

Mapping Mashups

URPL 590 – Spring 2009
Applied GIS Workshop



David Hart

*Department of Urban and Regional Planning
University of Wisconsin-Madison*

A.J. Wortley

*Wisconsin State Cartographer's Office
Thursday, May 7, 2009*

Presentation Outline



- Background
 - What is a Mashup?
 - Workshop Goals
 - Collaborative Technologies
 - Presentations/Demonstrations
 - Workshop Structure
- Student Presentations (10 @ 5 min. each)
- Observations on mapping mashup methods (10 min.)
- General Q&A (15 min.)

What is a Mashup?



“In web development, a mashup is a Web application that combines data or functionality from two or more sources into a single integrated application.” – wikipedia

new orleans craigslist > [apts/housing for rent](#)

search in: apts/housing for rent

rent: min max 0+ BR cats dogs

[Thu, 07 May 10:06:16] [[free credit reports](#)] [[stating a disc](#)] [[hou](#)] [[AVOII](#)]

Thu May 07

[SCAM WARNING! DO NOT FILL OUT ONLINE APPLICATI](#)
(downtown)

[\\$1750 / 3br - Great 3br/2ba home CONVIENT TO EVERYTHIN](#)

[\\$1800 / 2br - Uptown Luxury Condo - \(3817 Coliseum St\) pic](#)

[\\$2500 / 6br - Large Beautiful House for Rent -](#)

<http://neworleans.craigslist.org/>

Powered by [craigslist](#) a
(this site is in no way affiliated w

Show Filters ^{New} Refresh Link

Map Satellite Hybrid

pics	price	bd	description
	\$1500	3bd	spectacular 3br/2ba Midcity house!
	\$1650	3bd	Apartment for rent
	\$1750	3bd	3br/2ba - Huge Broadway Apt, 3Bd/2BA, Full Kitchen, Washer/Dryer
	\$1500	2bd	Beautiful Condo for Lease/Lease Purchase Opt
	\$1550	3bd	Great Location - feet from Magazine St.
	\$1650	3bd	Really nice 3 bedroom close to universities
	\$1650	2bd	Great location, near Tulane/Lovola
	\$1650	4bd	2500 Sq ft 3Bath Near Uno-Ben Franklin-City Park-Lake Front
	\$1600	3bd	Plus sunporch and office
	\$2000	5bd	Near Tulane and the park (2 blocks)
	\$1800	3bd	Great 2 Story Duplex - Avail June 1
	\$1800	3bd	Beautiful Downstairs Unit Avail Aug. 1
	\$1800	3bd	Beautiful Single Family Home - Lots of Character
	\$2000	4bd	Great 2 Story Across St. from Loyola Law
	\$1550	3bd	On Trolley Route - Beautiful House for Rent in Covington
	\$1500		
	\$1750		2 bed/2bath in 1750 St. Charles.
	\$1695	3bd	Super Nice Renovation In Good Neighborhood

Map data ©2009 Tele Atlas - Terms of Use

<http://www.housingmaps.com/>

Workshop Goals



- Develop a better understanding of the mapping mashup phenomenon
- Gain hands-on experience with software tools to develop web mapping applications
- Learn to effectively communicate the benefits of mapping mashups to society
- Build and promote a mapping mashup that has benefits to society
- Utilize technology that promotes collaboration
- Learn to work effectively in a group setting
- Sharpen writing skills directed at a professional audience

Collaborative Technologies



- Presentation on collaborative technologies
 - Jeff Bohrer and John Thomson, DoIT
- Collaborative Blog (Wordpress)
- Social Bookmarking (Delicious)
- Web Hosting (MyWebSpace)
- Web Conferencing (WisLineWeb)
- Discussion Forum (Learn@UW)

Collaboration Tools at UW-Madison



Learn@UW

<http://learnuw.wisc.edu>

Group tools include private discussion board and secure file locker
Access with UW NetID

Contact David Hart or Jeff/John to get started

Presentations/Demos



- Overview of Mapping Mashups (AJ)
- Mashup Tools/Data Sources (David)
- MapBuilder Demo (AJ)
- KML for Mapping Mashups
 - Web Conference on April 28th by Pete Giencke, Google

Sign Up Sign In

map builder *"MapBuilder lets you tag locations on a map and publish it on your own site. Mapping is now easier than ever. It's free."*

Home Real Estate **NEW!** Booming Maps Search About FAQ Help Feedback Business Solutions Source Code Preview

New goodies available! Check out Europe coverage (GMaps API V2 support) and [draggable markers!](#) Don't waste time - build maps!

