

Geo-Mashups
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T-111.5550 SEMINAR ON MULTIMEDIA

WHAT ARE GEO-MASHUPS?

- ✘ Web applications
- ✘ Gather data from multiple sources
- ✘ Primary focus on location data
- ✘ Usually on top of a mapping service

Google Maps - Mozilla Firefox 3 Beta 4

File Edit View History Bookmarks Tools Help Smart Bookmarks 800x600 1024x768 1280x1024

http://maps.google.com/

Google Maps Go2Web20.net - The complete Web 2... Flagr :: Sharewhere!

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Google Maps e.g., "10 market st, san francisco" or "hotels near lax" Search Maps Show search options

Search the map Find businesses Get directions

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Map Satellite Terrain

Welcome to Google Maps
You can drag the map with your mouse, and double-click to zoom. [Take a tour](#)

Search the map, e.g.
[kansas city](#)
[10 market st, san francisco](#)

Find businesses, e.g.
[hotels near lax](#)
[pizza](#)

Get directions, e.g.
[jfk to 350 5th ave, new york](#)
[seattle to 98109](#)

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100 mi
200 km

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Done

TYPES OF GEO-MASHUPS

- ✘ Location based
- ✘ Route based
- ✘ Hybrids of these

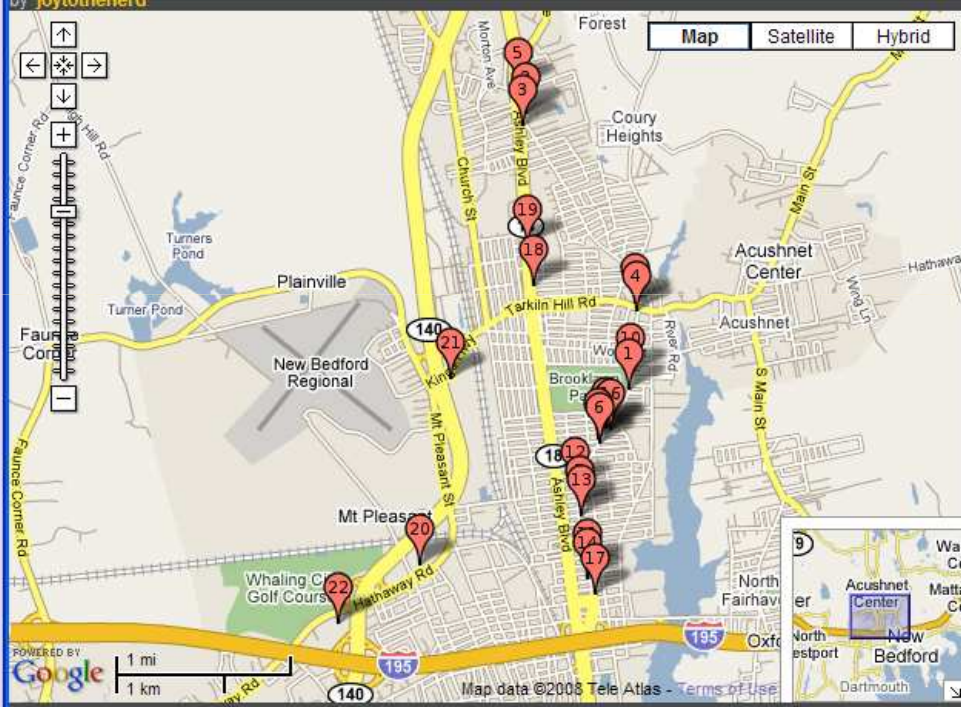
LOCATION BASED

- ✘ Photos on a map (Panoramio)
- ✘ A tourist map: restaurants, sights and so on
 - + Usually also has photos
- ✘ Specialized locations (Viewr for Real Estate)
- ✘ Wikimapia
- ✘ Frappr

ROUTE BASED AND HYBRIDS

- ✘ Route based
 - + Wayfaring

- ✘ Hybrids of the two previous types
 - ✘ "Party planner" (WeddingMapper)
 - ✘ Advanced tourist map



Map Details Trackers Blog Send

Painting Tour of the North End of New Bedford, MA

created by **joytothenerd**

Waypoints

- 1 Ma's Donuts zoom
- 2 Frate's Bottle zoom
- 3 Pa Raffa's Pizza zoom
- 4 Quintal Investments zoom
- 5 Printing zoom
- 6 The Bullpen zoom
- 7 Charlie's zoom
- 8 Ino's Tire zoom

Edit Map

joytothenerd says:
Select a location to see the painting I've made of it. Click on the painting to enlarge it.

DATA COLLECTION PROBLEMS

- ✘ Many require manual "geo tagging"
- ✘ Coordinate system precision
- ✘ GPS device precision
- ✘ Lack of "gazepoint"
- ✘ Lack of advanced way-point system

HIGHER PRECISION GEO-MASHUPS

- ✘ More data

- + Requires automated and easier gathering of the data

- + GPS embedded in the cameras

- ✘ Privacy issues

- + Google Street View

- ✘ More accuracy

- + Better GPS devices

- + Specially for indoor use

EXAMPLE: INSIDE A SUPER MARKET

- ✘ More data AND more accuracy
- ✘ RFID tags to achieve both
- ✘ Layout serves as a very high precision map
- ✘ In-store logistics for customers
- ✘ Create your own route based on your shopping list
- ✘ Recommend products and pinpoint them on the map

EXAMPLE: AMUSEMENT PARK

- ✘ Similar to the Super Market example
 - + Precision can be slightly bit less
- ✘ "Ride Recommendations"
- ✘ A small-scale (but high-precision) "vacation route planner"
- ✘ Rate rides
- ✘ View photos & videos positioned on the Park Map

EXAMPLE: PHOTOS IN 3D SPACE

- ✘ Photosynth
- ✘ Calculates the gazing point of the photo automatically from a large set of photos
- ✘ Can be used with the Amusement Park example above
- ✘ "Poor mans Street View"
- ✘ Benefits from large amounts of photos

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