Although excellent for computer-to-computer communication, coordinates are not readily intelligible.
1 South Hall
Berkeley, CA

Geocoder

37°52' 16.78" N
122°15' 30.59" W
MEANINGFUL LOCATION PROJECT

37°52' 16.78" N
122°15' 30.59" W

Reverse Geocoder

South Hall,
UC Berkeley,
1 South Hall
Berkeley, CA
i School working on MeLo busy co-lab school

What if?

Geocoder

37°52’ 16.78” N
122°15’ 30.59” W
THEORY “Place”

- Neogeography
- Critical humanistic geography
- Ontological Relativity
THEORY Privacy & Sharing

Sharing options
- Share best available location
- Share only city level location
- Hide location from this friend
WHAT IS MELO?
MeLo
The Meaningful Location Project

Tuesday, May 11, 2010

12:30am
Home
BERKELEY, CALIFORNIA

11:30am

11:40am
South Hall
BERKELEY, CALIFORNIA

4:22pm

4:27pm
Walgreens
BERKELEY, CALIFORNIA

4:35pm

7:14pm
Thai Basil
BERKELEY, CALIFORNIA

7:14pm

7:43pm
South Hall
BERKELEY, CALIFORNIA

9:35pm
The MeLo Ecosystem

- MeLo API
- MeLo Datastore
- User Interface
- Applications
- Other Third-Party Applications
- Data Sources
- Location Services

Data Sources:
- GeoPlanet
- Yahoo
- Yelp

Location Services:
- Foursquare
- MapQuest
Google App Engine & BigTable
Tracking Location History

37.87121, -122.25844
13:38:51
South Hall

Berkeley
Alameda County
California
United States of America

MeLo Datastore
Tracking Location History

Points

37.534583, -122.145255, at 3:38:51 p.m.
37.357774, -122.764980, at 3:43:55 p.m.
37.782283, -122.224872, at 3:48:44 p.m.
37.718445, -122.087458, at 3:53:50 p.m.
37.870698, -122.328999, at 3:58:53 p.m.
37.490057, -122.710117, at 4:03:49 p.m.
37.043930, -122.695104, at 4:08:59 p.m.
37.583333, -122.937157, at 4:13:53 p.m.
37.622439, -122.109974, at 4:18:54 p.m.
37.383970, -122.097864, at 4:23:49 p.m.
37.247068, -122.056722, at 4:28:59 p.m.
37.814516, -122.030007, at 4:33:54 p.m.
37.846888, -122.548628, at 4:38:55 p.m.
37.106865, -122.763092, at 4:43:57 p.m.
37.788158, -122.175366, at 4:48:45 p.m.
37.367346, -122.295030, at 4:53:34 p.m.
37.700808, -122.655107, at 4:58:47 p.m.
37.361362, -122.624402, at 5:03:53 p.m.
37.637110, -122.201284, at 5:08:49 p.m.
37.543091, -122.526902, at 5:13:43 p.m.
37.940291, -122.979975, at 5:18:53 p.m.

Stays

USER was at 37.87121, -122.25844 from 3:38:51 to 5:18:55
Tracking Location History
Tracking Location History
Annotate with Personal Names

- Brainstorming, Sketching, Prototyping, Interviews
Annotate with Personal Names

Re-visiting a location

Edit location name
Annotate with Personal Names
Prompts are used to encourage users to enter richer annotations.
MEANINGFUL LOCATION PROJECT

Annotate with Personal Names

Category

Activity

Description

Name

Moscone Center
San Francisco, California
9:57am – 10:17am
April 18, 2010

About Moscone Center

Suggestions
Macworld 2010 +
Downtown Watch Repair +
Urban Allure +
Aisha Valverde Skincare - Medical Skin Aesthetics +
CO Rider Motorcycle Tow +
Bay Area Box Express +

What type of place is this?
Mo

What do you do here?
coffee shop, friend's house

What is it like?
shopping, errands, studying
interesting, noisy, cheap
Annotate with Personal Names

Moscone Center

Category
Activity
Description

Moscone Center
Annotate with Personal Names
MEANINGFUL LOCATION PROJECT

Annotate with Personal Names

Category: drupalcon
Description:
Name:
Annotate with Personal Names

**Category:**
- crowded

**Activity:**
- Name

**About Moscone Center**
San Francisco, California
9:57am – 10:17am
April 18, 2010

**Suggestions**
- Macworld 2010 +
- Downtown Watch Repair +
- Urban Allure +
- Aisha Valverde Skincare - Medical Skin Aesthetics +
- CO Rider Motorcycle Tow +
- Bay Area Box Express +

**What type of place is this?**
- coffee shop
- friend's house

**What do you do here?**
- shopping
- errands

**What is it like?**
- interesting
- noisy
- cheap
MeLo REST API

Public-facing, REST API enables third-party applications
MeLo REST API

Resources
- Stay
- Point
- Tag
- Rule
- User

HTTP Verbs
- GET, POST, PUT, DELETE
Documentation alongside hands-on playground
- Hackathon: user testing for developers
Applications

• Developed by using operations available on the MeLo API
• Explores different aspects of personal annotations for location:
  • Location History
  • Privacy and Sharing
  • Personally meaningful location triggers
Applications: meloscope

- Explores visualizing location history for self-reflection
- Goes **beyond** common visualizations based on **geography** by leveraging **personal** descriptions of place
Applications: meloscope
Applications: When you are at

- Alert **Miranda** to bring the XKCD book when he is at home

- Alert **friends** to join me when I am at a **bar**

- Alert **classmates** to get me some food when near **Telegraph and Bancroft**
Applications - ShareWhere

When I am
at school
show my exact location
to classmates
for forever

Save
Potential Applications

Directions with Personal Waypoints
Potential Applications

A Map of Words and Places, not Roads
Potential Applications

Personal Location Annotations

greenberg Just learned how Zipcars stay so clean: I saw a mobile vacuum/cleaning squad at Ashby BART taking care of the cars there.

about 4 hours ago via Tweetie from South Berkeley, Berkeley

greenberg Just learned how Zipcars stay so clean: I saw a mobile vacuum/cleaning squad at Ashby BART taking care of the cars there.

about 4 hours ago via Tweetie from the weekend flea market at Ashby BART
Conclusions & Future Work

Meaningful abstractions of location data allow us to:

- Make sense of large amount of data
- Have control over the way we share location information

These are important features that enable ubiquitous computing.
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