan

- First implementation:
  - Qt/QtQuick
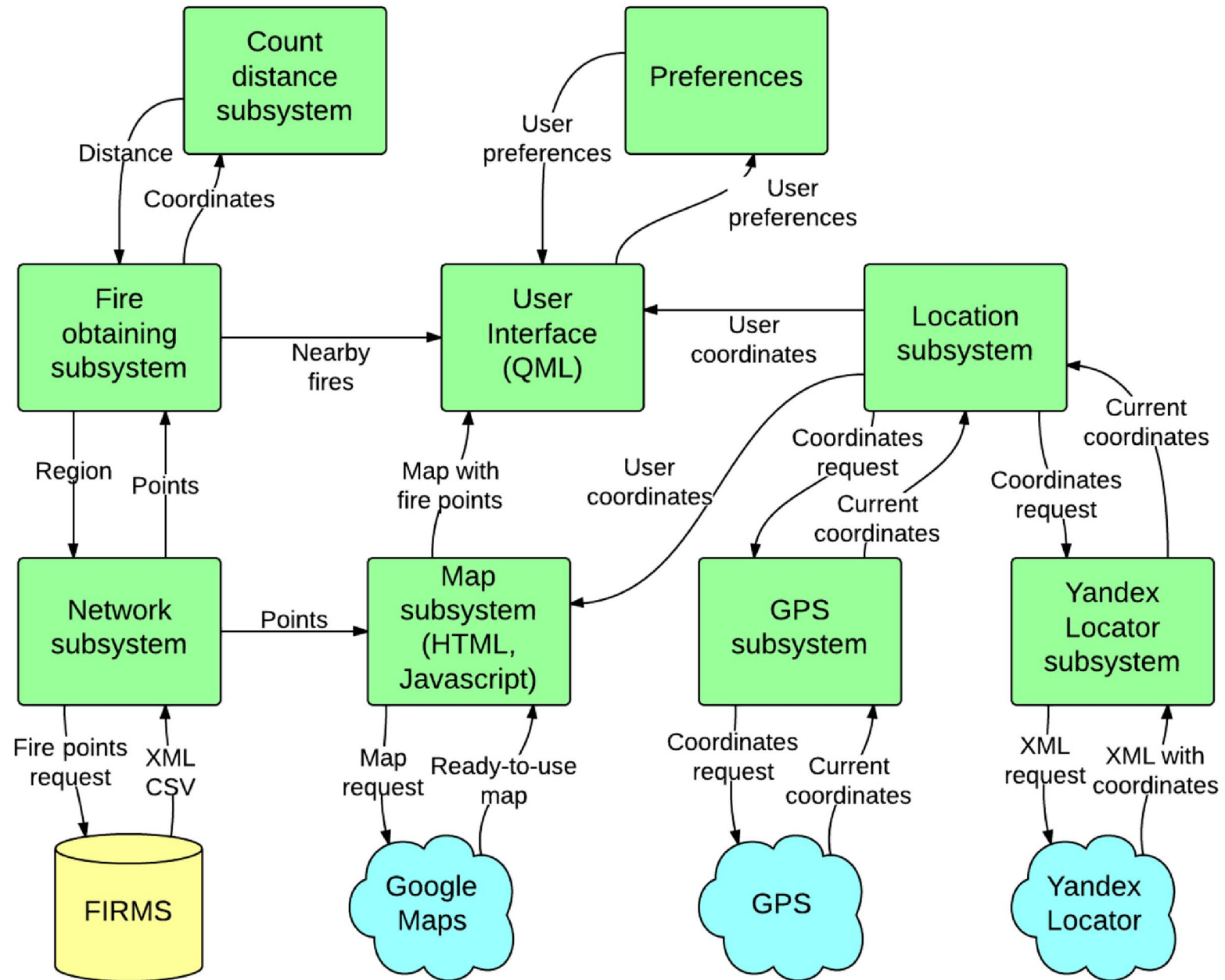 - HTML, Javascript
- FRUCT 11

Using Qt on different platforms

- Symbian: OK

- Android:

  – Necessitas

  – Ministro

- S40: no possibility

HTML5 on mobile platforms

- ## Phonegap:

    – Symbian: no support for working with files

    – S40 is not supported

- ## Titanium:

