



Mobile Campus Assistant

Mike Jones

mike.a.jones@bristol.ac.uk

@MrJ1971



University of
BRISTOL



Institute for Learning and Research Technology (ILRT)

Established in 1996

~50 staff working in R&D,
consultancy, support and
services



Strong history of innovation

Expertise in web application development, semantic
web, linked data mobile technologies, social software
and data visualisation

Background

JISC funded 'Rapid Innovation' project

6 Month project with 1.1 FTEs

Developed between August to November, 2009

Software available under a BSD-style license

The logo for JISC, consisting of the letters 'JISC' in a bold, orange, sans-serif font.

Rationale



<http://www.flickr.com/photos/tonivc/2283676770>



<http://www.flickr.com/photos/nullalux/2261949240>

What issues are there in providing a *time* and *location* sensitive application for students?



Where is the nearest open library?



Where is the nearest available PC?



When is the next bus to the halls of residence?

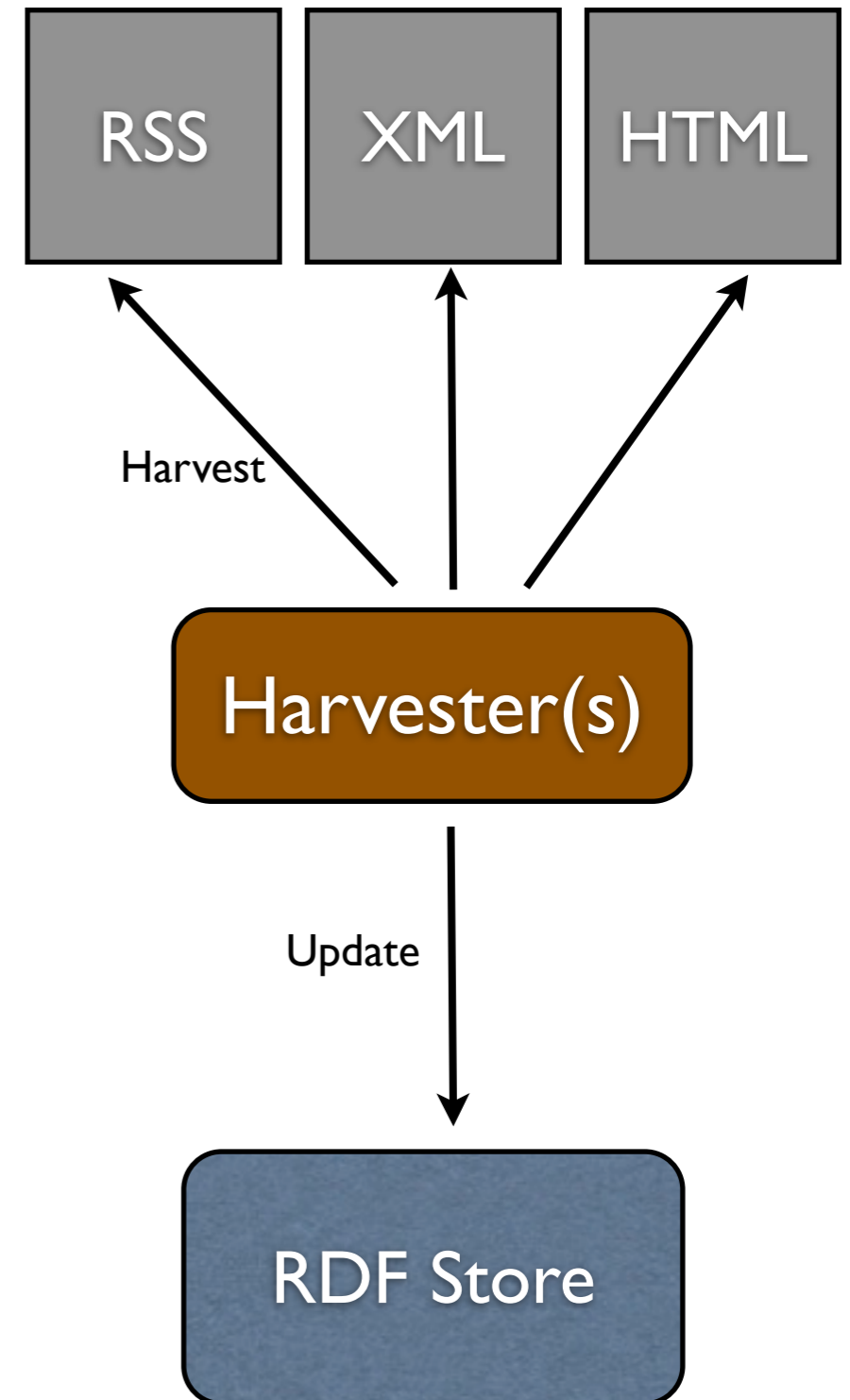
Mobile Web or Native App?