Map Satellite Hybrid

Save Center, Zoom, MapType

Automatically Zoom In

Clear

Location Search & Quick Navigation

344 Main Street, Bellwood, PA Search

Select State/Prov... Go

Select Country... Go

Your Locations: -----

Location Details Real Estate Images

Add Delete

Latitude: Center & Zoom To

Longitude:

Caption:

Description:

Source

Workshop Structure



- **Mashup Gallery – weeks 1 to 2**
 - discover an innovative mapping mashup in your area of interest
 - prepare a summary and post it on a collaborative weblog
 - share your discovery through a presentation to the class
- **Mashup Tutorial – weeks 3 to 5**
 - build proficiency in mashup methods and share knowledge of those methods
 - tutorial format – instructions, datasets, screencasts/YouTube
- **Mashup Project – weeks 6 to 10**
 - develop a mapping mashup that meets a social or business purpose

Mashup Gallery



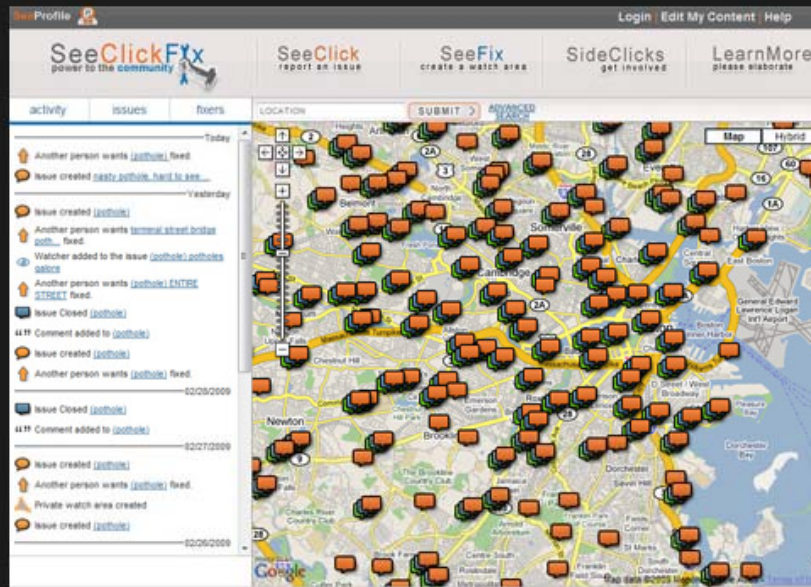
Mashup Gallery – SeeClickFix

March 2, 2009 – 6:19 pm

Posted in Uncategorized

Tagged Boston, Construction, Google Maps, Mashups, Potholes

Comments (0)



I think every state north of the Mason-Dixon line claims to have only two seasons: winter and construction. This may be a foreign concept to go-green Madisonians, but outside bike-friendly cities, this clichéd pseudo-truism is the source of daily frustration for those who commute by car. In an attempt free commuters from this biseasonal prison, the people at SeeClickFix have put together a mashup for reporting potholes and other non-emergency road issues.



- SeeClickFix
- CTA Bus Tracker
- Weather Bonk
- CO2 Emission Mapping
- America's Most Unsafe Cities
- 511
- Active Trails (2)
- Planet Hazard
- The College Outlook
- Price Watch vs. Gas Buddy
- Winery Bound

Mashup Tutorials



Time, KML, and Google Earth

April 4, 2009 – 1:18 am

Posted in Uncategorized

Comments (0)



There are commercially available GPS units that allow you to extract location and time information. You can also purchase pedometers that also record GPS data, as well as speed, and time. What can you do with this data? How do you visualize it?

In this tutorial, I go over how to get the raw data output from a GPS and convert it into usable data for Google Earth. The goal is to teach you how to get data that has time associated with it in order to create an "animation" in Google Earth.

This tutorial goes over:

- 1) Converting .gpx data into kml.
- 2) How to do an excel to kml conversion
- 3) Viewing a time-stamped kml file in Google Earth as an animation.

-Michael A. Rodriguez

- Time, KML and Google Earth (V)
- Overlay WMS into Google Maps (V)
- PHP for Mapping Mashups
- gvSIG and WFS
- ArcGIS API for FLEX
- Excel to KML
- ArcMap – Layer to KML
- Flickr Photostream to Google MyMaps
- Export to KML

Mashup Projects



- Bicycle Tour around Lake Michigan
 - Janice Baudewig Poehlman (ArcGIS Server, Flex IDE)
- Travel Route Choice
 - Kaushik Bekkem (Google Maps API, mySQL)
- Shipwrecks of the Great Lakes
 - Danny Bera (Google Maps, Google Earth, Flickr)
- Bayou Bienvenue Wetland Triangle Community-Based Restoration
 - Lydia Bi (KML, Google Earth, Google Maps API, geocoding)
- Biking Suitability in Madison, WI
 - Nicholas Kasang (Google Earth, KML)

Mashup Projects



- City of Madison Plan Commission Meeting Items
 - David Kress (KML, EarthPoint's Excel to KML, Google Earth)
- Madison Area Networking Events
 - Jamie Krug (KML, Google Earth, Google Maps, geocoding)
- Amtrak Station Ridership in Wisconsin - Proportional Maps and Time Data
 - Michael Rodriguez (Google Earth, time animation)
- Seeing the Wisconsin Idea (and beyond)
 - Nick Terrible (Google Earth, KML, Log Parser, SQL Server)
- Massachusetts Maritime Heritage
 - Tim Wallace (Flash ActionScript 3.0, Illustrator, Photoshop, Google Earth, Dreamweaver, AFComponents Umap API)

Next Steps



Workshop Products

- Promote Gallery, Tutorials, Projects
- Helping people decide on mashup tools/technologies

Future Mashup Workshops?

- Modular or full semester?

Questions?

David Hart (dhart@aquawisc.edu)

A.J. Wortley (lwortley@wisc.edu)

<http://maps.aqua.wisc.edu/urpl590-spring09/mashups/index.htm>