    – Symbian is not supported

    – S40 is not supported

- ## Sencha

    – Symbian is not supported

    – S40 is not supported

Architecture

Dealing with Symbian

- No changes in Qt source code

- Flexible QML

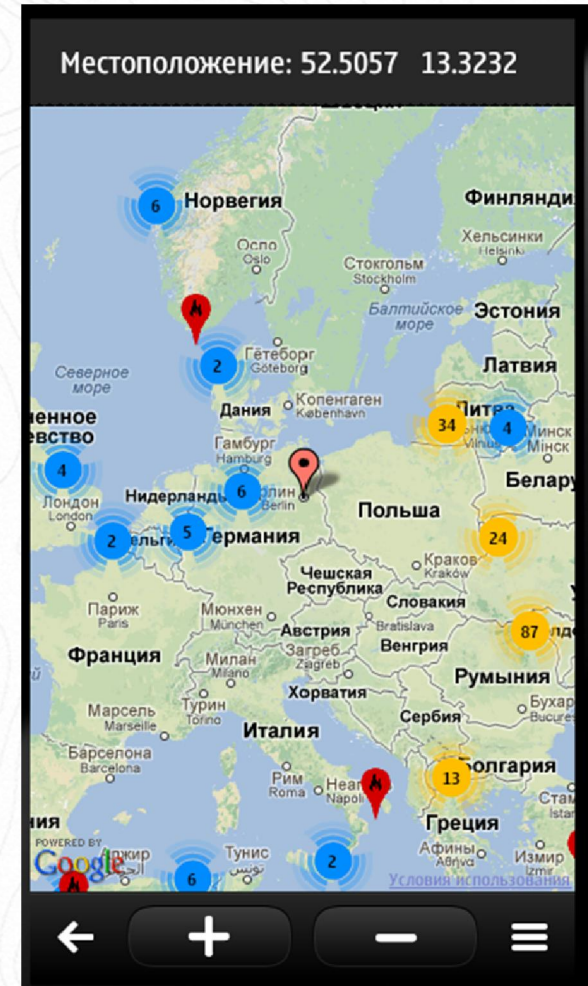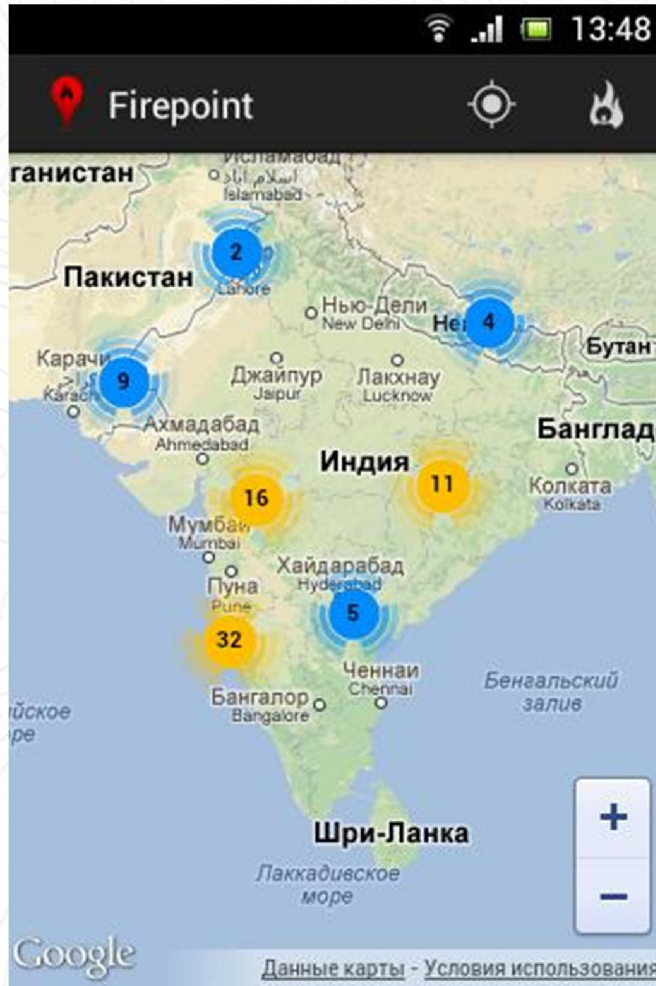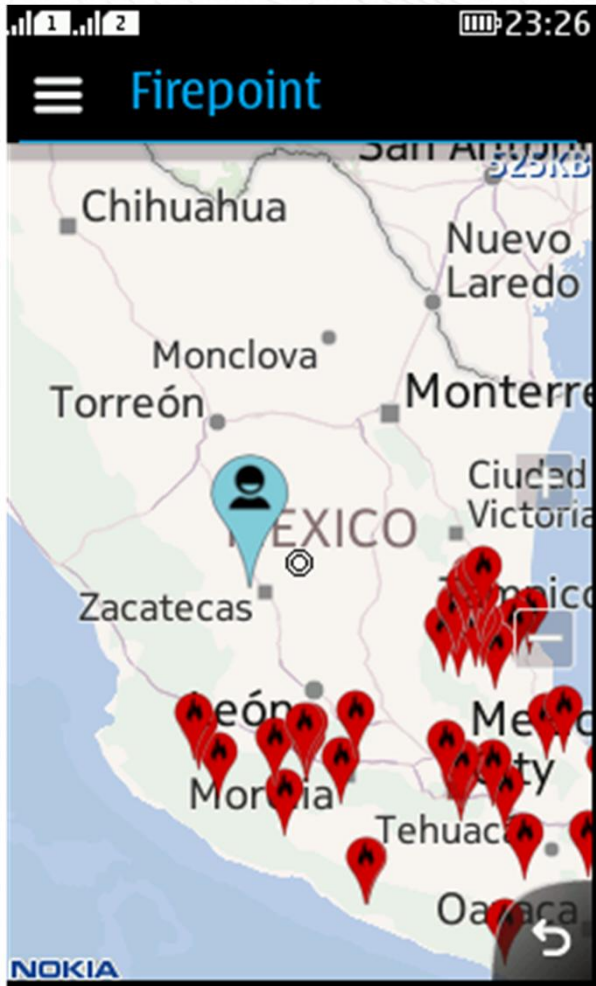- QML components naming

- Publishing process

Dealing with Android

- Qt to Java

- Map subsystem:

  – WebView

  – Google Maps Android API

- Clustering

- Supporting under 2.3 versions

  – ActionBarSherlock

  – Official library

Dealing with S40

- Native or web application?

- Problems with documentation

- No clustering

- Different devices:

  - Full touch

  - Touch and type

Screenshots

Results

Platform	Language	LoC
Android	Java XML	1076 813
Nokia Asha	Java ME	2108
Symbian	Qt QML	1004 3089

Average time is about 3 months.

Android — published: https://play.google.com/store/apps/details?id=org.fruct.oss.firepoint
Symbian — published: http://store.ovi.com/content/279268
S40 — in process