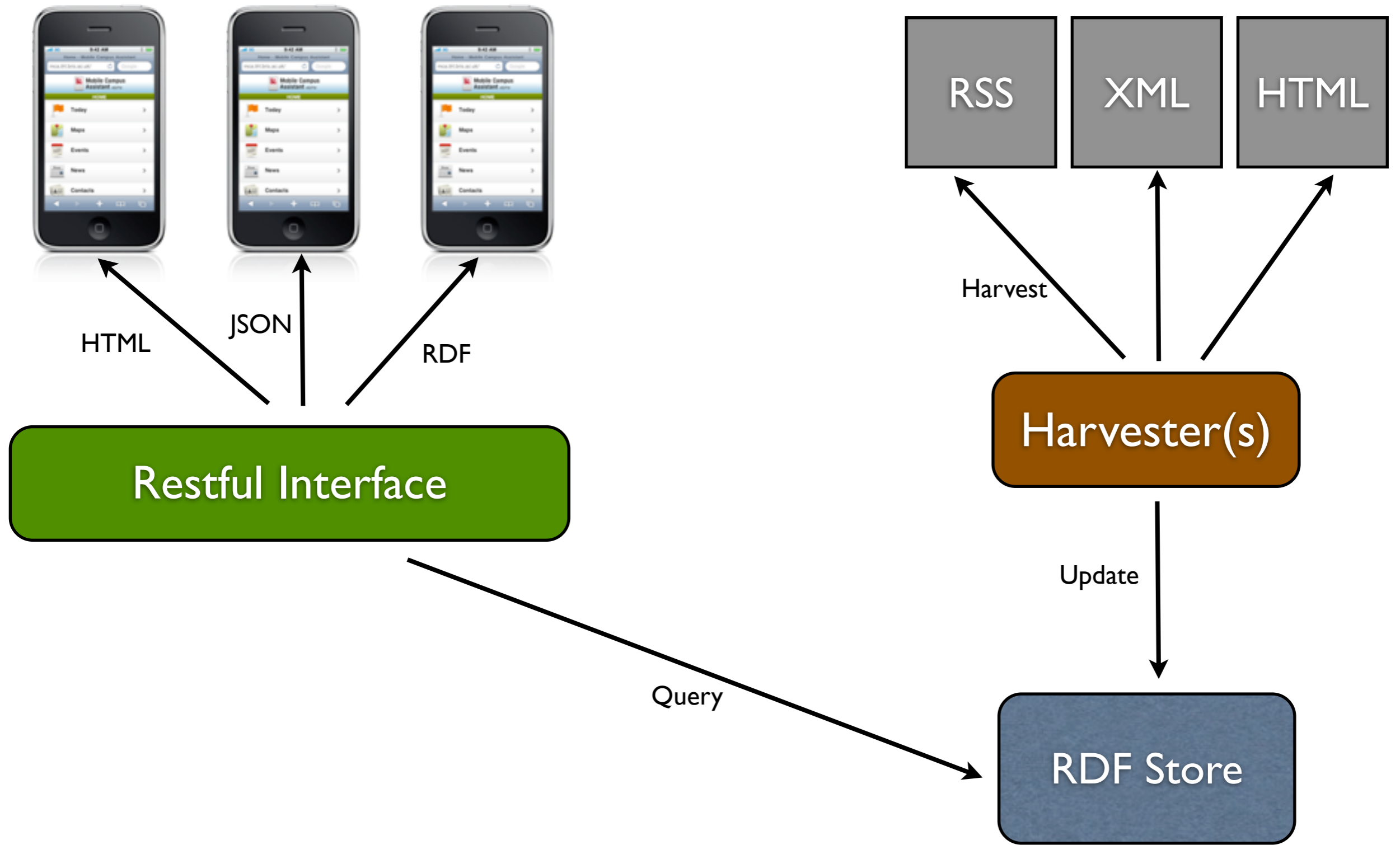
(not forgetting PhoneGap, Titanium etc.)

