Firepoint: Application for Identified Fires Notification

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This project is supported by grant KA179 of Karelia ENPI programme, which is co-funded by the European Union, the Russian Federation and the Republic of Finland.

11th FRUCT conference
April 23–27, Saint-Petersburg, Russia
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Problem

- Enormous damage to the environment
- People and animals dying
- Destroying of huge areas of forests

What can we do?

- Provide users with information about the surrounding environment
- Ask for feedback in case of a fire site detection
Problem: user’s location

- Can not be associated with any street or house
- Use of geographical coordinates is OK
Idea

Providing the user with:

- Information about fire detection, obtained from the FIRMS service
- Geographical map with fire points
- Connection with emergency services
Use cases: download data before campaign

- Downloading map with fires at home
- Going to forest
- Using downloaded data
Use cases: face to face with fire

■ Actors
  ▶ Forest rangers
  ▶ Hunters
  ▶ Mushroom and berry pickers

■ What to do?
  ▶ Teach them how to behave in forest
  ▶ Teach them what to do in case of fire
  ▶ Provide them with a functionality of an emergency call
Architecture
Application forms: maps with fire points

Your location: 55.0612N  82.9174E

Your location: 55.0612N  82.9174E
Application forms: report about new fire

Discover a new fire? Report about it to emergency service.

Information, provided for emergency call:

- Your current location (geographical coordinates)
- Article about responsibility for fake call
Application forms: comic strip ‘How not to cause a fire’

1. Do not fuel the campfires during the dry season, windy weather and without the need.
2. Always extinguish the campfire completely and do not leave a fire unattended.
3. Do not throw cigarettes and matches.
4. Do not throw trash in the forest.
5. Do not dilute the campfires near trees. Fence campfires by stones.
Application forms: comic strip 'What to do in case of fire'

PART 1

When you have an ability to run

a) move against the wind and perpendicularly to edge of the fire

b) stay calm
c) choose a path by a glade/road/river
Application forms: comic strip ‘What to do in case of fire’

PART 2

When you have no ability to run

a) plunge into any pond (except swamp!)

b) find a safe place (burnt area/riverbed)

c) cover your mouth and nose with a piece of wet tissue
Implementation

Third-party services:

- Google Maps - providing maps
- Yandex.Locator - location determination over mobile network
- The Fire Information for Resource Management System (FIRMS) - fire activity data

Programming tools: Qt developing platform, QML (UI), HTML+JS (map, clusterization), Bazaar (distributed revision control system)

Firepoint is licensed under GNU GPL v.2
Current project state

- Finished coding
  - Qt/C++: 10 files, 718 lines
  - QML: 18 files, 2791 lines
  - Javascript: 4 files, 761 lines
  - HTML: 1 file, 137 lines

- Finished testing
  - 101 tests performed

- Publishing in Nokia Store in progress
Plans

- Make available for Symbian (not only MeeGo Harmattan)
- Bring new functionality: mark different types of points: illegal logging, illegal carwash, illegal landfills

Project hosting: http://launchpad.net/firepoint
Promo-site: http://oss.fruct.org/projects/firepoint

Thank you for attention!