EMPTY SPACE MAPPING
Mussie Nigussie, Jessica Chayavichitsilp
PROBLEM SPACE

- Problem space
  - Permits users to quickly map out a new area not on existing maps.
- How do people deal with this problem today?
  - Remote volunteers/organization collecting data and creating map.
- Who will care about a solution?
  - Volunteers/ Community affected by disaster
- Who will a solution effect?
  - Helping volunteers to map affected disaster area.
Description

Integrate OSM to LocalGround to allow digitization of scanned image.
Our system: Update map quickly. Permanent software.

Main elements

Digitization map. Data collection through mobile app.

Who are the users/stakeholders

Volunteers. People affected during disaster.
RELATED WORK

- Other related projects relate to this one?
  - Walking Paper, LocalGround, OSM, GoogleMap

- What ideas does it draw on and who has worked on them?
  - LocalGround: Paper collection of data.
  - OSM: Digitizing online editor.

- What makes this project novel/interesting?
  - Knowing that people will be able to use this project in real life situation.
FINDINGS SO FAR

► What did you do?
  ► Research on what and how to digitize LG map data collection.
  ► Plan on customizing online mapping tool into simpler version i.e. for disaster situation.

► Who did you talk to?
  ► Tapan Parikh, Sarah Van (Advisor on LocalGround)
BASIC SCENARIO

LocalGround • Map Data Collection

Editor • Digitization i.e. Potlatch, JOSM

Digitized Map • Share map with friends
THE ARCHITECTURE
ON-SITE VOLUNTEERS

1. PRINT A PAPER MAP OR USE MOBILE APP

2. EDIT MAP BY HAND

3. Take a pic of hand-annotated map and upload it to LG
OFF-SITE VOLUNTEERS

4 SELECT THE Uploaded MAP

5 EDIT THE MAP USING ONLINE EDITOR

6 PUBLICIZE YOUR MAP OR SHARE WITH FRIENDS
DESIGN AND EVALUATION

- How will you iterate on your prototype and its UI?
  - Who will you ask to provide feedback?
    - Our main client: LG
  - How will you evaluate your prototype and its UI?
    - Ask people to use our app, and fill in survey about their experience.
PLAN FOR NEXT QUARTER

WEEK 1
• Understanding LG source code.

WEEK 2
• Learning Potlatch and OSM API.

WEEK 3
• Find a way to customize Potlatch Editor to make it simpler for general purpose mapping or disaster.
• Research more on simpler online editor.

WEEK 4
• Implement the customization of online editor.

WEEK 5, 6
• Integrate the customized online editor to LG website.

WEEK 7
• Test the reliability of the integration. User review.

WEEK 8, 9
• Explore the possibility of data collection through mobile phone.

WEEK 10
• GO LIVE!
BIBLIOGRAPHY

- http://hot.openstreetmap.org/updates/2012-05-24_openstreetmap_at_the_harvard_humanitarian_initiative_disaster_simulation