Mobile Web

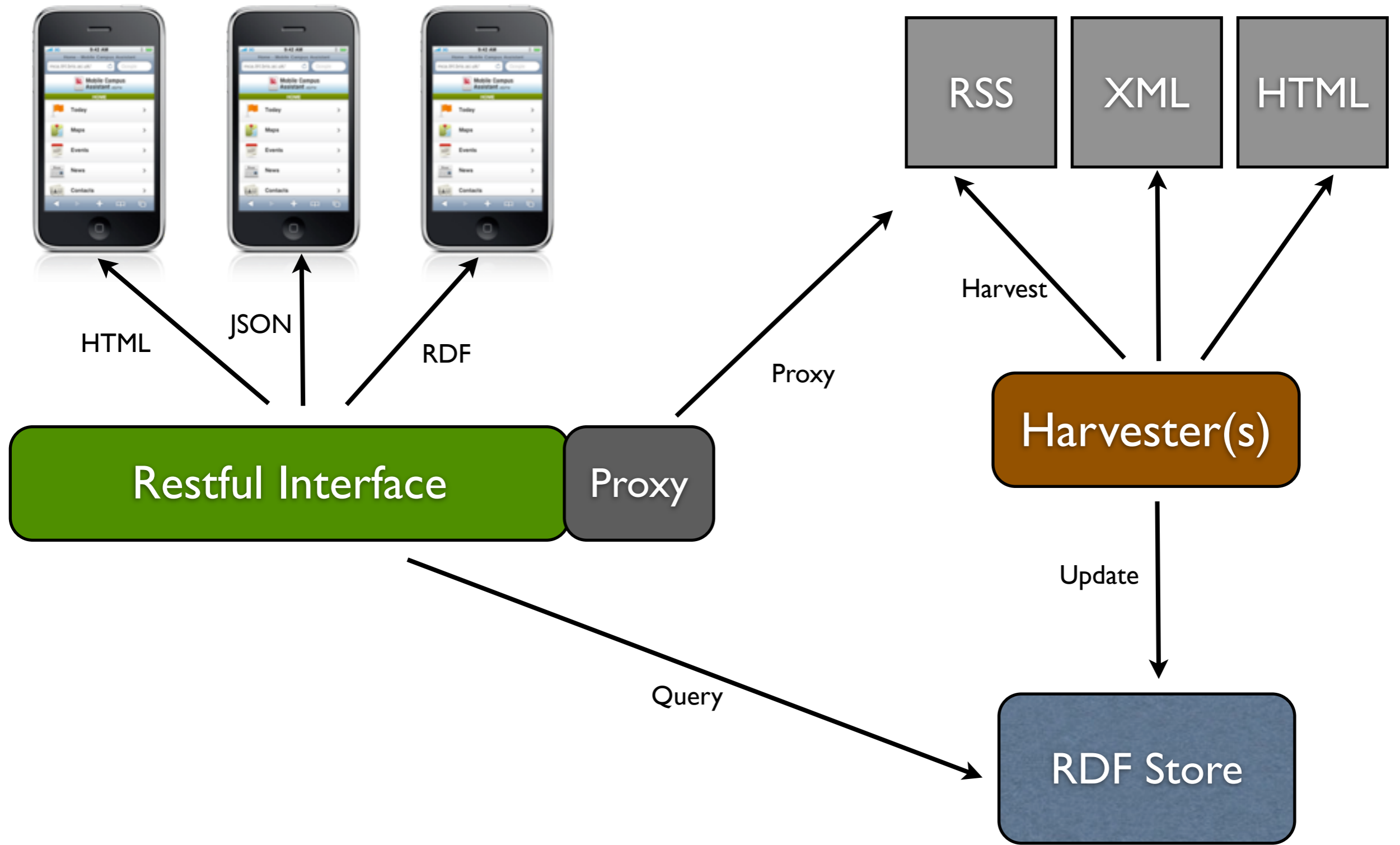




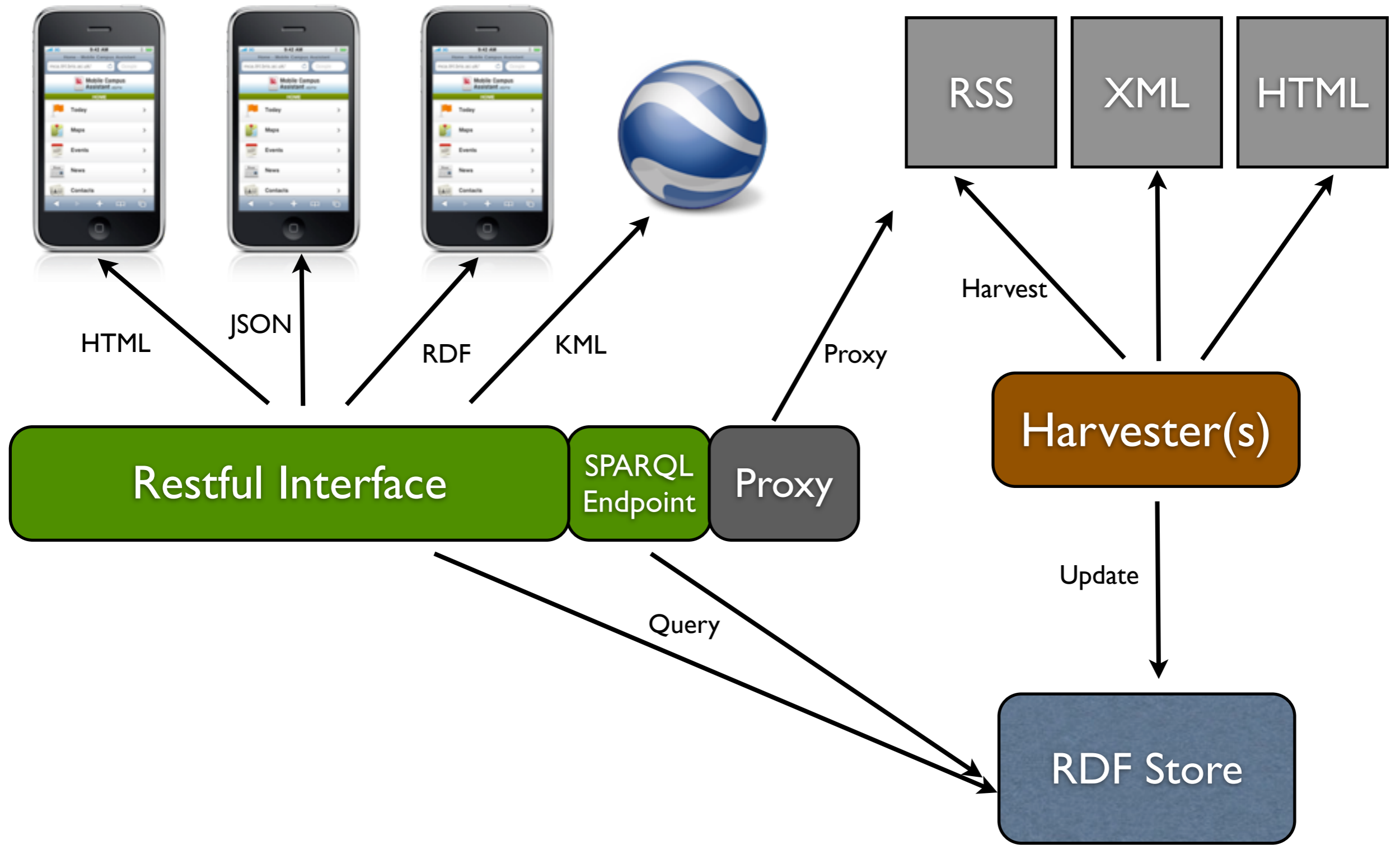
Harvesting data sources



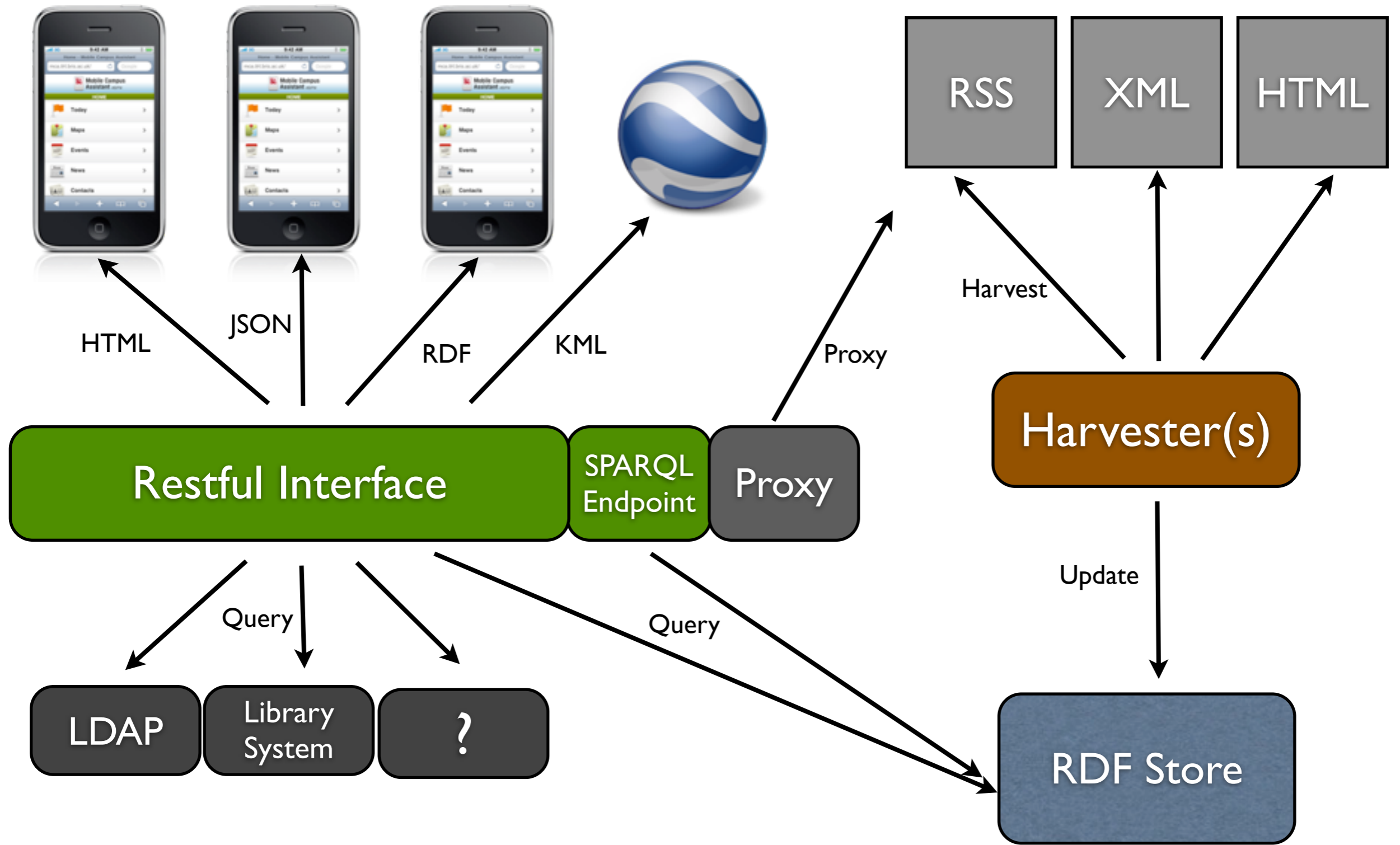
Querying the data store



If all else fails ... screen scrape



SPARQL Endpoint and Geo support



Extensible RESTful interface

Technology Stack

Technology Stack



Technology Stack



H2 Database Engine

Technology Stack



H2 Database Engine

Jena Semantic Web Framework

Technology Stack



H2 Database Engine

Jena Semantic Web Framework

Jersey (JAX-RS Reference Implementation)

Technology Stack



H2 Database Engine

Jena Semantic Web Framework

Jersey (JAX-RS Reference Implementation)

FreeMarker Template Language

Technology Stack



H2 Database Engine

Jena Semantic Web Framework

Jersey (JAX-RS Reference Implementation)

FreeMarker Template Language

Apache Maven

Technology Stack



H2 Database Engine

Jena Semantic Web Framework

Jersey (JAX-RS Reference Implementation)

FreeMarker Template Language

Apache Maven

JEE Servlet Container

Standards Bingo

RDF

CSS

XHTML

RSS

SPARQL

XML

Atom

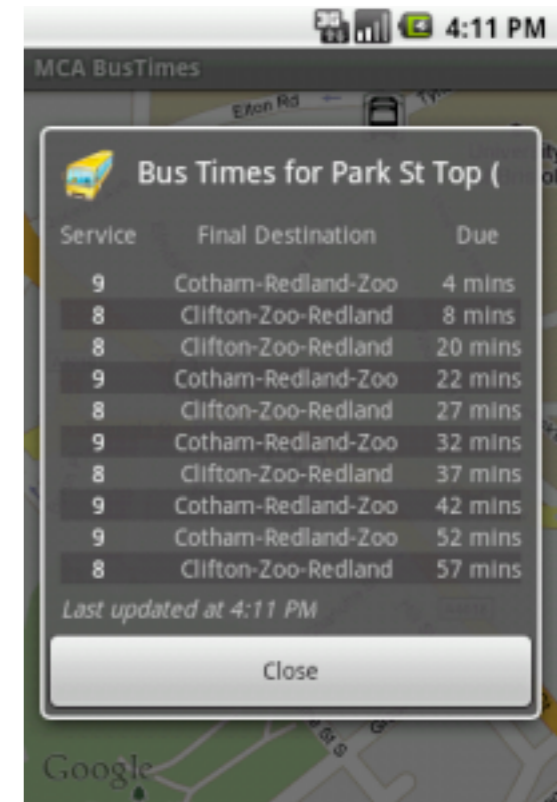
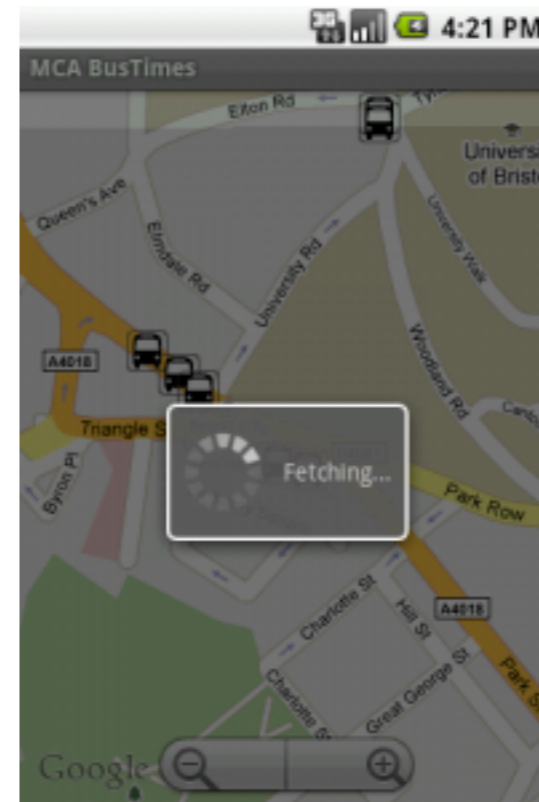
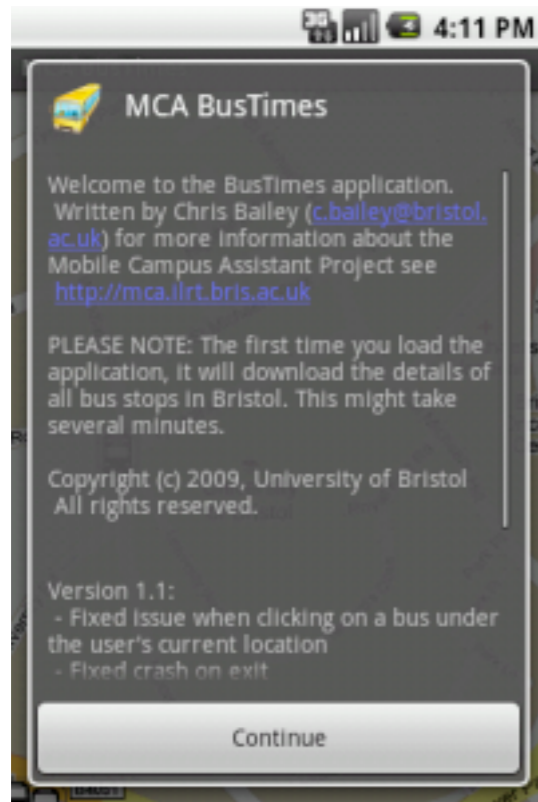
Geo Location API

KML

JSON

JAX-RS

Native apps can use the data



Project Roadmap

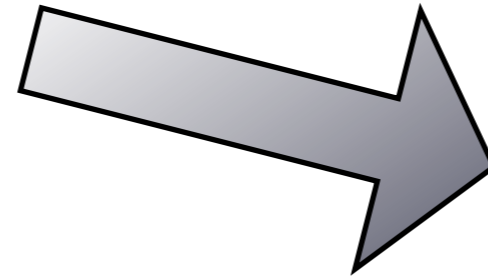


**Mobile Campus
Assistant**

Project Roadmap



Mobile Campus Assistant



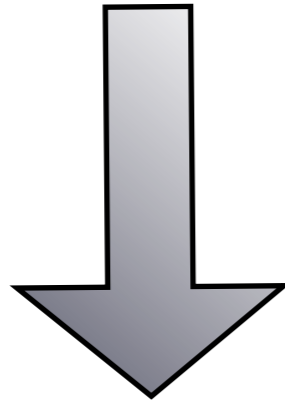
Greening Events



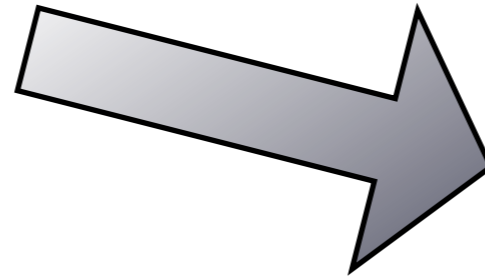
Project Roadmap



Mobile Campus Assistant



MyMobileBristol



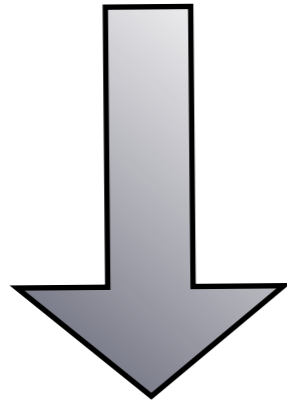
Greening Events



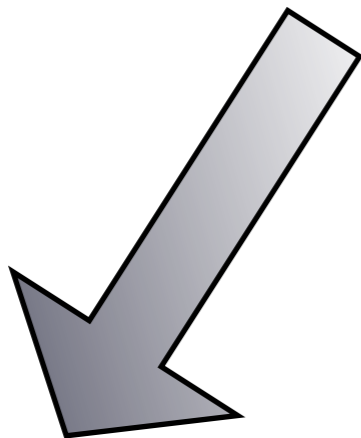
Project Roadmap



Mobile Campus Assistant

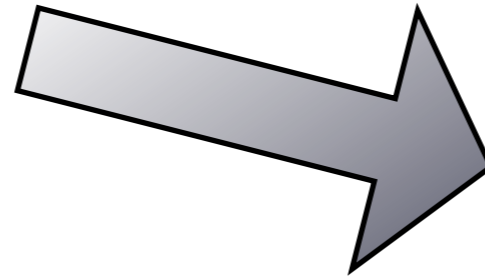


MyMobileBristol



m.bristol.ac.uk

Greening Events

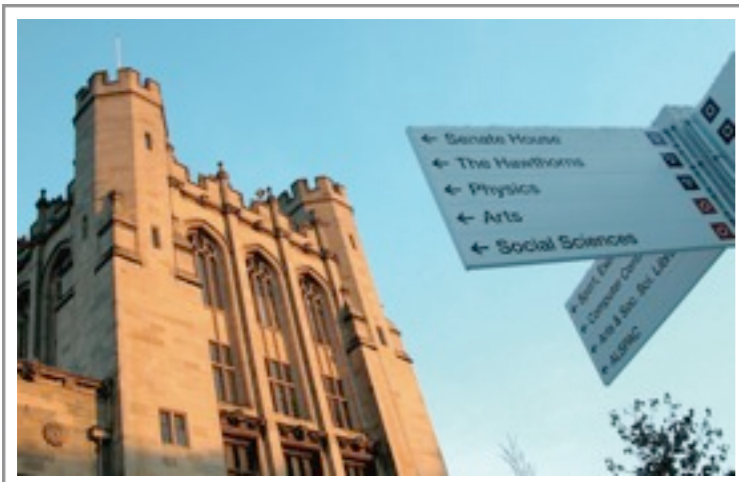


MyMobileBristol

A collaborative platform composed of mailing lists, wiki, blog and source code repository.

A demonstrator installed at the University of Bristol.

Stakeholder engagement and workshops.



MyMobileBristol

‘Open Innovation’ project funded by JISC under their Business and Community Engagement

Running from July 2010 to August 2011

Collaboration with Bristol City Council

Council have released data under the B-Open initiative

Looking at releasing transport data



Some Feedback

*Love this
application.*

*thanks for
the work*

Really good ...

*Great work!
Much needed.*

“It’s the data, stupid”

The data is a web page

The data is incomplete

You can’t have the data

You can have the data if you pay

The data has a commercial license

Is it on the App store?

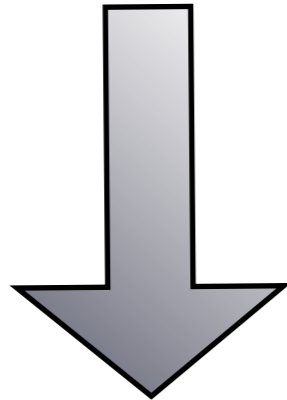


<http://www.flickr.com/photos/jima/3435396513/>

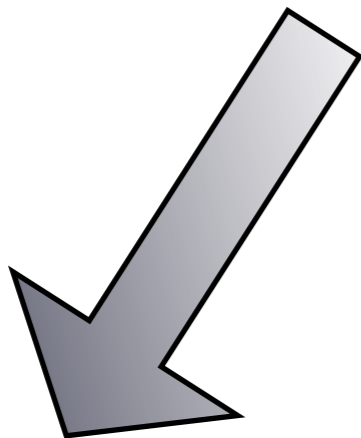
Project Roadmap



Mobile Campus Assistant

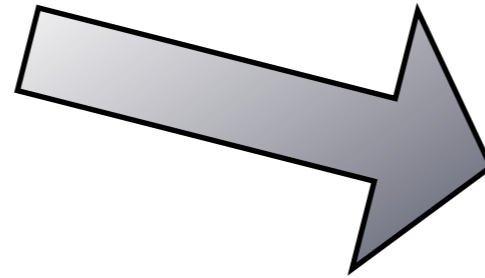


MyMobileBristol



m.bristol.ac.uk

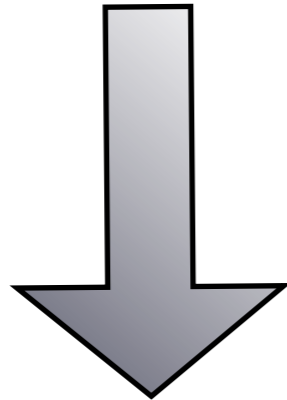
Greening Events



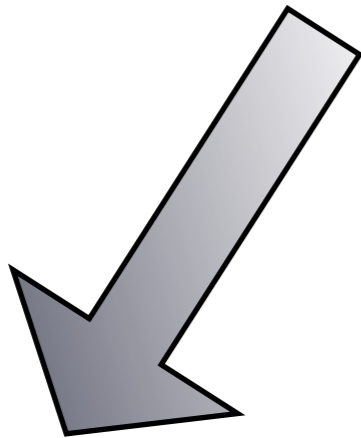
Project Roadmap



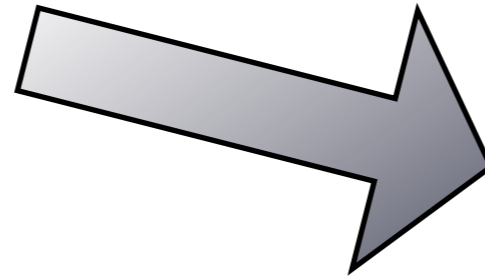
Mobile Campus Assistant



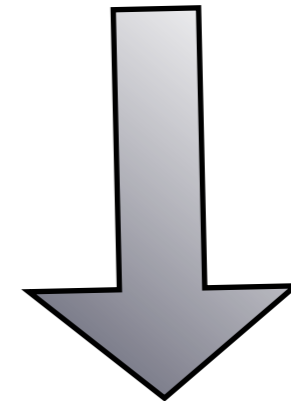
MyMobileBristol



m.bristol.ac.uk



Greening Events



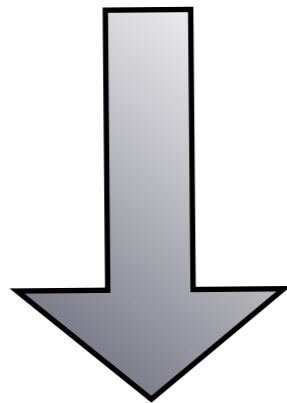
Greening Events 2



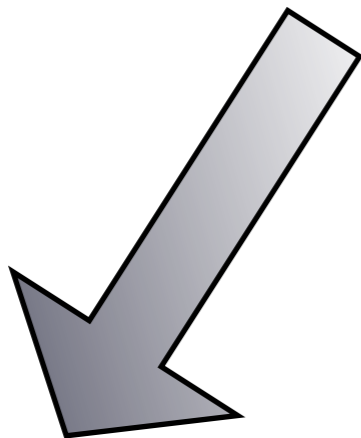
Project Roadmap



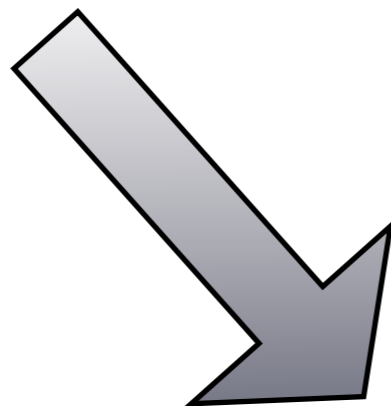
Mobile Campus Assistant



MyMobileBristol

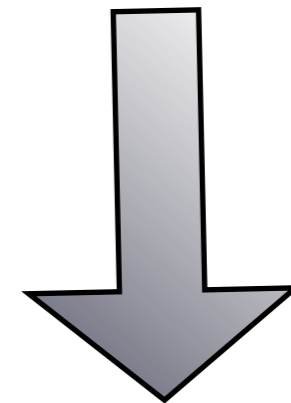


m.bristol.ac.uk



m.jisc.ac.uk

Greening Events



Greening Events 2



Further Information

Project Website:

<http://mymobilebristol.com>

Demonstrator:

<http://m.bristol.ac.uk>

Source code:

<https://github.com/ilrt/mca>